# gsu

## round 1—aff v. jmu bm

### 1ac

#### ADVANTAGE ONE IS PROLIF—

#### Nuclear risks are multiplying—risks nuclear multipolarity and un-deterrable war

Heisbourg 12—chairman of the council of the Geneva Centre for Security Policy and of the London-based International Institute for Strategic Studies (Francois, 3/4/12, “NUCLEAR PROLIFERATION – LOOKING BACK, THINKING AHEAD: HOW BAD WOULD THE FURTHER SPREAD OF NUCLEAR WEAPONS BE?,” http://www.npolicy.org/article\_file/Nuclear\_Proliferation\_-\_Looking\_Back\_Thinking\_Ahead\_How\_Bad\_Would\_the\_Further\_Spread\_of\_Nuclear\_Weapons\_Be.pdf, RBatra)

Given their disproportionate power, nuclear weapons cannot serve to achieve limited policy goals, thus excluding their use as Clausewitzian weapons; further, the possession of nuclear weapons may even inhibit actions which an aggressive non-nuclear power would otherwise contemplate versus a nuclear power. Stalin at the head of a still clearly non-nuclear USSR blockaded Berlin, an action which none of his nuclear armed successors sought to emulate. As a non-nuclear power, Red China bombed Taiwan repeatedly. The worst of it ceased after Beijing acquired nuclear weapons. Possession of nuclear weapons, possibly after a learning curve, appears to selfdeter escalatory aggressive behavior.

Bilateral deterrence between two nuclear powers has long been deemed to moderate direct confrontation and to deflect aggressive behavior towards proxies (11).Although no such theoretical consensus exists vis à vis the possible stability of multi-cornered possession of nuclear weapons, the case has been made by powerful authors such as Ken Waltz or Pierre Gallois (12). In practice, a global multipolar nuclear order was established to some extent since the 1960s, with the USSR, the US and China forming a strategic triangle which was perceived as such by the authors of the Nixon-to-Beijing visit. A regional multipolar dispensation arguably also exists between China, India and Pakistan. These relationships have apparently not led to instabilities greater than (or even as great as) those which have characterized the US-Soviet nuclear standoff.

In short, proliferation has been a manageable, slow-motion process, nuclear weapons have not been used nor has the probability of their use appear to have increased (rather the opposite). Its overall status is satisfactory, provided some adjustments are made in terms of securing material from nonstate actors, even if the policy mix sustaining it is messy and occasionally fraught –as so many things are in international life. Difficult case-specific situations such as Iran today will continued to be handled as such, as Iraq was yesterday.

THE PAST IS NOT WHAT IT USED TO BE

The problem with this reassuring reading of the past is that it is not entirely true. Yes, the NPT had a major material effect by gradually making non nuclear the new normal. Yes again, defense guarantees by the US weaned Germany, Italy (13), South Korea, Taiwan and even neutral Sweden away from the nuclear road, followed by the US-French-British assurances to post-Soviet Ukraine. Yes too, various levels of coercion worked in Iraq, Libya and Syria. But no, the practice of even the most ‘classical’ bilateral deterrence was not nearly as reassuring as the mainstream narrative inherited from the Cold War would have it. Nor can we consider that our elements for empirical judgment as methodologically satisfactory in terms of their breadth and depth. These two negatives will be examined in turn.

Nuclear archives, as other sensitive governmental archives, open up usually after an interval of decades and even then with varying levels of culling and redaction. Even oral histories tend to follow this pattern, as ageing witnesses feel freer to speak up. Hence a paradox: when the Soviet- American nuclear confrontation was central to our lives and policies during the Cold War, we didn’t how bad things really where; now that we are beginning to know, there is little public interest given the disappearance of the East-West contest. Yet there are lessons of general interest which can be summarized as follows: 1) the Cuban missile crisis brought us much closer to the brink than the acute sense of danger which prevailed at the time, for reasons which are germane to the current situation: massive **failures of intelligence** on Soviet nuclear preparations and dispositions in Cuba, notably on tactical nukes and on the operational readiness of a number of IRBMs and their warheads; dysfunctional or imperfect command and control arrangements (notably vis à vis Soviet submarines), unintentionally mixed signals on each antagonist’s actions). These are effectively laid out in Michael Dobb’s book, “One Minute to Midnight”(14). 2) the safety and security of nuclear forces are subject to potentially calamitous procedural, technical or operational mishaps and miscalculations, somewhat along the lines of what applies to related endeavors (nuclear power and aerospace). Scott Sagan in his “Limits of Safety”(15) provides compelling research on the American Cold War experience. It would be interesting to have a similar treatment on the Soviet experience…Although it can be argued that today’s nuclear arsenals are much smaller and easier to manage reliable, and that the technology for their control has been vastly improved, several facts remain:

the US has continued to witness serious procedural lapses in the military nuclear arena (16); the de-emphasis of the importance of nuclear weapons in the US force structure is not conducive to treating them with the respect which is due to their destructive power; other nuclear powers do not necessarily benefit from the same technology and learning curves as the older nuclear states, and notably the US; cheek-to-jowl nuclear postures, which prevailed in the Cuban missile crisis and which help explain why World War III nearly occurred, and which characterize India and Pakistan today.

Despite the dearth of detail on Indian and Pakistani nuclear crisis management, we know that the stability of nuclear deterrence between India and Pakistan is by no means a given, with serious risks occurring on several occasions since the mid-1980s(17).

At another level of analysis, we have to recognize the limits of the database on which we ground our policies on nonproliferation. The nuclear age, in terms of operationally usable devices, began in 1945, less than seventy years, less than the age of an old man. The fact that there has been no accidental or deliberate nuclear use during that length of time is nearly twice as reassuring as the fact that it took more than thirty years (18) for a nuclear electricity generating plant to blow up, in the form of the Chernobyl disaster of 1986. But given the destructive potential of nuclear weapons, twice as much reassurance (in the form of no use of nuclear weapons for close to seventy years) is probably not good enough. Furthermore, the Chernobyl disaster involved the same sort of errors of judgment, procedural insufficiencies and crisis-mismanagement visible in Scott Sagan’s book, not only or even mainly, flawed design choices: inadvertence at work, in other words of the sort which could prevail in a time-sensitive, geographically constrained Indo- Pakistani or Middle Eastern conflict. Give it another seventy years to pass judgment?

The same empirical limits apply to the number of actors at play: we have simple bipolar (US-USSR/Russia or India/Pakistan) and complex bipolar (US/France/UK/NATO-Soviet Union/Russia) experience; we’ve had US-Soviet-Chinese or Sino- Indian-Pakistani tripolarity; and we’ve had a number of unipolar moments (one nuclear state vis à vis non-nuclear antagonists). But we mercifully have not had to deal with more complex strategic geometries –yet- in the Middle East or East Asia. We only know what we know, we don’t know what we don’t know.

A historical narrative which is not reassuring and an empirical record that is less than compelling need to inform the manner in which we approach further proliferation.

PROLIFERATION PUSH AND PULL

Ongoing proliferation differs from that of the first halfcentury of the nuclear era in three essential ways: on the demand side, the set of putative nuclear actors is largely focused in the most strategically stressed regions of the world; on the supply side, the actual or potential purveyors of proliferation are no longer principally the first, industrialized, generation of nuclear powers; the technology involved in proliferation is somewhat less demanding than it was during the first nuclear age. Taken together, these changes entail growing risks of nuclear use.

Demand is currently focusing on two regions, the Middle East and East Asia (broadly defined) and involves states and, potentially, non-state actors. In the Middle East, Iran’s nuclear program is the focus of the most intense concerns. A potential consequence in proliferation terms would be to lead regional rivals of Iran to acquire nuclear weapons in term: this concern was vividly in 2007 by the then President of France, Jacques Chirac (19) who specifically mentioned Egypt and Saudi Arabia. The likelihood of such a “proliferation chain-reaction” may have been increased by President Obama’s recent repudiation of containment as an option (20): short of Iran being persuaded or forced to abandon its nuclear ambitions, the neighboring states would presumably have to contemplate security options other than a Cold War style US defense guarantee. Given prior attempts by Iraq, Syria and Libya to become nuclear powers, the probability of a multipolar nuclear Middle East has to be rated as high in case Iran is perceived as having acquired a military nuclear capability. Beyond the Middle East, the possibility of civil war in nuclear-armed Pakistan leading to state failure and the possibility of nukes falling out of the hands of an effective central government. There are historical precedents for such a risk, most notably, but not only(21)in the wake of the collapse of the Soviet Union: timely and lasting action by outside powers, such as the US with the Nunn-Lugar initiative, and the successor states themselves has prevented fissile material from falling into unauthorized hands in significant quantities. Pakistan could pose similar problems in a singularly more hostile domestic environment. As things stand, non-state actors, such as post-Soviet mafiya bosses (interested in resale potential) or Al Qaeda (22) have sought, without apparent success, to benefit from opportunities arising from nuclear disorder in the former USSR and Central Asia. Mercifully, the price Al Qaeda was ready to pay was way below the going rate (upwards of hundreds of $million) for the sorts of services provided by the A.Q.Khan network (see below)to some of his clients.

Although North Korea’s nuclear ambitions appear to be both more self-centered and more containable than is the case for Iran, the possibility of state collapse in combination with regional rivalry leave no room for complacency.

More broadly we are facing the prospect of a multipolar nuclear Middle East, linked to an uncertain nuclear Pakistan already part of a nuclear South Asia tied via China to the Korean nexus in which nuclear America and Russia also have a stake. More broadly still, such a nuclear arc-of-crisis from the Mediterranean to the Sea of Japan, would presumably imply the breakdown of the NPT regime, or at least its reversion to the sort of status it had during the Seventies, when many of its currently significant members had not yet joined (23), unloosening both the demand and supply sides of proliferation.

On the supply side, “old style” proliferation relied on official cooperation between first-generation nuclear or nuclearizing powers, of which the Manhattan project was a forerunner (with American, British and Canadian national contributions and multinational scientific teams), followed inter alia by post-1956 French-Israeli, post-1958 US-UK, pre- 1958 USSR-China cooperation. If India relied heavily on the “unwitting cooperation” , notably on the part of Canada and the US involved in the Atoms for Peace CIRUS research reactor, Pakistan set up the first dedicated, broad spectrum, crossborder trading network to make up for the weakness of its limited industrial base. This import-focused organization thus went beyond traditional espionage-aided efforts (as practiced by the USSR during and after the Manhattan project) or case-by-case purloining or diversion of useful material on the global market (as practiced by Israeli operatives). Even before the Pakistani network had fulfilled its primary task of supplying the national program, it began its transformation into an export-oriented venture.

Libya, Iran, North Korea and a fourth country which remains officially unnamed became the main outlets of what became the world’s first private-sector (albeit government originated and ,presumably, supported)proliferation company which was only wound down after strong Western pressure on Pakistan after 9/11. Although the by-now richly documented A.Q.Khan network (24) appears to have ceased to function in its previous incarnation, it has powerfully demonstrated that there is an international market for proliferation which other operators can expect to exploit. Furthermore, budding, resource-weak nuclear powers have a strong incentive to cover the cost of their investment by selling or bartering their nuclear-related assets, including delivery systems. The fruits of state-tostate cooperation between Iran, North Korea and Pakistan are clearly apparent in the close-to-identical genealogy of their nuclear-capable ballistic missiles of the No- Dong/Ghauri/Shahab families displayed in military parades and test launches. Not all such cooperation consists of televised objects.

Even in the absence of game-changing breakthroughs, technical trends facilitate both demand and supply-side proliferation. For the time being, the plutonium route towards the bomb remains essentially as easy and as difficult as from the earliest years of the nuclear era. Provided a country runs a (difficult-to-hide) research or a power reactor from which low-irradiated fuel can be downloaded at will (such as CANDUtype natural uranium reactors), reprocessing is a comparatively straightforward and undemanding task. Forging and machining a multiple-isotope metal which is notorious for its numerous physical states and chemical toxicity is a substantial challenge, with the companion complications of devising a reliable implosion mechanism. Nuclear testing is highly desirable to establish confidence in the end-result. Opportunities for taking the plutonium-proliferation road may increase somewhat as new techniques (such as pyro-processing) come on stream. Developments in the enriched uranium field have been more substantial in facilitating proliferation. The development of lighter and more efficient centrifuges make it easier for a state to extract enriched uranium speedily in smaller and less visible facilities. Dealing with the resulting military-level HEU is a comparatively undemanding task. The long-heralded advent of industrially effective and reliable laser enrichment technology may eventually further increase ease of access. Downstream difficulties would still remain. Although implosion-mechanisms are not mandatory, they are desirable in order both to reduce the critical mass of U235 for a nuclear explosion and to make for a lighter and smaller more-readily deliverable weapons package.

In sum, incremental improvements increase the risk of proliferation. However, non-state actors are not yet, and will not be on the basis of known technical trends, in a position to master the various steps of the two existing military nuclear fuel cycles, which remain the monopoly of states. Nonstate actors would need the active complicity from (or from accomplices within) states, or benefit from the windfall of state collapse, to acquire a military nuclear capability. The threat of nuclear terrorism continues to be subordinated to developments involving state actors, a remark which is not meant to be reassuring since such developments (see above) are increasingly likely as proliferation spreads to new states and as state failure threatens in the ‘arc of proliferation’ extending from the Mediterranean to North-East Asia. Furthermore, non-state actors can be satisfied with levels of nuclear reliability and performance which states could not accept. A difficult-to-deliver or fizzle-prone nuclear device would not provide a state with the level of deterrence needed to shield it from pre-emptive or retaliatory action, whereas a terrorist group would not be seeking such immunity. A road or ship-delivered imperfect device, which would be closer to a radiological bomb than to a fully-fledged atomic weapon would provide its non-state owners with immense potential. The road to a non-state device does not need to be as well-paved.

NUCLEAR FUTURES

‘New’ lessons from a revisited past and current trends in nuclear proliferation, will tie into a number of characteristics of contemporary international relations with potentially destabilizing consequences, leading to an increasing likelihood of nuclear use. Four such characteristics will be singled out here both because of their relevance to nuclear crisis management and because of their growing role in the world system in the age of globalization:

- Strategic upsets

- Limits of imagination

- Unsustainable strains

- Radical aims

The 2008 French Defence and National Security White Paper (25) developed the concept of ‘ruptures stratégiques’ (strategic upsets) to describe the growing tendency of the world system to generate rapid, unexpected, morphing upsets of international security as a consequence of globalization broadly defined against the backdrop of urbanizing populations generating economic growth and environmental and resource constraints. In themselves, such upsets are not novel (see inter alia, a pandemic such as the Black Death in 1348-49, the Great Depression not to mention World Wars or indeed the major and benign strategic upset of 1989-1991) but the very nature of globalization and the relationship between human activity and the Earth’s ability to sustain them) mean more, and more frequent as well as more complex upsets. If this reading is correct –and the Great financial crisis, the Arab revolutions, the accession of China to superpower status can be mentioned as examples which followed the publication of the White paper- ,then the consequences in the nuclear arena will be twofold. First, nuclear doctrines and dispositions which were conceived under a set of circumstances (such as the Cold War or the India-Pakistan balance of power) may rapidly find themselves overtaken by events. For instance it is easier to demonstrate that US and Russian nuclear forces still visibly bear the imprint of their 1950s template than it is to demonstrate their optimal adaptation to post-post-Cold War requirements. Second, more challenges to international security and of a largely unforeseeable nature mean greater strains placed on the ability of nuclear powers to manage crises against the backdrop of their possession of nuclear weapons. In many, indeed most, cases, such ‘ruptures stratégiques’ will no doubt be handled with nuclear weapons appearing as irrelevant: hypothetical security consequences of an epidemic (such as the interhuman transmission of the H5N1 bird flu virus) or prospective conflicts resulting from climate change do not have prima facie nuclear aspects. But beyond the reminder that we don’t know that as a fact, the probability is, under the ‘rupture stratégique’ hypothesis, that there will be more occasions for putting all crisis management, including nuclear, to the test.

Human societies tend to lack the imagination to think through, and to act upon, what have become known as ‘black swan’ events (26): that which has never occurred (or which has happened very rarely and in a wholly different context) is deemed not be in the field of reality, and to which must be added eventualities which are denied because their consequences are to awful to contemplate. The extremes of human misconduct (the incredulity in the face of evidence of the Holocaust, the failure to imagine 9/11) bear testimony to this hard-wired trait of our species. This would not normally warrant mention as a factor of growing salience if not for the recession into time of the original and only use of nuclear weapons in August 1945. Non-use of nuclear weapons may be taken for granted rather than being an absolute taboo. Recent writing on the reputedly limited effects of the Hiroshima and Nagasaki bombs (27) may contribute to such a trend, in the name of reducing the legitimacy of nuclear weapons. Recent (and often compelling) historical accounts of the surrender of the Japanese Empire which downplay the role of the atomic bombings in comparison to early research can produce a similar effect, even if that may not have been the intention (28). However desirable it has been, the end of atmospheric nuclear testing (29) has removed for more than three decades the periodic reminders which such monstrous detonations made as to the uniquely destructive nature of nuclear weapons. There is a real and growing risk that we forget what was obvious to those who first described in 1941 the unique nature of yet-to-be produced nuclear weapons (30). The risk is no doubt higher in those states for which the history of World War II has little relevance and which have not had the will or the opportunity to wrestle at the time or ex post facto with the moral and strategic implications of the nuclear bombing of Japan in 1945.

Unsustainable strains are possibly the single most compelling feature of contemporary proliferation. Tight geographical constraints –with, for instance, New Delhi and Islamabad located within 300 miles of each other-; nuclear multipolarity against the backdrop of multiple, criss-crossing, sources of tension in the Middle East (as opposed to the relative simplicity of the US-Soviet confrontation); the existence of doctrines (such as India’s ‘cold start’) and force postures (such as Pakistan’s broadening array of battlefield nukes) which rest on the expectation of early use; the role of non-state actors as aggravating or triggering factors when they are perceived as operating with the connivance of an antagonist state ( in the past, the assassination of the Austrian Archduke in Sarajevo in 1914; in the future, Hezbollah operatives launching rockets with effect against Israel or Lashkar-e-Taiba commandos doing a ‘Bombay’ redux in India?) : individually or in combination, these factors test crisis management capabilities more severely than anything seen during the Cold War with the partial exception of the Cuban missile crisis. Even the overabundant battlefield nuclear arsenals in Cold War Central Europe, with their iffy weapons’ safety and security arrangements, were less of a challenge: the US and Soviet short-range nuclear weapons so deployed were not putting US and Soviet territory and capitals at risk.

It may be argued that these risk factors are known to potential protagonists and that they therefore will be led to avoid the sort of nuclear brinksmanship which characterized US and Soviet behavior during the Cold War in crises such as the Korean war, Berlin, Cuba or the Yom Kippur war. Unfortunately, the multiple nuclear crises between India and Pakistan demonstrate no such prudence, rather to the contrary. And were such restraint to feed into nuclear policy and crisis planning –along the lines of apparently greater US and Soviet nuclear caution from the mid-Seventies onwards-, the fact would remain that **initial intent** rarely resists the strains of a complex, multi-actor confrontation between inherently distrustful antagonists. It is also worth reflecting on the fact that during the 1980s, there was real and acute fear in Soviet ruling circles that the West was preparing an out-of-the-blue nuclear strike, a fear which in turn fed into Soviet policies and dispositions (31).

The Cold War was a set of crises and misunderstandings which came within a whisker of a nuclear holocaust; India and Pakistan’s nuclear standoff is deeply unstable not least as a result of the interaction with non-state actors; a multipolar nuclear Middle East would make the Cuban missile crisis look easy in comparison.

Great conflicts tend to occur when one or several of the antagonists views the status quo as sufficiently undesirable and/or unsustainable to prompt forceful pro-action. Notwithstanding widespread perceptions to the contrary, this was not the case of the USSR and the United States during the Cold War. The US had chosen a policy of containment, as opposed to roll-back, of the Soviet Empire within its limits established as a result of World War II. The Soviet Union seized targets of opportunity outside of its 1945 area of control but avoided direct confrontation with US forces. Messianic language from the USSR on the global victory of communism or from the US about the end of the Evil Empire did not take precedence over the prime Soviet concern of preserving the Warsaw Pact and the US pursuit of containment – and, no less crucially, their mutual confidence that they could achieve these aims without going to war one with the other.

No such generalization can be made about the Middle East, a region in which the very existence of a key state (Israel) is challenged while others have gone to war with each other (e.G.Iran-Iraq war, the Gulf War of 1990-1991), or are riven by deep internal conflicts. Actors such as Hezbollah, with its organic and functional links with Islamic Iran and Alawite Syria add to the complexities and dangers. Extreme views and actions vis à vis the strategic status quo are widely prevalent. Although the India-Pakistan relationship corresponds to something akin to the US-Soviet ‘adversarial partnership’, that does not apply to radical non-state actors prevalent in Pakistan with more or less tight links to that country’s military intelligence services (ISI, Inter-Services Intelligence). The potential for danger is compounded by the variety of such groups: the Pashtu-related Pakistani Taliban (TTP), Kashmiri-related groups, Jihadi militants from the core provinces of Punjab and Sind… Their common characteristics are extreme radicalism, high levels of operational proficiency, and shared enmity of India. Their potential for triggering a conflict between the two countries is substantial, above and beyond the intentions of government officials.

#### The impact is extinction—nuclear optimism is conceptually bankrupt

Kroenig, 12 [May 26th, Matthew Kroenig: Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, The History of Proliferation Optimism: Does It Have A Future? Prepared for the Nonproliferation Policy Education Center, <http://www.npolicy.org/article.php?aid=1182&tid=30>]

Proliferation Optimism: Proliferation optimism was revived in the academy in Kenneth Waltz’s 1979 book, Theory of International Politics.[[1]](#footnote-1)[29] In this, and subsequent works, Waltz argued that the spread of nuclear weapons has beneficial effects on international politics. He maintained that states, fearing a catastrophic nuclear war, will be deterred from going to war with other nuclear-armed states. As more and more states acquire nuclear weapons, therefore, there are fewer states against which other states will be willing to wage war. The spread of nuclear weapons, according to Waltz, leads to greater levels of international stability. Looking to the empirical record, he argued that the introduction of nuclear weapons in 1945 coincided with an unprecedented period of peace among the great powers. While the United States and the Soviet Union engaged in many proxy wars in peripheral geographic regions during the Cold War, they never engaged in direct combat. And, despite regional scuffles involving nuclear-armed states in the Middle East, South Asia, and East Asia, none of these conflicts resulted in a major theater war. This lid on the intensity of conflict, according to Waltz, was the direct result of the stabilizing effect of nuclear weapons. Following in the path blazed by the strategic thinkers reviewed above, Waltz argued that the requirements for deterrence are not high. He argued that, contrary to the behavior of the Cold War superpowers, a state need not build a large arsenal with multiple survivable delivery vehicles in order to deter its adversaries. Rather, he claimed that a few nuclear weapons are sufficient for deterrence. Indeed, he even went further, asserting that any state will be deterred even if it merely suspects its opponent might have a few nuclear weapons because the costs of getting it wrong are simply too high. Not even nuclear accident is a concern according to Waltz because leaders in nuclear-armed states understand that if they ever lost control of nuclear weapons, resulting in an accidental nuclear exchange, the nuclear retaliation they would suffer in response would be catastrophic. Nuclear-armed states, therefore, have strong incentives to maintain control of their nuclear weapons. Not even new nuclear states, without experience in managing nuclear arsenals, would ever allow nuclear weapons to be used or let them fall in the wrong hands. Following Waltz, many other scholars have advanced arguments in the proliferation optimist school. For example, Bruce Bueno de Mesquite and William Riker explore the “merits of selective nuclear proliferation.”[[2]](#footnote-2)[30] John Mearsheimer made the case for a “Ukrainian nuclear deterrent,” following the collapse of the Soviet Union.[[3]](#footnote-3)[31] In the run up to the 2003 Gulf War, John Mearsheimer and Steven Walt argued that we should not worry about a nuclear-armed Iraq because a nuclear-armed Iraq can be deterred.[[4]](#footnote-4)[32] And, in recent years, Barry Posen and many other realists have argued that nuclear proliferation in Iran does not pose a threat, again arguing that a nuclear-armed Iran can be deterred.[[5]](#footnote-5)[33] What’s Wrong with Proliferation Optimism? The proliferation optimist position, while having a distinguished pedigree, has several major problems. Many of these weaknesses have been chronicled in brilliant detail by Scott Sagan and other contemporary proliferation pessimists.[[6]](#footnote-6)[34] Rather than repeat these substantial efforts, I will use this section to offer some original critiques of the recent incarnations of proliferation optimism. First and foremost, proliferation optimists do not appear to understand contemporary deterrence theory. I do not say this lightly in an effort to marginalize or discredit my intellectual opponents. Rather, I make this claim with all due caution and with complete sincerity. A careful review of the contemporary proliferation optimism literature does not reflect an understanding of, or engagement with, the developments in academic deterrence theory in top scholarly journals such as the American Political Science Review and International Organization over the past few decades.[[7]](#footnote-7)[35] While early optimists like Viner and Brodie can be excused for not knowing better, the writings of contemporary proliferation optimists ignore the past fifty years of academic research on nuclear deterrence theory. In the 1940s, Viner, Brodie, and others argued that the advent of Mutually Assured Destruction (MAD) rendered war among major powers obsolete, but nuclear deterrence theory soon advanced beyond that simple understanding.[[8]](#footnote-8)[36] After all, great power political competition does not end with nuclear weapons. And nuclear-armed states still seek to threaten nuclear-armed adversaries. States cannot credibly threaten to launch a suicidal nuclear war, but they still want to coerce their adversaries. This leads to a credibility problem: how can states credibly threaten a nuclear-armed opponent? Since the 1960s academic nuclear deterrence theory has been devoted almost exclusively to answering this question.[[9]](#footnote-9)[37] And, unfortunately for proliferation optimists, the answers do not give us reasons to be optimistic. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.[[10]](#footnote-10)[38] He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”[[11]](#footnote-11)[39] They can engage in a process, the nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis there is an **increasing probability** that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before back down will win the crisis as long as it does not end in catastrophe. It is for this reason that Thomas Schelling called great power politics in the nuclear era a “competition in risk taking.”[[12]](#footnote-12)[40] This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Or they can the escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. Since 1945 there were have been many high stakes nuclear crises (by my count, there have been twenty) in which “rational” states like the United States run a risk of nuclear war and inch very close to the brink of nuclear war.[[13]](#footnote-13)[41] By asking whether states can be deterred or not, therefore, proliferation optimists are asking the wrong question. The right question to ask is: what risk of nuclear war is a specific state willing to run against a particular opponent in a given crisis? Optimists are likely correct when they assert that Iran will not intentionally commit national suicide by launching a bolt-from-the-blue nuclear attack on the United States or Israel. This does not mean that Iran will never use nuclear weapons, however. Indeed, it is almost inconceivable to think that a nuclear-armed Iran would not, at some point, find itself in a crisis with another nuclear-armed power and that it would not be willing to run any risk of nuclear war in order to achieve its objectives. If a nuclear-armed Iran and the United States or Israel have a geopolitical conflict in the future, over say the internal politics of Syria, an Israeli conflict with Iran’s client Hezbollah, the U.S. presence in the Persian Gulf, passage through the Strait of Hormuz, or some other issue, do we believe that Iran would immediately capitulate? Or is it possible that Iran would push back, possibly even brandishing nuclear weapons in an attempt to deter its adversaries? If the latter, there is a real risk that proliferation to Iran could result in nuclear war. An optimist might counter that nuclear weapons will never be used, even in a crisis situation, because states have such a strong incentive, namely national survival, to ensure that nuclear weapons are not used. But, this objection ignores the fact that leaders operate under competing pressures. Leaders in nuclear-armed states also have very strong incentives to convince their adversaries that nuclear weapons could very well be used. Historically we have seen that in crises, leaders purposely do things like put nuclear weapons on high alert and **delegate nuclear launch authority to low level commanders**, purposely increasing the risk of accidental nuclear war in an attempt to force less-resolved opponents to back down. Moreover, not even the optimists’ first principles about the irrelevance of nuclear posture stand up to scrutiny. Not all nuclear wars would be equally devastating.[[14]](#footnote-14)[42] Any nuclear exchange would have devastating consequences no doubt, but, if a crisis were to spiral out of control and result in nuclear war, any sane leader would rather be facing a country with five nuclear weapons than one with thirty-five thousand. Similarly, any sane leader would be willing to run a greater risk of nuclear war against the former state than against the latter. Indeed, systematic research has demonstrated that states are willing to run greater risks and, therefore, more likely to win nuclear crises when they enjoy nuclear superiority over their opponent.[[15]](#footnote-15)[43] Proliferation optimists miss this point, however, because they are still mired in 1940s deterrence theory. It is true that no rational leader would choose to launch a nuclear war, but, depending on the context, **she would almost certainly be willing to risk one.** Nuclear deterrence theorists have proposed a second scenario under which rational leaders could instigate a nuclear exchange: a limited nuclear war.[[16]](#footnote-16)[44] By launching a single nuclear weapon against a small city, for example, it was thought that a nuclear-armed state could signal its willingness to escalate the crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. In a future crisis between a nuclear-armed China and the United States over Taiwan, for example, China could choose to launch a nuclear attack on Honolulu to demonstrate its seriousness. In that situation, with the continental United States intact, would Washington choose to launch a full-scale nuclear war on China that could result in the destruction of many more American cities? Or would it back down? China might decide to strike hoping that Washington will choose a humiliating retreat over a full-scale nuclear war. If launching a limited nuclear war could be rational, it follows that the spread of nuclear weapons increases the risk of nuclear use. Again, by ignoring contemporary developments in scholarly discourse and relying exclusively on understandings of nuclear deterrence theory that became obsolete decades ago, optimists reveal the shortcomings of their analysis and fail to make a compelling case. The optimists also error by confusing stability for the national interest. Even if the spread of nuclear weapons contributes to greater levels of international stability (which discussions above and below suggest it might not) it does not necessarily follow that the spread of nuclear weapons is in the U.S. interest. There might be other national goals that trump stability, such as reducing to zero the risk of nuclear war in an important geopolitical region. Optimists might argue that South Asia is more stable when India and Pakistan have nuclear weapons, but certainly the risk of nuclear war is higher than if there were no nuclear weapons on the subcontinent. In addition, it is wrong to assume that stability is always in the national interest. Sometimes it is, but sometimes it is not. If stability is obtained because Washington is deterred from using force against a nuclear-armed adversary in a situation where using force could have advanced national goals, stability harms, rather than advances, U.S. national interests. The final gaping weakness in the proliferation optimist argument, however, is that it rests on a logical contradiction. This is particularly ironic, given that many optimists like to portray themselves as hard-headed thinkers, following their premises to their logical conclusions. But, the contradiction at the heart of the optimist argument is glaring and simple to understand: either the probability of nuclear war is zero, or it is nonzero, but it cannot be both. If the probability of nuclear war is zero, then nuclear weapons should have no deterrent effect. States will not be deterred by a nuclear war that could never occur and states should be willing to intentionally launch large-scale wars against nuclear-armed states. In this case, proliferation optimists cannot conclude that the spread of nuclear weapons is stabilizing. If, on the other hand, the probability of nuclear war is nonzero, then there is a real danger that the spread of nuclear weapons increases the probability of a catastrophic nuclear war. If this is true, then proliferation optimists cannot be certain that nuclear weapons will never be used. In sum, the spread of nuclear weapons can either raise the risk of nuclear war and in so doing, deter large-scale conventional conflict. Or there is no danger that nuclear weapons will be used and the spread of nuclear weapons does not increase international instability. But, despite the claims of the proliferation optimists, it is nonsensical to argue that nuclear weapons will never be used and to simultaneously claim that their spread contributes to international stability. Proliferation Anti-obsessionists: Other scholars, who I label “anti-obsessionists” argue that the spread of nuclear weapons has neither been good nor bad for international politics, but rather irrelevant. They argue that academics and policymakers concerned about nuclear proliferation spend too much time and energy obsessing over something, nuclear weapons, that, at the end of the day, are not all that important. In Atomic Obsession, John Mueller argues that widespread fears about the threat of nuclear weapons are overblown.[[17]](#footnote-17)[45] He acknowledges that policymakers and experts have often worried that the spread of nuclear weapons could lead to nuclear war, nuclear terrorism and cascades of nuclear proliferation, but he then sets about systematically dismantling each of these fears. Rather, he contends that nuclear weapons have had little effect on the conduct of international diplomacy and that world history would have been roughly the same had nuclear weapons never been invented. Finally, Mueller concludes by arguing that the real problem is not nuclear proliferation, but nuclear nonproliferation policy because states do harmful things in the name of nonproliferation, like take military action and deny countries access to nuclear technology for peaceful purposes. Similarly, Ward Wilson argues that, despite the belief held by optimists and pessimists alike, nuclear weapons are not useful tools of deterrence.[[18]](#footnote-18)[46] In his study of the end of World War II, for example, Wilson argues that it was not the U.S. use of nuclear weapons on Hiroshima and Nagasaki that forced Japanese surrender, but a variety of other factors, including the Soviet Union’s decision to enter the war. If the actual use of nuclear weapons was not enough to convince a country to capitulate to its opponent he argues, then there is little reason to think that the mere threat of nuclear use has been important to keeping the peace over the past half century. Leaders of nuclear-armed states justify nuclear possession by touting their deterrent benefits, but if nuclear weapons have no deterrent value, there is no reason, Ward claims, not to simply get rid of them. Finally, Anne Harrington de Santana argues that nuclear experts “fetishize” nuclear weapons.[[19]](#footnote-19)[47] Just like capitalists, according to Karl Marx, bestow magical qualities on money, thus fetishizing it, she argues that leaders and national security experts do the same thing to nuclear weapons. Nuclear deterrence as a critical component of national security strategy, according to Harrington de Santana, is not inherent in the technology of nuclear weapons themselves, but is rather the result of how leaders in countries around the world think about them. In short, she argues, “Nuclear weapons are powerful because we treat them as powerful.”[[20]](#footnote-20)[48] But, she maintains, we could just as easily “defetish” them, treating them as unimportant and, therefore, rendering them obsolete. She concludes that “Perhaps some day, the deactivated nuclear weapons on display in museums across the United States will be nothing more than a reminder of how powerful nuclear weapons used to be.”[[21]](#footnote-21)[49] The anti-obsessionists make some thought-provoking points and may help to reign in some of the most hyperbolic accounts of the effect of nuclear proliferation. They remind us, for example, that our worst fears have not been realized, at least not yet. Yet, by taking the next step and arguing that nuclear weapons have been, and will continue to be, irrelevant, they go too far. Their arguments call to mind the story about the man who jumps to his death from the top of a New York City skyscraper and, when asked how things are going as he passes the 15th story window, replies, “so far so good.” The idea that world history would have been largely unchanged had nuclear weapons not been invented is a provocative one, but it is also unfalsifiable. There is good reason to believe that world history would have been different, and in many ways better, had certain countries not acquired nuclear weapons. Let’s take Pakistan as an example. Pakistan officially joined the ranks of the nuclear powers in May 1998 when it followed India in conducting a series of nuclear tests. Since then, Pakistan has been a poster child for the possible negative consequences of nuclear proliferation. Pakistan’s nuclear weapons have led to further nuclear proliferation as Pakistan, with the help of rogue scientist A.Q. Khan, transferred uranium enrichment technology to Iran, Libya, and North Korea.[[22]](#footnote-22)[50] Indeed, part of the reason that North Korea and Iran are so far along with their uranium enrichment programs is because they got help from Pakistan. Pakistan has also become **more aggressive** since acquiring nuclear weapons, displaying an increased willingness to sponsor cross-border incursions into India with terrorists and irregular forces.[[23]](#footnote-23)[51] In a number of high-stakes nuclear crises between India and Pakistan, U.S. officials worried that the conflicts could escalate to a nuclear exchange and intervened diplomatically to prevent Armageddon on the subcontinent. The U.S. government also worries about the safety and security of Pakistan’s nuclear arsenal, fearing that Pakistan’s nukes could fall into the hands of terrorists in the event of a state collapse or a break down in nuclear security. And we still have not witnessed the full range of consequences arising from Pakistani nuclear proliferation. Islamabad has only possessed the bomb for a little over a decade, but they are likely to keep it for decades to come, meaning that we could still have a nuclear war involving Pakistan. In short, Pakistan’s nuclear capability has already had deleterious effects on U.S. national security and these threats are only likely to grow over time. In addition, the anti-obsessionists are incorrect to argue that the cure of U.S. nuclear nonproliferation policy is worse than the disease of proliferation. Many observers would agree with Mueller that the U.S. invasion of Iraq in 2003 was a disaster, costing much in the way of blood and treasure and offering little strategic benefit. But the Iraq War is hardly representative of U.S. nonproliferation policy. For the most part, nonproliferation policy operates in the mundane realm of legal frameworks, negotiations, inspections, sanctions, and a variety of other tools. Even occasional preventive military strikes on nuclear facilities have been far less calamitous than the Iraq War. Indeed, the Israeli strikes on nuclear reactors in Iraq and Syria in 1981 and 2007, respectively, produced no meaningful military retaliation and a muted international response. Moreover, the idea that the Iraq War was primarily about nuclear nonproliferation is a contestable one, with Saddam Hussein’s history of aggression, the unsustainability of maintaining the pre-war containment regime indefinitely, Saddam’s ties to terrorist groups, his past possession and use of chemical and biological weapons, and the window of opportunity created by September 11th, all serving as possible prompts for U.S. military action in the Spring of 2003. The claim that nonproliferation policy is dangerous because it denies developing countries access to nuclear energy also rests on shaky ground. If anything, the global nonproliferation regime has, on balance, increased access to nuclear technology. Does anyone really believe that countries like Algeria, Congo, and Vietnam would have nuclear reactors today were it not for Atoms for Peace, Article IV of the NPT, and other appendages of the nonproliferation regime that have provided developing states with nuclear technology in exchange for promises to forgo nuclear weapons development? Moreover, the sensitive fuel-cycle technology denied by the Nuclear Suppliers Group (NSG) and other supply control regimes is not even necessary to the development of a vibrant nuclear energy program as the many countries that have fuel-cycle services provided by foreign nuclear suppliers clearly demonstrate. Finally, the notion that nuclear energy is somehow the key to lifting developing countries from third to first world status does not pass the laugh test. Given the large upfront investments, the cost of back-end fuel management and storage, and the ever-present danger of environmental catastrophe exemplified most recently by the Fukushima disaster in Japan, many argue that nuclear energy is not a cost-effective source of energy (if all the externalities are taken into account) for any country, not to mention those developing states least able to manage these myriad challenges. Taken together, therefore, the argument that nuclear nonproliferation policy is more dangerous than the consequences of nuclear proliferation, including possible nuclear war, is untenable. Indeed, it would certainly come as a surprise to the mild mannered diplomats and scientists who staff the International Atomic Energy Agency, the global focal point of the nuclear nonproliferation regime, located in Vienna, Austria. The anti-obsessionsists, like the optimists, also walk themselves into logical contradictions. In this case, their policy recommendations do not necessarily follow from their analyses. Ward argues that nuclear weapons are irrelevant and, therefore, we should eliminate them.[[24]](#footnote-24)[52] But, if nuclear weapons are really so irrelevant, why not just keep them lying around? They will not cause any problems if they are as meaningless as anti-obsessionists claim and it is certainly more cost effective to do nothing than to negotiate complicated international treaties and dismantle thousands of warheads, delivery vehicles, and their associated facilities. Finally, the idea that nuclear weapons are only important because we think they are powerful is arresting, but false. There are properties inherent in nuclear weapons that can be used to create military effects that simply cannot, at least not yet, be replicated with conventional munitions. If a military planner wants to quickly destroy a city on the other side of the planet, his only option today is a nuclear weapon mounted on an ICBM. Therefore, if the collective “we” suddenly decided to “defetishize” nuclear weapons by treating them as unimportant, it is implausible that some leader somewhere would not independently come to the idea that nuclear weapons could advance his or her country’s national security and thereby re-fetishize them. In short, the optimists and anti-obsessionists have brought an important perspective to the nonproliferation debate. Their arguments are provocative and they raise the bar for those who wish to argue that the spread of nuclear weapons is indeed a problem. Nevertheless, their counterintuitive arguments are not enough to wish away the enormous security challenges posed by the spread of the world’s most dangerous weapons. These myriad threats will be considered in the next section. Why Nuclear Proliferation Is a Problem The spread of nuclear weapons poses a number of severe threats to international peace and U.S. national security including: nuclear war, nuclear terrorism, emboldened nuclear powers, constrained freedom of action, weakened alliances, and further nuclear proliferation. This section explores each of these threats in turn. Nuclear War. The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there is a **catastrophic nuclear war**. A nuclear exchange between the two superpowers during the Cold War could have arguably resulted in human extinction and a nuclear exchange between states with smaller nuclear arsenals, such as India and Pakistan, could still result in millions of deaths and casualties, billions of dollars of economic devastation, environmental degradation, and a parade of other horrors. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used one nuclear weapon each on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to sixty-five-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again. After all, analysts in the 1990s argued that worldwide economic downturns like the great depression were a thing of the past, only to be surprised by the dot-com bubble bursting in the later 1990s and the Great Recession of the late Naughts.[[25]](#footnote-25)[53] This author, for one, would be surprised if nuclear weapons are not used in my lifetime. **Before** reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preemptive nuclear strike to disarm Iran’s nuclear capabilities and eliminate the threat of nuclear war against Israel. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use ‘em or loose ‘em pressures. That is, if Tehran believes that Israel might launch a preemptive strike, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.[[26]](#footnote-26)[54] If there are advantages to striking first, one state might start a nuclear war in the **belief that war is inevitable** and that it would be better to go first than to go second. In a future Israeli-Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, there is a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders that would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. For example, Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who genuinely hold millenarian religious worldviews who could one day ascend to power and have their finger on the nuclear trigger. We cannot rule out the possibility that, as nuclear weapons continue to spread, one leader will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine a nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. This leads to the credibility problem that is at the heart of modern deterrence theory: how can you threaten to launch a suicidal nuclear war? Deterrence theorists have devised at least two answers to this question. First, as stated above, leaders can choose to launch a limited nuclear war.[[27]](#footnote-27)[55] This strategy might be especially attractive to states in a position of conventional military inferiority that might have an incentive to escalate a crisis quickly. During the Cold War, the United States was willing to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority in continental Europe. As Russia’s conventional military power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear use in its strategic doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a U.S. superpower in a possible East Asia contingency. Second, as was also discussed above leaders can make a “threat that leaves something to chance.”[[28]](#footnote-28)[56] They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents could have led to war.[[29]](#footnote-29)[57] When we think about future nuclear crisis dyads, such as India and Pakistan and Iran and Israel, there are fewer sources of stability that existed during the Cold War, meaning that there is a very real risk that a future Middle East crisis could result in a devastating nuclear exchange.

#### Tech leadership based on domestic nuclear expansion prevents global prolif

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

The health of the U.S. civil nuclear infrastructure can have an important bearing in a variety of ways on the ability of the United States to advance its nonproliferation objectives. During the Atoms for Peace Program and until the 1970s, the U.S. was the dominant supplier in the international commercial nuclear power market, and it exercised a strong leadership role in shaping the global nonproliferation regime. In those early days, the U.S. also had what was essentially a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Today due to its political, military and economic position in the world, the United States continues to exercise great weight in nonproliferation matters. However, the ability of the United States to promote its nonproliferation objectives through peaceful nuclear cooperation with other countries has declined**.** The fact that no new nuclear power plant orders have been placed in over three decades has led to erosion in the capabilities of the U.S. civil nuclear infrastructure. Moreover, during the same period, the U.S. share of the global nuclear market has declined significantly, and several other countries have launched their own nuclear power programs and have become major international suppliers in their own right. It is highly significant that all but one of the U.S. nuclear power plant vendors and nuclear fuel designers and manufactures for light water reactors have now been acquired by their non-U.S. based competitors. Thus, while the U.S. remains a participant in the international market for commercial nuclear power, it no longer enjoys a dominant role as it did four decades ago. To the extent that U.S. nuclear plant vendors and nuclear fuel designers 2 and manufacturers are able to reassert themselves on a technical and commercial basis, opportunities for U.S. influence with respect to nuclear nonproliferation can be expected to increase. However, the fact that there are other suppliers that can now provide plants and nuclear fuel technology and services on a competitive commercial basis suggests that the U.S. will have to work especially hard to maintain and, in some cases, rebuild its nuclear infrastructure, if it wishes to exercise its influence in international nuclear affairs. The influence of the United States internationally could be enhanced significantly if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. There is a clear upsurge of interest in nuclear power in various parts of the world. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. **Constructive** U.S. influence will be best achieved to the extent that the U.S. is perceived as a major **technological** leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, the erosion of the U.S. nuclear infrastructure has begun to weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international 3 nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, enrichment services, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation with other countries. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. Further, the ability of the U.S. to develop improved and advanced nuclear technologies will depend on its ability to provide consistent and vigorous support for nuclear R&D programs that will enjoy solid bipartisan political support in order that they can be sustained from one administration to another. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and to U.S. non-proliferation posture as criteria in project design and source selection where possible. Finally, the ability of the United States to resolve its own difficulties in managing its **spent fuel** and nuclear wastes will be crucial to maintaining the credibility of the U.S. nuclear power program and will be vital to implementing important new nonproliferation initiatives designed to discourage the spread of sensitive nuclear facilities to other countries.

**Fuel cycle is key—effectiveness is historically predicated on sustainable waste arrangements**

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

Historically, the ability of the U.S. to help prevent the spread of nuclear weapons has stemmed from many factors, not least of which has been the political, military and economic power that the US has exercised in international affairs. The U.S. has used many tools to promote its nonproliferation objectives. One important instrument that the U.S. has employed for decades in building the international nonproliferation system has been its ability to provide nuclear fuel, nuclear power plants and fuel cycle services to countries on a reliable and stable basis, under strict nonproliferation controls and conditions. In the early days of the nuclear era, the U.S. essentially had a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the NPT. The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Moreover, the strength of U.S. civil nuclear capabilities gave it an important seat at the international table, not only in negotiating the norms that should 10 govern the conduct of civil nuclear power programs to protect against their misuse or diversion to nuclear weapons, but also in shaping the key elements of the global nonproliferation regime. In addition domestic U.S. nuclear programs have enabled the United States to make important contributions to achieving technical improvements in international safeguards, physical protection, and nuclear detection systems. However, the challenges now confronting the international nonproliferation regime come at a time when the U.S. commercial share of the global nuclear market has declined and when there are serious concerns about the health of the U.S. nuclear infrastructure.

**Expanding global interest generates new challenges—but effective domestic conditions ensure a lead role and solidify export policy**

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

Consumer countries are likely to turn for support and assistance to those states possessing **the most vigorous** domestic nuclear power programs that are placing new power plant orders, extending international fuel cycle services, and maintaining leadership roles in supporting innovative improvements in advanced technologies. This suggests that the influence of the United States internationally could be enhanced significantly if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. Conversely, if the 2010 initiative falters, or if U.S. companies only are given subordinate roles in processing new plant orders, then this can only further weaken the U.S. nuclear infrastructure as well as the stature of the U.S. in the international nuclear community. Experts believe that the U.S. nuclear infrastructure is capable of sustaining the goals of the 2010 program, but this will require the resolution of a number of formidable problems, including arrangements for the acquisition of long lead time components and coping with anticipated shortages of experienced personnel. Maintaining the U.S. as a Significant Global Supplier The health of the U.S. civil nuclear infrastructure will also be crucial to the success of U.S. efforts to play a significant role as a nuclear supplier and to advance its nonproliferation objectives. There is a clear and compelling upsurge of interest in nuclear power in various parts of the world that is independent of U.S. policy and prerogatives. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to 23 exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. Constructive U.S. influence will be best achieved to the extent that the U.S. is perceived as a major technological leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, if the U.S. nuclear infrastructure continues to erode, it will weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, uranium enrichment, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation other countries. The U.S. should establish a high priority goal to rebuild an indigenous nuclear industry and support its growth in domestic and international markets. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. 24 The percentage of nuclear materials, including separated plutonium, that are subject to U.S. consent rights will diminish over time as new suppliers of nuclear materials and facilities take a larger share of the international nuclear market. Unless the U.S. is able to compete effectively in the international market as a supplier of nuclear fuels, equipment and technology, the quantity of the nuclear materials around the globe that the U.S. has control over will diminish significantly in the future. This may not immediately weaken the effectiveness of the nonproliferation regime since all the major suppliers have adopted the export guidelines of the Nuclear Supplier Group. However, only the U.S., Australia and Canada have consent rights over enrichment and reprocessing of the nuclear materials subject to their agreements. Consequently, if there is a major decline in the U.S. share of the international nuclear market, the U.S. may not be as effective as it has been in helping to ensure a rigorous system of export controls. Nuclear R&D Further, the revitalization of the U.S. nuclear infrastructure will depend on the U.S. ability to provide sustained bipartisan support for nuclear R&D programs in order that they can be sustained from one administration to another. The ability of the United States to continue to make significant contributions to the improvement of safeguards, physical protection and proliferation resistance of nuclear systems is dependent, at least in part, on the continued health of the U.S. technological base. This assumes close collaboration between industry and the national laboratories, which could be increased through greater use of Cooperative Agreements between U.S. firms and national laboratories. GNEP contains some important new ideas that could advance U.S. nonproliferation objectives. Envisioned within both GNEP and the U.S.-led Generation IV Initiative is the development and deployment of nextgeneration nuclear power plant designs that, if completed, could help restore a U.S. competitive edge in nuclear system supply. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and the benefit to U.S. non-proliferation posture as criteria in project design and selection where possible.

#### Federal action is key to reverse industry decline and influence reactor adoption

Wallace and Williams, 12 [Michael, Senior Adviser, U.S. Nuclear Energy Project, Sarah, CSIS, “Nuclear Energy in America: Preventing It’s Early Demise,” <http://csis.org/files/publication/120417_gf_wallace_williams.pdf>]

America’s nuclear energy industry is in decline. Low natural gas prices, financing hurdles, new safety and security requirements, failure to resolve the waste issue and other factors are hastening the day when existing reactors become uneconomic, making it virtually impossible to build new ones. Two generations after the United States took this wholly new and highly sophisticated technology from laboratory experiment to successful commercialization, our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future. The pace of this decline, moreover, could be more rapid than most policymakers and stakeholders anticipate. With 104 operating reactors and the world’s largest base of installed nuclear capacity, it has been widely assumed that the United States—even without building many new plants—would continue to have a large presence in this industry for some decades to come, especially if existing units receive further license extensions. Instead, current market conditions are such that growing numbers of these units are operating on small or even negative profit margins and could be retired early. Our nation is in danger of losing an industry of **unique** strategic **importance**, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future.60 | Center for Strategic and International Studies Meanwhile, China, India, Russia, and other **countries are looking to** significantly expand their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. **With the center of gravity** for global nuclear investment **shifting** to a new set of players, the United States and the international community face a difficult set of challenges: stemming the **spread of nuclear weapons-**usable materials and know-how; preventing **further catastrophic nuclear accidents**; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. In this context, federal action to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective SHARE OF NET GLOBAL NUCLEAR GENERATION 1980-2030 Source: Energy Information Agency (EIA) databaseGlobal Forecast 2012 | 61 safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be **more effective** and less expensive than trying to contain these risks militarily. Second, **setting global norms** and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, **America’s ability to exert leadership** and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty and other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### And, new tech is the crux – the alternative is cascading prolif and terrorism

NESG, 05 [report by the Nuclear Energy Study Group of the American Physical Society Panel on Public Affairs, “Nuclear Power And Proliferation Resistance: Securing Benefits, Limiting Risk,” May, http://www.aps.org/policy/reports/popa-reports/proliferation-resistance/upload/proliferation.pdf]

Nuclear Power, Nuclear Proliferation and National Security The technologies and materials used in the manufacture of nuclear weapons overlap with those used in peaceful nuclear power applications. The extent to which nuclear power will be an acceptable and enduring option to meeting future energy requirements in many regions of the world will therefore depend in part upon the ability to minimize the associated proliferation risks. The elements of a nuclear power system include: facilities that mine and mill uranium ore, facilities that enrich uranium to create fuel, fuel fabrication facilities, reactors that burn that fuel to generate electricity, possibly facilities to reprocess the spent fuel,6 and waste storage sites. Nuclear reactors themselves are not the primary proliferation risk. The principal proliferation concern among the various elements of a nuclear power system are the enrichment and reprocessing facilities, which can produce materials directly usable in weapons. In addition, the spent fuel is a potential source of plutonium that must be safeguarded to prevent its clandestine separation for use in weapons, and fresh low-enriched uranium (LEU) fuel materials are a potential source for clandestine enrichment to nuclear weapons grade material. Further, poorly secured nuclear materials, including plutonium separated for fabrication into reactor fuel, present a risk of proliferation through theft and transfer to another country or terrorist group. The **challenges to the non-proliferation regime** are evident worldwide. Negotiations are under way to persuade Iran to abandon a uranium enrichment program, heavy water production plant and high-power research reactor that Iran claims are for civilian use but could easily be used to produce high-enriched uranium and plutonium for nuclear weapons. In North Korea, negotiations continue on termination of its nuclear weapons program and the associated reprocessing and enrichment activities. Much of Russia’s approximately 2 million pounds of weapons usable uranium and plutonium from both military and civilian nuclear energy programs may not be satisfactorily secured.7 Also, the smuggling network run by A.Q. Khan, who in the 1970s diverted uranium enrichment technology from a European consortium for use in Pakistan’s nuclear weapons program, reportedly sold enrichment technology to several countries, including Libya. This recent history leaves little doubt that civilian nuclear technology and materials can be misused, sold, stolen, or used as a cover for development of a nuclear weapons production capability. Figure 2 illustrates four primary pathways from nuclear-power programs to nuclear-weapons proliferation: theft, sale, diversion, and breakout.8 Addressing the Proliferation Risks of Nuclear Power There are a number of diplomatic, economic, military, and scientific and technical (S&T) approaches to reducing the proliferation risks of nuclear power.9 President Bush made a two part proposal to restrict the spread of enrichment and reprocessing technologies: 1) the world's leading nuclear exporters should ensure that states have reliable access at reasonable cost to fuel for civilian reactors, so long as those states renounce enrichment and reprocessing; and 2) The 40 nations of the Nuclear Suppliers Group should refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants.10 IAEA director, Mohammed ElBaradei proposed a 5-year moratorium on construction of new enrichment or reprocessing plants while an effort is made to establish a multi-national alternative to nationally owned plants.11 Such fuel assurances and pledges to restrict sales are important components of a strategy to reduce the proliferation risks of nuclear power. 12 However, no single diplomatic, military, economic, or technical initiative alone will be able to fully deal with the proliferation challenge. The best prospect for achieving non-proliferation goals while expanding nuclear power is to engage all appropriate means and to maximize their respective contributions.13 From a technical point of view, nuclear power cannot be made “proliferation proof”. However, numerous steps can be taken -- and must be taken -- to make it as “proliferation-resistant” as reasonably possible. This is an urgent global security problem. China is poised to greatly expand its nuclear power program and Indonesia, Vietnam and Egypt have all declared an interest in building civilian nuclear power plants. **Without technological advances** and institutional changes, it will be easier for countries motivated to proliferate to take advantage of the global expansion of nuclear power or for terrorists to access nuclear materials. Iran’s developing nuclear program indicates the **urgent need to enhance the proliferation resistance of nuclear power.** Thus, whether or not the United States constructs new nuclear power plants over the next quarter century, it is vital to US national security that the US remain engaged in the development of proliferation-resistant nuclear-energy technologies and of technologies that can support any new arrangements to safeguard and internationalize the fuel-cycle and strengthen international institutions.

#### Thorium R&D is key – spurs elimination of plutonium stockpiles

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “[What about thorium?](http://www.fas.org/blogs/sciencewonk/2012/08/what-about-thorium/)” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into uranium in the form of U-233. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was [used](http://www.neimagazine.com/story.asp?storyCode=2054564) to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a [process](http://nuclearweaponarchive.org/Library/Plutonium/index.html) of decay whereby plutonium in the form of Pu-239 is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly 13 kilograms (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly [70](http://www.world-nuclear.org/info/inf15.html) tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would [realize](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf) a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, [featuring](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf.) a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, **thus making the thorium process less suitable for the development of plutonium for a nuclear weapon.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would [require](http://www.ltbridge.com/assets/Thorium_Fuel_Fact_Sheet.pdf) uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have [detonated](http://en.wikipedia.org/wiki/Nuclear_weapons_testing) nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “[in situ](http://hdl.handle.net/1721.1/29956).” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an [article](http://www.wired.com/magazine/2009/12/ff_new_nukes/) by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further **research and development of thorium** needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### And, plutonium disposal is possible with in-situ reprocessing – solves extinction from terrorism

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (<http://thoriumenergy.blogspot.com/>). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the <http://thoriumenergy.blogspot.com/> blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes in-situ reprocessing possible, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and does not require liquid sodium as a coolant, while it also **avoids the risk of plutonium getting into the hands of terrorists**. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### And, dual use makes other reactors too risky – federal investment streamlines tech transfers

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Advanced nuclear power must be proliferation resistant. Nuclear weapons can cause terrible destruction of whole cities and contaminate entire regions, so expansion of nuclear power must come with assurances that the risk of proliferation of nuclear weapons is not increased. The technology for making such weapons is widely known, although the process is difficult and expensive. Building commercial nuclear power plants has not led to weapons development; nations that have nuclear weapons have developed them with purposeful programs and facilities. However dual-use technologies such as centrifuge enrichment of U-235 that can make fuel for PWRs can be adapted to make highly enriched uranium for weapons. After President Eisenhower’s Atoms for Peace speech the US helped nations to acquire the knowledge and materials to use nuclear technology for peaceful purposes. Unexpectedly this knowledge led India to develop nuclear weapons instead. Selling advanced nuclear power plants worldwide does not require providing each nation with the technical skills and materials to build nuclear power plants or nuclear weapons. Consider the airplane and jet engine industry: nations want prestigious national airlines. Fully 83 countries, from Algeria to Yemen, operate airlines using the Boeing 747 airliner, yet these nations do not have their own airframe or engine production or maintenance capabilities. General Electric makes a business of maintaining and overhauling engines at GE’s own service centers. This is a technology-transfer-resistant model suitable for LFTR installation and maintenance. The liquid fluoride thorium reactor is proliferation resistant. LFTR requires fissile material to be transported to the site for startup, but not thereafter. LFTR then creates and burns fissile U-233 that conceivably could be used instead for a nuclear weapon. Would this ever happen? China, USA, Russia, India, UK, France, Pakistan, and Israel, which account for 57% of global CO2 emissions, already have nuclear weapons and no incentive to subvert LFTR technology. So just implementing LFTRs in these nations would be a big step in addressing global warming. Many additional nations, such as Canada, Japan, and South Africa, have the capability to build nuclear weapons but have chosen not to, so there is no incentive for them to subvert LFTR technology for this purpose. Should LFTRs be implemented in other non-weapons states? Certainly terrorists could not steal this uranium dissolved in a molten salt solution along with even more radioactive fission products inside a sealed reactor. IAEA safeguards include physical security, accounting and control of all nuclear materials, surveillance to detect tampering, and intrusive inspections. LFTR’s neutron economy contributes to securing its inventory of nuclear materials. Neutron absorption by uranium-233 produces about 2.4 neutrons per fission—one to drive a subsequent fission and another to drive the conversion of Th-232 to U-233 in the blanket molten salt. Taking into account neutron losses from capture by protactinium and other nuclei, a well-designed LFTR reactor will direct just about 1.00 neutrons per fission to thorium transmutation. This delicate balance doesn’t create excess U-233, just enough to generate fuel indefinitely. If this conversion ratio could be increased to 1.01, a 100 MW LFTR might generate kilogram of excess U-233 per year. If meaningful quantities of uranium-233 are misdirected for non-peaceful purposes, the reactor will report the diversion by stopping because of insufficient U-233 to maintain a chain reaction. Yet a sovereign nation or revolutionary group might expel IAEA observers, stop the LFTR, and attempt to remove the U-233 for weapons. Accomplishing this would require that skilled engineers, working in a radioactive environment, modify the reactor's fluorination equipment to separate uranium from the fuel salt instead of the thorium blanket salt. What would happen to them? The neutrons that produce U-233 also produce contaminating U-232, whose decay products emit 2.6 MeV penetrating gamma radiation, hazardous to weapons builders and obvious to detection monitors. The U-232 decays via a cascade of elements to thallium- 208, which builds up and emits the radiation. Depending on design specifics, the proportion of U-232 would be about 0.13% for a commercial power reactor. A year after separation, a weapons worker one meter from a subcritical 5 kg sphere of such U-233 would receive a radiation dose of 43 mSv/hr, compared to 0.003 mSv/hr from plutonium, even less from U-235. Death becomes probable after 72 hours exposure. After ten years this radiation triples. A resulting weapons would be highly radioactive and therefore dangerous to military workers nearby. The penetrating 2.6 MeV gamma radiation is an easily detected marker revealing the presence of such U-233, possibly even from a satellite. U-232 can not be removed chemically, and centrifuge separation from U-233 would make the centrifuges too radioactive to maintain. Conceivably, nuclear experts might try to stop the reactor, chemically extract the uranium, and devise chemistry to remove the intermediate elements of the U-232 decay chain before the thallium is formed, except that the isotopes are continually replaced by U-232 decay. They might try to quickly separate the small amount of Pa-233 from the uranium and let it decay to pure U-233, but they would have to design and build a special chemical plant within the radioactive reactor. Bomb-makers might attempt quickly fabricate a weapon from newly separated U-233 before radiation hazards become lethal; even so there will be sufficient U-232 contamination that penetrating 2.6 MeV gamma rays will be readily detected. The challenge of developing and perfecting such new processes will be more difficult and expensive than creating a purpose-built weapons factory with known technology, such as centrifuge enrichment of U-235 conducted in Iran or PUREX for extracting plutonium from solid fuel irradiated in LWRs. Bruce Hoglund wrote a fuller report of the challenges to would-be bomb makers, and there is a discussion in the comments of the energy from thorium blog, both linked in the references section. A LFTR operating under IAEA safeguards might additionally be protected by injecting U-238 from a remotely controlled tank of U-238. The U-238 would dilute (denature) the U-233 to make it useless for weapons, but it would also stop the reactor and ruin the fuel salt for further use. For personnel safety, any U-233 material operations must be accomplished by remote handling equipment within a radioactively shielded hot cell. This can be designed to make it very hard for any insiders or outsiders to remove material from the hot cell. Another hurdle for the would-be pilferer uranium from 700° C molten salt is the retained radioactive fission products. Even with a l-hour cooling period to allow decay of the short-lived isotopes, the salt still releases ~350 W/liter of heat. That heat comes from deadly ionizing radiation that would kill a nearby pilferer in minutes unless shielded by meters of concrete or water or heavy lead. This fission product radiation is the same self protection that protects spent LWR fuel from theft. The single-fluid DMSR is highly proliferation resistant. The DMSR contains enough U-238 mixed with fissile U-233 and U-235 that the uranium can not sustain the rapid fission reaction necessary for a nuclear weapon. Uranium enriched to less than 20% U-235 is termed LEU, low-enriched uranium. The LEU fuel is not suitable for a nuclear weapon, which typically requires over 90% U-235. The DMSR with at least 80% U-238 is said to be denatured with it. The DMSR has less chemical processing equipment than the two- fluid LFTR, which uses fluorine chemistry to direct U-233 generated in the thorium blanket to the core. The DMSR has no chemical processing equipment in the reactor plant that might somehow be modified to divert U-233 for a weapons program. Because of the substantial amount of U-238 in the DMSR, it does breed plutonium from neutron capture, just as does a standard LWR. Some Pu-239 fissions. However the fissile Pu-239 isotope that might be desired for a weapon is only 31% of the plutonium, mixed with other isotopes (Pu-238, 240, 241, 242) that make the plutonium unsuitable for a weapon. Because the plutonium is dissolved in the fuel salt, there is no opportunity to remove it early to obtain weapons grade Pu-239 before neutrons convert it to other isotopes, as in a LWR, CANDU, RBMK, or military plutonium production reactor. Further, plutonium’s chemistry makes it difficult to remove from the salt. Also, the salt contains highly radioactive fission products as well as U-232, whose decay daughters emit a penetrating 2.6 MeV gamma ray. DMSR is the most proliferation-resistant nuclear reactor. There are easier paths than U-233 to make nuclear weapons. Pakistan has illustrated how a developing nation can make uranium weapons using centrifuge enrichment; in a dual path it simultaneously developed the methods to extract weapons grade plutonium from uranium reactors. India and North Korea developed plutonium weapons from heavy water or graphite moderated reactors with online fuel exchange capability. Iran has built centrifuge enrichment plants capable of making highly enriched U-235 for nuclear weapons. These proven weapons paths eliminate the incentive for nations to try to develop nuclear weapons via the technically challenging and expensive U-233 path. Only a determined, well-funded effort on the scale of a national program could overcome the obstacles to illicit use of uranium- 232/233 produced in a LFTR reactor. Such an effort would certainly find that it was less problematic to pursue the enrichment of natural uranium or the breeding of plutonium. LFTR reduces existing weapons proliferation risks. Deploying LFTRs on a global scale will not increase the risk of nuclear weapons proliferation, but rather decrease it. Starting up LFTRs with existing plutonium can **consume inventories** of this weapons-capable material. The thorium-uranium fuel cycle reduces demand for U-235 enrichment plants, which can make weapons material nearly as easily as power reactor fuel. Abundant energy cheaper than coal can increase prosperity and enable lifestyles that lead to sustainable populations, reducing the potential for wars over resources.

#### ADVANTAGE TWO IS CHINA—

#### China will monopolize thorium reactor tech—large initiatives make LFTR inevitable, but if they develop it first they will control intellectual property

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

GIVEN ALL THIS, I HAD TO ASK, why bother? Blessed with large¶ thorium reserves and an existing nuclear R&D capacity that,¶ operational snafus notwithstanding, is world class, India, rather than¶ taking a laborious three-stage route to thorium-based nuclear power,¶ could start building thorium reactors—most simply and inexpensively,¶ liquid fluoride thorium reactors—tomorrow. The reasons it’s not doing¶ so have to do with institutional inertia, national pride, and supposed¶ national security concerns~such as, for instance, building its nuclear¶ arms stockpile. China, meanwhile, is taking a more catholic approach¶ to its nuclear power program, including investigating LFTRs.¶ In a development heralded by thorium advocates around the world,¶ China officially announced in February 2011 at a Shanghai scientific¶ conference that it will begin a program to develop a thorium-fueled¶ molten salt reactor (MSR), aka an LFTR. The project was first reported¶ on the mainland in the Wen Hui Baa newspaper. I broke the news in¶ the West in a story for Wired.com. I first heard about it at a conference¶ in Oak Ridge with Sorensen and other thorium activists. The phrase¶ “Sputnik moment” was used freely. The world’s most dynamic¶ economyhad **thrown down the thorium gauntlet**. While India chose to¶ slog up the long hill of its three-stage program, China was going straight¶ for the prize.¶ India’s three-stage program calls for gradually phasing in thorium¶ fuel rods in advanced heavy-water reactors. The Chinese program, in¶ contrast, marks the largest national initiative to pursue thorium MSRs¶ to date. One of the world’s largest consumers of coal for electricity, the¶ People’s Republic has embarked on a public campaign to shift toward¶ less noxious energy sources, including nuclear power. The massive¶ Three Gorges dam project, one of the largest public works projects in¶ history, was designed to produce 18.2 gigawatts of electricity and has¶ also engendered fierce criticism and internal protest. Electricity¶ demand is growing at nearly 10 percent a year, and Chinese officials,¶ often willing to ignore international objections to its domestic policies,¶ are committed to using nuclear power as a source of clean, inexpensive¶ energy.¶ The nuclear ambitions of India and China are similarly outsized, but¶ the cultures and capabilities of the two countries are quite different. I¶ used to live in Hong Kong, and I’ve traveled extensively in both¶ northern India and southeastern China. The differences in the¶ countries, for me, can be summed up with a glance at their railways:¶ The Indian rail system, a source of national pride since the days of the¶ raj, is known neither for its modernity nor its efficiency. In September¶ 2011 the passengers on a cross-country journey were surprised to learn¶ that their train had somehow traveled more than 600 miles in the¶ wrong direction. This was treated as a newsworthy but not completely¶ unheard-of experience. The passengers, suitably outraged, stormed the¶ depot.¶ In China the government completed the Beijing-to-Tibet railway in¶ 2006, a dream since the days of Sun Yat-sen. Totaling 2,526 miles, it¶ includes tracks, from Golmud to Lhasa, at the highest altitude of any¶ railway in the world. The two-day journey, which passes through the¶ world’s highest-altitude railway tunnel and uses many sections of¶ elevated track passing over permafrost, costs about $160, or about¶ what it costs to go from Boston to Washington, D.C., on the relatively¶ low-tech Acela train. The new Chinese line has engendered plenty of¶ criticism regarding fears of cultural hegemony and the loss of Tibetan¶ autonomy, but no reports of wrong-way trains have surfaced. In the¶ realm of public infrastructure, India is a great producer of think-tank¶ studies, government reports, and beard-stroking orations. China,¶ unimpeded by the hurly-burly of parliamentary democracy, is a better¶ place for actually accomplishing things. If you are betting on which¶ country will build a thorium power reactor first, the choice is not¶ tough. (A July 2011 crash on a high-speed rail line near Wenzhou, on¶ the southern coast, killed 39 people and sparked a level of public outcry¶ seldom seen under communist rule on the mainland. In public¶ statements after the accident, Chinese premier Wen Jibao vowed to¶ toughen safety standards in China’s rapid industrialization—but the¶ crash did little to slow China’s drive to modernize its energy and¶ transportation infrastructure.)¶ China has 14 nuclear power reactors in operation on the mainland¶ today, with more than 25 under construction and more soon to get¶ under way. For many years a consumer of reactor technology and¶ components from the West, and from Russia, China will soon be¶ building fully homegrown reactors. The development of liquid fluoride¶ thorium reactors would make China the most advanced nuclear power¶ nation on Earth—and could well give it yet another source of high-tech¶ products to **pad its export surplus**.¶ Comparing nuclear reactors to humble kitchen appliances, Xu¶ Hongjie, a research scientist at the Shanghai Institute of Applied¶ Physics, said, “We need a better stove that can burn more fuel.”11 It¶ was a line reminiscent of Chairman Mao’s finest exhortations.¶ Like many nuclear nations, China declared a pause to review and¶ reassess its nuclear development plans after Fukushima. This was only a breather; Chinese officials made it clear that the Japanese accident¶ would not affect their long-range plans. And they scoffed at the German¶ decision to get out of nuclear power altogether. The comments of¶ Chinese officials did not inspire confidence. Dr. Liu Changxin, vice¶ general secretary of the China Nuclear Society, remarked that such¶ natural disasters “don’t happen in China”—a startling claim given the¶ devastation wrought by the 2008 earthquake in Sichuan Province,¶ which killed 69,000 people and left nearly five million homeless.¶ The Chinese thorium program is headed by Jiang Mianheng, an¶ electrical engineer and the son of the former Chinese president Jiang¶ Zemin (see chapter 1). Jiang Mianheng, who is also a vice president of¶ the Chinese Academy of Sciences, headed a Chinese delegation that¶ visited Oak Ridge in the fall of 2010. The Chinese politely listened to the¶ research presentations, and patiently endured the facilities tour, before¶ revealing that what they were really there for was to soak up as much¶ information on thorium MSRs as they could. “They were quite open¶ about it,” a person present at those discussions told me. In early 2012¶ Western observers of the Chinese nuclear effort stated that the¶ Shanghai Institute of Applied Physics, with around 400 people and a¶ budget of $400 million, planned to build two prototype molten salt¶ reactors by 2015.¶ Like India, China needs to shift to nuclear from coal to avoid adding¶ catastrophic levels of carbon to the atmosphere. At the same time¶ many in the U.S. thorium movement regard the development of¶ Chinese LFTRs as a direct threat to U.S. economic competitiveness. The¶ specter of Chinese competitiveness with the United States is often¶ overblown; in general, China’s prosperity and the well-being of its¶ people, are good things for the world, particularly for Americans. That¶ won’t make it feel any better when we are buying LFTRs with “Made in¶ Shanghai” stamped on the side.¶ The alarmist version of China’s next-generation nuclear strategy¶ comes down to this: if you like foreign oil dependency, you’re going to¶ love foreign nuclear dependency.¶ While various international efforts, including the Gen IV nuclear R&D¶ initiative, include a thorium MSR component, China has made clear its¶ intention to go it alone. The announcement from the Chinese Academy¶ of Sciences states explicitly that the People’s Republic plans to develop¶ and control intellectualproperty with regard to thorium for its own¶ benefit. “This will enable China to firmly grasp the lifeline of energy in¶ its own hands,” Wen Hui Baa reported.”¶ The plans for China’s lifeline include not only thorium but also¶ critical materials that have increased in value at a startling rate since¶ 2010 and of which China now has a monopoly: rare earth elements.¶

#### And, that trades off with US market access – collapses economic competitiveness

Wash Post 12 [Washington Post, 3-14, “America Is Letting China Steal Our Valuable Nuclear Innovations,” http://www.washingtonsblog.com/2012/03/america-is-letting-china-steal-our-valuable-nuclear-innovations.html]

The U.S. Is Letting China Steal Its Nuclear Innovations … Just Like Xerox Let Apple and Microsoft Steal Its Valuable Breakthroughs Microsoft and Apple grew rich by using Xerox’s innovation. Xerox’s research arm (called Xerox Parc) invented the “graphical user interface” used by all modern computers. Bill Gates famously admitted to Steve Jobs that both Microsoft and Apple had ripped of Xerox’s GUI. Xerox could have made a fortune on its innovation. But it didn’t realize what it had … and failed to capitalize on its breakthroughs (Xerox tried to sue to protect its invention … but years too late, and the lawsuit was thrown out because Xerox had missed the deadline for suing). The same dynamic is playing out in the nuclear industry. Specifically, the U.S. created a safer, more efficient form of nuclear energy running on thorium. But – like Xerox Parc – America isn’t doing anything with its innovation, and China is running off with prize. The Telegraph’s Ambrose Evans-Pritchard notes: If China’s dash for thorium power succeeds, it will vastly alter the global energy landscape …. China’s Academy of Sciences said it had chosen a “thorium-based molten salt reactor system”. The liquid fuel idea was pioneered by US physicists at Oak Ridge National Lab in the 1960s, but the US has long since dropped the ball. Further evidence of Barack `Obama’s “Sputnik moment”, you could say. Chinese scientists claim that hazardous waste will be a thousand times less than with uranium. The system is inherently less prone to disaster. “The reactor has an amazing safety feature,” said Kirk Sorensen, a former NASA engineer at Teledyne Brown and a thorium expert. “If it begins to overheat, a little plug melts and the salts drain into a pan. There is no need for computers, or the sort of electrical pumps that were crippled by the tsunami. The reactor saves itself,” he said. “They operate at atmospheric pressure so you don’t have the sort of hydrogen explosions we’ve seen in Japan. One of these reactors would have come through the tsunami just fine. There would have been no radiation release.” The Telegraph continues: Professor Robert Cywinksi from Huddersfield University said thorium must be bombarded with neutrons to drive the fission process. “There is no chain reaction. Fission dies the moment you switch off the photon beam. There are not enough neutrons for it continue of its own accord,” he said. Dr Cywinski, who anchors a UK-wide thorium team, said the residual heat left behind in a crisis would be “orders of magnitude less” than in a uranium reactor. The earth’s crust holds 80 years of uranium at expected usage rates, he said. Thorium is as common as lead. America has buried tons as a by-product of rare earth metals mining. Norway has so much that Oslo is planning a post-oil era where thorium might drive the country’s next great phase of wealth. Even Britain has seams in Wales and in the granite cliffs of Cornwall. Almost all the mineral is usable as fuel, compared to 0.7pc of uranium. There is enough to power civilization for thousands of years. \*\*\* US physicists in the late 1940s explored thorium fuel for power. It has a higher neutron yield than uranium, a better fission rating, longer fuel cycles, and does not require the extra cost of isotope separation. The plans were shelved because thorium does not produce plutonium for bombs. As a happy bonus, it can burn up plutonium and toxic waste from old reactors, reducing radio-toxicity and acting as an eco-cleaner. Dr Cywinski is developing an accelerator driven sub-critical reactor for thorium, a cutting-edge project worldwide …. The idea is to make pint-size 600MW reactors. Popular Science reports: It would be based on thorium, a radioactive element that is much more abundant, and much more safe, than traditional sources of nuclear power. Some advocates believe small nuclear reactors powered by thorium could wean the world off coal and natural gas, and do it more safely than traditional nuclear. Thorium is not only abundant, but more efficient than uranium or coal — one ton of the silver metal can produce as much energy as 200 tons of uranium, or 3.5 million tons of coal, as the Mail on Sunday calculates it. \*\*\* Thorium reactors would not melt down, in part because they require an external input to produce fission. Thorium atoms would release energy when bombarded by high-energy neutrons, such as the type supplied in a particle accelerator. Wired points out: “President Obama talked about a Sputnik-type call to action in his [State of the Union] address,” wrote Charles Hart, a a retired semiconductor researcher and frequent commenter on the Energy From Thorium discussion forum. “I think this qualifies.” While nearly all current nuclear reactors run on uranium, the radioactive element thorium is recognized as a safer, cleaner and more abundant alternative fuel. Thorium is particularly well-suited for use in molten-salt reactors, or MSRs. Nuclear reactions take place inside a fluid core rather than solid fuel rods, and there’s no risk of meltdown. In addition to their safety, MSRs can consume various nuclear-fuel types, including existing stocks of nuclear waste. Their byproducts are unsuitable for making weapons of any type. They can also operate as breeders, producing more fuel than they consume. In the 1960s and 70s, the United States carried out extensive research on thorium and MSRs at Oak Ridge National Laboratory. That work was abandoned — partly, believe many, because uranium reactors generated bomb-grade plutonium as a byproduct. Today, with nuclear weapons less in demand and cheap oil’s twilight approaching, several countries — including India, France and Norway — are pursuing thorium-based nuclear-fuel cycles. (The grassroots movement to promote an American thorium power supply was covered in this December 2009 Wired magazine feature.) China’s new program is the largest national thorium-MSR initiative to date. The People’s Republic had already announced plans to build dozens of new nuclear reactors over the next 20 years, increasing its nuclear power supply 20-fold and weaning itself off coal, of which it’s now one of the world’s largest consumers. Designing a thorium-based molten-salt reactor could place China at the forefront of the race to build environmentally safe, cost-effective and politically palatable reactors. \*\*\* A Chinese thorium-based nuclear power supply is seen by many nuclear advocates and analysts as a threat to U.S. economic competitiveness. During a presentation at Oak Ridge on Jan. 31, Jim Kennedy, CEO of St. Louis–based Wings Enterprises (which is trying to win approval to start a mine for rare earths and thorium at Pea Ridge, Missouri) portrayed the Chinese thorium development as potentially crippling. “If we miss the boat on this, how can we possibly compete in the world economy?” Kennedy asked. “What else do we have left to export?” According to thorium advocates, the United States could find itself 20 years from now importing technology originally developed nearly four decades ago at one of America’s premier national R&D facilities. The alarmist version of China’s next-gen nuclear strategy come down to this: If you like foreign-oil dependency, you’re going to love foreign-nuclear dependency. \*\*\* While the international “Generation IV” nuclear R&D initiative includes a working group on thorium MSRs, **China has made clear its intention to go it alone. The Chinese Academy of Sciences announcement explicitly states that the PRC plans to develop and control intellectual property around thorium for its own benefit**. “This will enable China to firmly grasp the lifeline of energy in its own hands,” stated the Wen Hui Bao report. The U.S. is acting just like Xerox Parc, letting others steal its innovations … and losing entire markets in the process. If America fails to capitalize on its breakthrough, and let’s China obtain all of the relevant thorium energy patents, we could lose the entire market. Too bad the U.S. government – instead of developing the thorium concept which it innovated decades ago – is protecting an obsolete uranium model which was chosen only because produced plutonium for nuclear warheads and powered nuclear submarines. Indeed, our government is doubling-down on archaic and unsafe technology: the Nuclear Regulatory Commission has approved construction of new nuclear plants which do not incorporate the safety measures needed to prevent a Fukushima meltdown here … and the same companies which built and operated Fukushima will build and run the U.S. plants as well.

#### The impact is heg

Martino 7 – founder and chairman of the board of Cyber Technology Group, author of numerous books on finance (Rocco, A Strategy for Success: Innovation Will Renew American Leadership, <http://www.fpri.org/orbis/5102/martino.innovationamericanleadership.pdf>,)

The United States of course faced great challenges to its security and economy in the past, most obviously from Germany and Japan in the first half of the twentieth century and from the Soviet Union in the second half. Crucial to America’s ability to prevail over these past challenges was our technological and industrial leadership, and especially our ability to continuously recreate it. Indeed, the United States has been unique among great powers in its ability to keep on creating and recreating new technologies and new industries, generation after generation. Perpetual innovation and technological leadership might even be said to be the American way of maintaining primacy in world affairs. They are almost certainly what America will have to pursue in order to prevail over the contemporary challenges involving economic competitiveness and energy dependence. 

#### Hegemonic decline causes global conflict

**Hirsh, 12/19/2011** [former Foreign Editor and chief correspondent for Newsweek written for Foreign Affairs, and Washington Monthly Hirsh was co-winner of the Overseas Press Club award for best magazine reporting from abroad in 2001 . “The End of the American Interlude”, http://www.nationaljournal.com/magazine/the-end-of-the-american-interlude-20111215]

Welcome to the future. What we are witnessing, at G-20 meetings and elsewhere, is the emergence of a leaderless world that is dangerously adrift. Often foretold in books such as Niall Ferguson’s Civilization: The West and the Rest, the phenomenon is now occurring on the ground. And not just in the economic realm: NATO’s recent intervention in Libya was the alliance’s first major military effort conceived and led by Europeans. Meanwhile, troops are leaving Iraq, the last large-scale unilateral exercise of American hard power that the world is likely to see for a long time, if ever again. A campaign that began wishfully as “shock and awe,” a demonstration of America’s righteous might, had little impact abroad. (The Arab Spring took inspiration from a self-immolating fruit seller, not a democratically elected Iraqi parliament.) The United States remains, technically, the world’s only superpower. But in the past decade, we have spent trillions of dollars deploying this vast military superiority—and to what end? Neither Iraq nor Afghanistan offers a clear victory.

Mostly what has been achieved, it seems, is to expose our economic and military vulnerabilities. The success of insurgents in both countries demystified U.S. power in the eyes of the world. “Whatever Washington thought it wanted when it invaded Iraq in 2003, it was not the establishment of Shia religious parties with links to Iran in power in Baghdad,” wrote one British critic, Patrick Cockburn of The Independent, this month. “Similarly, in Afghanistan, a surge in U.S. troop numbers and the expenditure of $100 billion a year has not led to the defeat of 25,000 mostly untrained Taliban fighters,” he wrote. “Great powers depend on a reputation for invincibility and are wise not to put this too often to the test. The British Empire never quite recovered in the eyes of the world from the gargantuan effort it had to make to defeat a few tens of thousand Boer farmers.”

The problem is much bigger than the United States. If Washington is no longer the agenda-setter it once was, can a leaderless world continue to enjoy peace and stability? Can the “international system” as we know it today survive without its father in the driver’s seat? The question is as important for America’s future as, say, détente versus confrontation was during the Cold War, or isolationism versus engagement during the rise of fascism. “I don’t know how this is going to play out over time,” says a senior U.S. official who helps direct the U.S. agenda at G-20 meetings. “The Europeans have quite adroitly used the relative international diminution of stature of the U.S. in this crisis as way to get themselves back in the driver’s seat.” But Europe has its own existential crisis, which means that it, too, is unlikely to lead.

If history is any guide, a global system of open trade and peaceful relations cannot survive under such conditions. Through most of recorded history, and in every region of the globe, an international power vacuum has meant a ruthless jostling for military might, empire- and alliance-building, and sometimes worse. The fall of Rome ushered in the Dark Ages. The Congress of Vienna that imposed European order after the Napoleonic wars broke down in terrible conflicts by the late 19th century. The end of European empire precipitated World War I.

The G-20 was created in 1999 and ignored for a decade. It won a battlefield promotion during the financial crisis.

Some experts, such as Princeton University’s John Ikenberry in his new book Liberal Leviathan, argue that institutions like the United Nations and the World Trade Organization—and the overall benefits of trade, democracy, and openness—are now so well entrenched that the global system can prevail on its own. In rebuttal, political “realists” cite the overnight demise of the pre-World War I era of globalization, a halcyon period of free trade that had seemed almost as promising as today’s U.S.-designed system. The skeptics point to catastrophically wrong predictions like that of Norman Angell, whose 1911 book, The Great Illusion, argued that economic interdependence would prevent another major war.

Indeed, a similar breakdown of international order might already have occurred if Washington had reverted to its traditional isolationism after World War II. A resurgent Japan might have become a nuclear power and competed against China for regional hegemony. Europe would have devolved into age-old wars and rivalries. Lacking the annealing structure of the postwar Atlantic alliance, the Continent might never have achieved monetary union. Russia would have bid for Eurasian dominance, as it has since the 17th century. Most important of all, the trading system, which the United States virtually reinvented after World War II, would almost certainly have broken down, killing globalization in its infancy, reinforcing all the above developments. A major war of some kind would have been much more likely—and, despite the nuclear era, it might not have remained cold.

SIGNS OF DECAY

Already signs are emerging that, absent American leadership, the seams are unraveling. Recent G-20 outcomes have been close to incoherent: The world’s major governments didn’t just fail to devise a coordinated strategy for avoiding double-dip recession. In Washington and European capitals, they have embraced policies (for varying domestic political reasons) that most economists argue are the opposite of what is needed. They are pursuing austerity, in other words, when the world needs a concerted stimulus. The 50-year effort to strengthen rules for open trade—so integral to global stability since the General Agreement on Tariffs and Trade began in 1947—is also badly adrift; the 10-year-old Doha Round of talks has been at an impasse since negotiations broke down in 2008.

In fact, the only real evidence of global economic coordination in recent months has come from unelected central bankers, as seen in the coordinated rate cut of early December. And while Europe’s economic troubles will probably have more impact than any other factor on America’s economic health (and on the 2012 presidential contest), senior U.S. economic officials have found that they possess just one voice among many—and not even a major one—trying to bring the 17 eurozone countries and 27 European Union nations to consensus.

America also seems helpless to affect the outcome of the revolutions in Egypt, Syria, Tunisia, and Yemen. At first, these seemed consonant with the spread of democracy that Washington has always favored. But now, if any outside force is shaping events, it’s the autocratic and brutally repressive regime in Saudi Arabia. Why? Because U.S. and European actions are being guided, more and more, by the decisions of the Gulf Cooperation Council and the Arab League, both of which are ever more dominated by the Saudis. As columnist David Ignatius wrote recently in The Washington Post, “Saudi Arabia has increasingly replaced the United States as the key status quo power in the Middle East, a role that seems likely to expand even more in coming years as the Saudis boost their military and economic spending.” And a top Saudi prince recently told U.S. officials that Riyadh wouldn’t depend on U.S. security reassurance in the region, saying that the threat from Iran and Israel means that Saudi Arabia must consider building its own bomb. “They no longer trust us,” says a former senior U.S. official who visited the kingdom in December.

Russia, too, is in turmoil, and all the world can do is watch, wait, and hope. Twenty years ago this Christmas, when the Soviet Union (more or less) peacefully disbanded, U.S. economic advisers almost immediately began dispensing advice on what was then called democratic transition, and the Russian elite listened eagerly. Now, nuclear Russia appears on the verge of another revolution, and Vladimir Putin is telling the United States to keep its nose out.

Most unnerving of all, perhaps, is the rising global role of China. Beijing could choose to be a rogue power that routinely flouts trade rules, manipulates its currency, and steals intellectual property—leading to an ultimate breakdown of the global trading system. U.S. officials for years have pressed Beijing to become a responsible “stakeholder,” but the Chinese may have no incentive to listen if that system’s very survival is in doubt.

These problems will shape the world in which our grandchildren grow up. Yes, the United States has no military rival, even on the horizon. Maybe, 50 years on, the world map won’t look very different. It could be, in other words, a world of occasional wars and political flare-ups, but one where trade and international relations continue largely as they are, especially if the United States and Europe stay on the same page. Or, given today’s rudderless environment and current trends, it could also become a much more violent, uncertain world with rival, duopolistic spheres of influence run by Washington and Beijing. Or it could even become an ugly multipolar world dominated by “the United States of Europe,” Moscow, Washington, and Beijing—one where vicious mercantilist trade and occasional proxy wars (or something far worse) define the contest.

THE ESSENTIAL NATION?

Great powers typically decline very slowly. It took years before the world realized that Great Britain was an imperial corpse in the mid-20th century, sapped of its strength by two world wars. In 1947, a quick passing of the baton took place. The United States would now fill Britain’s role and become the central, stabilizing power in the West. The rest of the world, perhaps, didn’t realize how lucky it was to have such an orderly and seamless handoff.

The Cold War also ended quietly (though many had expected a big bang). For four decades, two ideas of social and political organization waged a titanic battle with apocalypse at stake. Then—on Dec. 25, 1991—Mikhail Gorbachev officially handed over his powers to Boris Yeltsin, and the Soviet Union ended its existence. The United States became, by accession, the world’s “hyperpower,” as French Foreign Minister Hubert Védrine described it at the time, reaching rhetorically for some new level of awesomeness not quite covered by the term “superpower.”

The ensuing 20 years at first seemed a time of triumph for the United States. After all, it had so clearly outperformed the Soviets, outspent them, and exposed their system as an ideological and economic fraud. Washington did some things right: Coaxing most of the former Soviet bloc states and allies, and many East Asian nations, into the Western system. But we never developed a new strategy. We tried “democratic enlargement” (Bill Clinton), “assertive multilateralism” (Madeline Albright), “the Bush Doctrine” (don’t ask), and now Obama’s no-doctrine presidency.

Instead, this 20-year era has been a kind of lost generation of diplomacy and errant war—a time, mostly, of confusion. No one calls the United States a hyperpower now. Given the paralyzed state of American politics; the indefinite state of indebtedness (especially to China); and the “rise of the rest,” especially China, India, and Brazil, this era is looking more like an interlude. The British maintained their imperial power for two centuries through a savvy (and somewhat ruthless) system of taxes and colonization, but Americans spent recklessly in the service of ideology—both through supply-side-inspired tax cuts and neoconservative pretensions about the projection of American power—and we stopped paying attention to how we were financing it all. Partly as a result, partly because they are enjoying their own success within the system, other nations have stopped taking our advice very seriously. It’s not that the so-called Beijing consensus is replacing the Washington consensus. Instead, there simply is no new consensus out there.

One problem we have in sketching out a future course is that no one has really done a good job of defining the present system—in other words, how deeply entrenched the international system is in our world, or how it might differ from the past.

Like Princeton’s Ikenberry, I have argued (in a 2003 book, At War With Ourselves: Why America Is Squandering Its Chance to Build a Better World) that the current network tying together markets, governments, and peoples is far broader and deeper than any of its predecessors, including what existed before World War I. Today, for the first time ever, most of the world is democratic, and most nations embrace similar ideas of open-market capitalism. In the security realm, the powers that could cause America the greatest headaches—China and Russia—are motivated to keep at least one foot inside the system because they’re both proud permanent members of the U.N. Security Council.

No country, not even would-be rogues such as Iran, has yet found a way around these iron operating laws: In order to be influential or powerful, a nation must be prosperous; in order to be prosperous, it must engage the international system of open trade (rather than conquer territory, as it might once have done); and in order to engage, even countries with dramatically different political and social systems, like America and China, must act according to the set of norms governing trade and conflict (if not yet, sadly, human rights). There seems to be no other choice. So the system has an internal logic that should give it natural life outside of U.S. dominance. As Obama put it on a trip to China in 2009, the American and Chinese economies are so integrated that to disentangle them would mean a kind of “mutual assured destruction.”

This is all to the good. But many political scientists insist that American global power remains the essential glue to this system. Charles Kupchan, a former Clinton administration official teaching at Georgetown University, argues that it’s almost impossible to keep the rules of the world system intact without an enforcer that guarantees global security. Until now, that has been American hegemony, not least because the U.S. has used its military dominance to amass scores of allies around the world. But how supportive will those allies be at a time of waning U.S. power, with China and other rising nations buying their own influence?

Perhaps no better augury of this future world exists than the G-20 meetings. The Group of 20 was created in 1999 by Europe and Canada and largely ignored for the next decade. But Beijing, which never wanted to join the U.S.-dominated G-8, found a home there because it seemed to be a more level field, with more natural allies among developing countries. “The formation of the G-20 is a Catch-22 of sorts, in the sense that the advanced industrialized nations had to enlarge the circle because the post-World War II order was anachronistic,” Kupchan says. “But when you’ve got 20 countries around the table, that’s a lot of cooks in the kitchen.”

Predictably, the G-20 has become a cacophonous convocation with no conclusion. For decades, American leaders at international gatherings have been first among equals. At the United Nations, NATO, and the WTO, Washington has usually enjoyed a baked-in-the-cake dominance, at least in setting the agenda. The president of the United States acted as a kind of informal president of the world—the quarterback of a sort of open-ended global game of nations and interest groups, whether the issue is free trade, geopolitics, or terrorism. This happens less and less. “It’s relatively hard to have a conversation,” the senior U.S. official says. “People take stylized positions that make it tougher to get a consensus agenda.”

But the G-20 won a battlefield promotion during the financial crisis of 2008, when government leaders elevated it by common consent to semiannual summit status—because it included China, South Korea, and other important creditor nations—and turned it into the world’s preeminent economic forum, eclipsing the G-8. This unwieldy group came of age amid U.S. weakness and culpability, with Wall Street as the chief culprit in the Great Recession. As a result, U.S. proposals have, if anything, gotten less attention because they emanate from Washington. At Cannes, for example, German Chancellor Angela Merkel quite publicly repudiated the Obama administration’s idea for putting hard bands around trade imbalances. “To set political limits on trade surpluses and deficits is neither economically justified nor politically appropriate,” she said—although a year later Merkel herself would propose, in an effort to save the euro, “political” limits on budgets of the E.U. nations. Not coincidentally, that plan appeared to emerge without any American input at all.

DARK FUTURE

Of course, some prominent thinkers, including Obama, still dispute the idea of American decline. Like every other president, he calls America the “greatest nation on earth” as blithely as he breathes. Europeans and many East Asians—especially those thinking about the rise of China—say that U.S. power is as essential as it has ever been. Some longtime scholars of the international system, such as former Deputy Secretary of State James Steinberg, say that the United States has staying power. “If you unpack it, the favorable views of the U.S. in Latin America are at historically high levels now,” he says. “Views of the United States in East Asia are extremely high. Views of the United States in Russia and Europe are extremely high, in historical terms.” Although it’s true that a deficit-hampered America is spending a huge amount on defense—more than the rest of the world combined—it may pose no problem. “Our share of global defense spending has risen, but it’s still a very minor share of [gross domestic product] so as long as the economy is growing,” Steinberg says. “The country has sustained dramatically higher defense spending than this. If we’re under 4 percent of GDP for defense spending, that’s sustainable over an indefinite period.”

So far, none of the major powers—the European Union, Japan, Russia, even China—has orchestrated a major military buildup in a bid for global power. Scholars going back to Thucydides argue that economic power inevitably tries to convert to influence on the world stage. So theoretically, countries like China, Japan, and new hybrid structures like the E.U. should be trying to convert their economic strength into military and strategic power. They all occasionally make noises about doing so, but their defense spending has remained steady and, even in China, not terribly aggressive. All of this has helped the global system survive terrorist attacks (which didn’t provoke a clash of civilizations) and a slew of financial crises (which didn’t herald the return of protectionism).

But the United States will find it extremely difficult to exercise its military dominance in the future, whether in counterinsurgency wars or more-traditional ones. Inside the Pentagon, officials are debating how to handle the rise of China, and the focus is shifting from Army-led counterinsurgency toward an Air Force and Navy kind of war-fighting strategy called “AirSea Battle.” The United States is not likely to ever again be as dominant as it was during the brief period of “smart bombs,” when the world stood in awe: Long-range and precision missiles are being commoditized, and the Chinese are developing their own. U.S. strategists, in response, are refining a doctrine of “assured access” to East Asia that means Americans would have to take the fight, in a hypothetical war, farther and farther inland in China to prevent those long-range missiles from being used. But critics say that’s an impossible task, especially with the budget knife now hitting the Pentagon. It is a standoff that could leave the world, again, without a clear leader or even a stable balance of power.

Meanwhile, China is throwing its weight around Asia, seeking to strong-arm Australia and Southeast Asian nations into alignment on geopolitical issues. Russia bullies members of the old Soviet sphere by punishing them with gas shutoffs or by supporting pro-Russian separatists inside their borders. In the Middle East, U.S. power is declining more rapidly than in other places, inspiring countries such as Saudi Arabia and Iran, vying for influence with Israel, to develop their own nuclear weapons. In an environment with no strong leadership on global trade and integration—where mistrust and new destabilizers such as cyberwarfare are rising—conflict is much more likely.

#### Hegemony solves great power war – any other system makes it more likely

**Wolforth et. al2011** (William is the Daniel Webster Professor at Dartmouth College, where he teaches in the Department of Government. Edited by Michael Mastanduno, Professor of Government and Dean of Faculty at Dartmouth College, and G. John Ikenberry, Professor of Politics and International Affairs at Princeton University, “Unipolarity, status competition, and great power war” *International Relations Theory and the Consequences of Unipolarity* pg. 65-66)

Conclusion

The evidence suggests that narrow and asymmetrical capabilities gaps foster status competition even among states relatively confident of their basic territorial security for the reasons identified in social identity theory and theories of status competition. Broad patterns of evidence are consistent with this expectation, suggesting that unipolarity shapes strategies of identity maintenance in ways that dampen status conflict. The implication is that unipoalrity helps explain low levels of military competition and conflict among major powers after 1991 and that a return to bipolarity or multipolairty would increase the likelihood of such conflict.

This has been a preliminary exercise. The evidence for the hypothesis explored here is hardly conclusive, but is sufficiently suggestive to warrant further refinement and testing, all the more so given importance of the questions at stake. If status matters in the way the theory discussed here suggests, then the widespread view that the rise of a peer competitor and the shift back to bipolar or multipolar structure present readily surmountable policy challenges is suspect. Most scholars agree with Jacek Kugler and Douglass Lemke’s argument: “[S]hould a satisfied state undergo a power transition and catch up with dominant power, there is little or no expectation of war. Given that today’s rising powers have every material reason to like the status quo, many observers are optimistic that the rise of peer competitors can be readily managed by fashioning an order that accommodates their material interests.

Yet it is harder to manage competition for status than for most material things. While diplomatic efforts to manage status competition seems easy under unipolarity, theory and evidence suggest that it could present much greater challenges as the system moves back to bipolarity or multipolairty. When status is seen as a positional good, efforts to craft negotiated bargains about status contests face long odds. And this positionality problem is particularly acute concerning the very issue unipolarity solves: primacy. The route back to bipolarity or multipolarity is thus fraught with danger. With two or more plausible claimants to primacy, positional competition and the potential for major power war could once again form the backdrop of world politics.

#### The United States Federal Government should establish a matching funds program, increase research and development funding, and reduce licensing restrictions for thorium power production in the United States.

#### Contention two is Solvency –

#### The tech is feasible but federal action via all three planks of the plan must happen

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

WHILE A NEW MANHATTAN PROIECT is not going to happen, some¶ form of government support is necessary. Transforming the energy¶ sector is too large a project for the private sector alone. That’s the¶ fundamental dilemma that faces the thorium movement. However,¶ there is a middle way, involving higher levels of federal support, a¶ conscious industrial policy to foster advanced nuclear power, and¶ broad incentives to harness the entrepreneurial energy of the private¶ sector.¶ Congress and the White House should establish a matching funds¶ program**,** aimed exclusively at two or three technologies, including¶ thorium power, to drive the creation of a Generation IV reactor¶ industry that would swiftly within this decade—build prototypes and¶ then small commercial versions, first to supplement and later replace¶ the current collection of outmoded plants, then to replace existing coal¶ plants. The government should overhaul the NRC to streamline the¶ licensing process and favor Generation IV designs over incremental,¶ halfhearted advances. It should explicitly benefit start-ups, like¶ TerraPower and Flibe Energy, not just established vendors and¶ manufacturers like GE, and it should promote homegrown technologies¶ like the LFTR. And it should be conditional on not just submitting new¶ designs for licensing but bringing reactors into commercial production¶ in the shortest time possible. With matching investments coming from¶ the private sector, the program should provide at least $2 billion a year¶ and no more than $5 billion, for a total of $4 billion to $10 billion a¶ year.¶ Many conservatives and liberals alike scoff at the notion of¶ significant funding for new nuclear power—or, indeed, for renewable¶ energy projects such as wind farms and solar arrays. In September¶ 2011 Solyndra, the California-based maker of solar panels, filed for¶ bankruptcy protection after receiving a loan guarantee for more than¶ half a billion dollars from the federal government. Critics of¶ renewables funding, such as Robert Bryce, seized on the Solyndra¶ affair, which threatened to turn into a major political landmine for the¶ Obama administration, as evidence of why the federal government¶ should never “pick winners” in the energy sector.¶ Here it’s important to recall that, as of late 2011, investment by the¶ United States in new energy sources was paltry compared with that of¶ the countries of Western Europe, to say nothing of China. The Solyndra¶ debacle represented less than 3 percent of a loan program that had¶ delivered $19 billion in private capital for reshaping the energy¶ economy, creating thousands of jobs in the worst employment¶ environment since the Great Depression.¶ For further perspective, keep in mind that, according to the Nobel¶ Prize— winning economist ]oseph Stiglitz, in 2007 the Iraq War was¶ costing $720 million per day.“ Big Oil subsidies are also huge in¶ comparison with investment in alternative energy. In 2010 the¶ Government Accountability Office found that the oil industry’s waiver¶ for royalties for deep-water drilling in the Gulf of Mexico—originally¶ passed by Congress in 1995, when oil was selling for $18 a barrel¶ —“could cost the Treasury $55 billion or more in lost revenue over the¶ life of the leases.” The federal government is already picking winners—¶ it’s just backing the wrong horse. Simply requiring big oil companies¶ operating in the Gulf to pay half the usual royalties for extracting oil¶ from U.S. territorial waters would fully fund a nuclear power¶ transformation program through 2020, at no cost to U.S. taxpayers. The¶ tobacco industry has funded billions of dollars in health-care and¶ prevention programs to move toward a smoke-free society. Let the¶ fossil fuel industry take a large role in funding the movement toward a¶ carbon-free society based on thorium power.¶ ----¶ SO, LET US ASSUME THAT A NUCLEAR POWER transformation¶ program is fully funded. The goals are to:¶ - Build a prototype LFTR within five years¶ - Commercialize LFTRs starting in 2020¶ - Bring LFTRs on line at a rate sufficient to replace fossil fuel plants¶ with clean energy sources by 2050¶ How much power would that be? The United States consumed about¶ 3.8 million gigawatt-hours of electricity in 2010. Coal accounted for 44¶ percent of that, nuclear for 20 percent. Total U.S. electricity-generating¶ capacity is about 1,000 gigawatts. Under an optimistic scenario for¶ renewable energy production from wind, solar, biomass, geothermal,¶ and so on, let’s say that, to reduce carbon emissions enough to stave off¶ catastrophic climate change, by 2050 we must increase the portion of¶ our electricity generated by nuclear power to 50 percent. One half of¶ 1,000 gigawatts is 500 gigawatts, or 500,000 megawatts.¶ Electricity demand will grow in the next four decades, of course, by¶ as much as 50 to 60 percent in some forecasts. But I’m being optimistic.¶ So let us say that improved conservation technology and changing¶ consumer habits will limit the increase in demand, and we must build¶ enough new nuclear power plants to generate 500 gigawatts by 2050.¶ That’s the equivalent of 500 thousand-megawatt nuclear reactors.¶ Between 2020 and 2050 that means building about 17 LFTRs a year.¶ Let’s be ambitious and call it 20 new thousand-megawatt thorium¶ plants a year, for a total of 600.¶ One of the beauties of LFTRs is that they can be mass-produced.¶ Small, modular LFTRs can be built as 250 megawatt machines and¶ assembled into larger plants. Boeing builds about one $200 million jet a¶ day. A modern airliner has many, many more moving parts and¶ greater overall complexity than a 250-megawatt LFTR. If we build, say,¶ four LFTR manufacturing plants a year with each plant producing 20¶ 250-megawatt reactors (five 1,000-megawatt plants) a year (think of the¶ jobs and spillover technological benefits each plant would bring to the¶ state in which it’s located), that would just about do it. And from 2050 to¶ 2100 we can build another 400 plants, until we have created 1,000¶ gigawatts of thorium power. By the end of the century, we will have¶ built a safe, clean energy infrastructure based on a mix of offshore and¶ land-based wind farms, big solar arrays in the West, geothermal, and¶ natural gas plants, layered on top of a baseload power-generating¶ sector of thorium reactors. Particularly in the Southwest, these plants¶ will use excess heat energy to desalinate seawater.¶ How much will this cost? Technology advances will bring the cost of¶ thorium reactors down **rapidly** after commercialization, potentially to¶ the cost of a new jet. Call it $1 billion per thousand-megawatt plant. The¶ cost of building 600 thousand-megawatt LFTRs (or twenty-four hundred¶ 250-megawatt machines) would come to $600 billion. Add 15 percent¶ for start-up costs and financing and round up: $700 billion. In¶ comparison, the 2010 budget for the U.S. Department of Defense was¶ $685 billion. In other words, for about what we spend in one year on¶ defense in wartime (which, by the way, is almost as much as all other¶ countries spend on defense combined), we can lay the foundation for a¶ thorium-based, carbon-free energy economy that could last a¶ millennium. And most of that construction cost will be borne by private¶ industry, which, thanks to the expedited licensing and speedy¶ construction of LFTRs, will generate profits from this construction¶ boom in a short timeframe. Consider the costs, direct and indirect, of¶ building any other thousand-megawatt power plant (coal, conventional¶ nuclear, solar, natural gas)—or of doing nothing and allowing climate¶ change to run rampant by midcentury. Building a couple dozen LFTRs¶ a year starts to sound like a bargain.¶ Alvin Weinberg’s vision of a nuclear-powered world running on¶ molten salt reactors will become a reality a couple of generations later¶ than he foresaw.¶ These are ambitious goals. What, then, must we do to pull them off?¶ To create a thorium energy economy in the next decade, **three things**¶ **must happen at once**: funding, licensing reform, and R&D. I have¶ already described the funding mechanism that must be put in place¶ quickly, by the end of 2013. Licensing reform and R&D—including the¶ development and procurement of the needed materials and fuel—must¶ occur in parallel. The president should order the NRC to expedite its¶ licensing process so that the period from application to final approval¶ is no more than five years. That means that by 2015, while a prototype¶ LFTR is being built (at the Savannah River Site, Idaho National¶ Laboratory, or Oak Ridge), companies will begin submitting¶ applications.¶ At the same time, you must have fuel to start up all those reactors.¶ Two kinds are required: fissile fuel to ignite the chain reaction and¶ transmute thorium into uranium-233, plus the thorium itself. Luckily¶ we have plenty of both. The Department of Energy (DOE) has more¶ than a ton of U-233, produced by past thorium reactor experiments, on¶ hand. Foolishly, the DOE is planning to spend half a billion dollars to¶ blend the U-233 with U-238 and throw it away in the desert. That plan¶ must be scrapped and the U-233 put to good use as starter fuel for¶ LFTRs.¶ As for thorium, the U.S. Geological Survey estimates that total¶ thorium reserves in the United States are about 440,000 tons, mostly in¶ Montana and Idaho. If we assume that future LFTRs will achieve an¶ energy efficiency of 50 percent (half the available energy in a given¶ unit of thorium is actually converted to electricity), then a single ton of¶ thorium would produce about 12.1 billion kilowatt-hours (or 12.1¶ million megawatt-hours) of electricity. About 1,650 tons of thorium¶ would satisfy all the electricity needs of the entire world for a single¶ year. Since LFTRs can he run as breeder reactors, producing more fuel¶ than they consume, 440,000 tons is effectively a limitless supply of¶ nuclear fuel.¶ ----¶ THE NEXT STEP, once a prototype reactor has been built and tested, is¶ to build a series of liquid fuel reactors to burn up the plutonium and¶ fission products from existing spent uranium fuel. Kirk Sorensen has¶ proposed a type of liquid chloride thorium reactor, a cousin to LFTRs,¶ that will consume transuranic fission products and use plutonium to¶ create uranium-233. The U-233 will be used to start up new LFTRs.¶ Next we must create the infrastructure to manufacture LFTRs. The¶ expertise to build these machines is dispersed among a cadre of startups¶ described in chapter 9, including Elibe Energy, DBI, and so on, as¶ well as among the big nuclear suppliers like GE and Westinghouse,¶ which already, in some cases, have R&D programs for liquid-core¶ reactors. As has happened in the electric vehicle market, the actual¶ manufacturers would likely include established companies (GE), startups¶ (Flibe), and joint ventures combining the two. States will compete¶ to host the new plants with tax incentives, university-based R&D¶ support, and training programs to provide the skilled workers. (Here¶ it’s worth noting that the Navy has for years been training recruits with¶ only high school educations to be shipboard nuclear engineers. The¶ new thorium power industry will create thousands of skilled, highpaying¶ jobs that do not require a Ph.D. in nuclear physics.)¶ It does no good to build carbon-free thorium reactors if you don’t get¶ rid of the existing nuclear and coal-fired plants. Decommissioning¶ nuclear reactors is a long, involved, and costly process. A typical decom¶ costs $300 million and takes a decade; an extreme case, like the¶ Hartford Weapons Reactor, can cost billions and take many decades.¶ Ways must be found to bring down that cost. One way would be to¶ build new LFTRs on the sites of old nuclear plants and use the new¶ thorium reactors to consume the fission products from the old¶ machines.¶ As for coal plants, new regulations from the Environmental¶ Protection Agency (EPA) will lead to the retirement of dozens of aging¶ facilities in the next few decades, regardless of what type of new plants¶ come on line. In July 2011 the consulting firm ICP released a report¶ saying that, while shutting down existing coal plants will take longer¶ than foreseen in the EPA deadlines, 30 to 50 gigawatts of coal-fired¶ electricity production will be retired in the coming decade.” Total coalfired¶ generating capacity in the United States is about 314 gigawatts.¶ Shutting down 50 gigawatts of that every decade, and replacing it with¶ safe, clean thorium power, will eliminate coal from the U.S. electrical¶ portfolio by 2070.¶ These are achievable goals. Remember: the obstacles to creating a¶ thorium power economy in the next 40 years are not technological or¶ even economic. They are political and perceptual. If we don’t do it, it ¶ will be because we chose not to—not because it was impossible.¶ ----¶ HERE IS WHERE THE CURRENT nuclear power establishment—the¶ nuclearati— guffaw and roll their eyes. There are a hundred reasons¶ why the scenario I’ve laid out will not happen, they say. Uranium is¶ inexpensive (for now), the existing reactor population is safe (except¶ when it’s not—see Fukushima), plenty of new reactor designs are less¶ radical than LFTRs (which is why they won’t make enough of a¶ difference), and so forth. We can’t do it because we’ve never done it¶ before.¶ They are right about one thing: the United States is not likely to be at¶ the center of the thorium power revolution. Here’s a more likely¶ scenario.¶ Discovering the advantages of thorium technology, the Chinese¶ accelerate their program to build a dozen LFTRs in the next 15 years.¶ They recruit the top thorium talent in the world and co-opt the nascent¶ Japanese program, signing lucrative contracts with the top nuclear¶ suppliers in Japan and South Korea, thus compressing further the R&D¶ timeline. By 2030 China is the leading source of LFTR technology—and¶ of raw thorium fuel—in the world.¶ India, watching its Asian rival move rapidly to the fore in advanced¶ nuclear power, shifts its three-stage program to a more accelerated¶ development schedule based on solid fuel technology from TerraPower¶ and Lightbridge. Using its huge reserves of thorium as leverage with¶ other emerging thorium power nations, such as the United Arab¶ Emirates, India builds a thriving thorium power sector, building¶ reactors at a slower pace than China but, by 2030, becoming a leader in¶ its own right. Enhanced energy security, and the economic power and¶ diplomatic prestige that come with it, allow India to reach a lasting¶ détente with its perennial foe, Pakistan.¶ Farther east, on the Pacific Rim, both Japan and South Korea rapidly¶ build thorium reactor technology sectors, supplying China and India¶ with the advanced materials and components they need while starting¶ to build thorium reactors of their own. By 2030 the fastest-growing¶ source of electricity in Asia is thorium power; by 2050 liquid fluoride¶ thorium reactors are supplying a significant fraction of the power not¶ only in China, India, Japan, and Korea but also in secondary,¶ technology-importing countries like Vietnam, Taiwan, Singapore, and¶ Indonesia.¶ Watching this transformation unfold in Asia, the nations of Western¶ Europe -- led by France, Norway, and the Czech Republic, already in¶ 2012 the home of significant thorium R&D efforts -- belatedly¶ underwrite their own thorium power programs. While the European¶ Union attempts to establish its own thorium power technology sector,¶ low-cost equipment and fuel from Asia prove irresistible, and China¶ becomes the Saudi Arabia of the new nuclear-powered world.¶ And the United States? Saddled with debt, paralyzed by woodenheaded¶ political opposition to taking action to reverse climate change,¶ and bound to powerful fossil fuel and nuclear power sectors and their¶ well-funded lobbyists, the United States enters an irreversible cycle of¶ declining living standards, diminishing international stature, and¶ ravaged cities. Civil unrest ensues, and the collapse of our political¶ institutions accelerates. Our top graduates, unfulfilled by their¶ professional prospects at home, emigrate to booming technological¶ centers like Shanghai, Singapore, and Seoul. Our vaunted military,¶ unable to procure energy for its far-flung overseas missions, contracts.¶ As in fourth-century Rome, the roads decay, harbors silt up, the legions¶ become disaffected, and the elite retreat into their marble palaces. All¶ because we failed to capitalize on a technology that we once held in¶ our hands.¶ THAT’S A WORST-CASE SCENARIO. And it’s hardly inevitable. So what¶ are the chances that Congress will back a technology that, though¶ proven and tested decades ago by American scientists, is seen today as¶ a radical new system? What is the likelihood that the American public¶ will support a new form of nuclear power so soon after Fukushima?¶ How plausible is it that Silicon Valley venture capital funds will¶ provide billions to thorium power start-ups?¶ One answer to all those questions is: no more likely than it was, in¶ August 1939, when Albeit Einstein wrote President Roosevelt to urge¶ development of atomic weapons, that the United States would design,¶ build, test, and detonate a nuclear warhead within six years. The¶ Manhattan Project, which mobilized vast intellectual, material, and¶ technical resources in a short amount of time, is often cited as the¶ paradigm for solving big and complex problems. General Groves’s list¶ of essential requirements, born out of his Manhattan Project¶ experience, has become famous in management theory circles: “Put¶ one man in charge, give him absolute authority, keep the chief outside¶ the bureaucracy, use existing government organizations whenever¶ possible, create a small advisory committee,” and so on. To that list,¶ based on the experience of the nuclear power industry, I would add,¶ “Keep military concerns separate from economic and energy-related¶ goals.” One main lesson of the thorium power debacle is that for too¶ long we have polluted nuclear power policy with rationales and¶ missions produced in the Pentagon. What a disgrace it would be if the¶ United States—the cradle of nuclear physics, the country that first¶ designed and built liquid-fuel thorium reactors, the greatest source of¶ technological innovation the world has ever known—failed to muster¶ the resources and the will to create the energy source for the twentyfirst¶ century and beyond.¶ Forests have been consumed to produce books wondering whether¶ we, as a nation and as a people, are still capable of Manhattan Project—¶ sized achievements and, if not, why not. The declinist school, it must be¶ said, is in ascendance, exemplified most clearly in books like The End¶ of Influence by the Berkeley economists J. Bradford DeLong and¶ Stephen Cohen: “The American standard of living will decline relative¶ to the rest of the industrialized and industrializing world. . . . The¶ United States will lose power and influence.”13¶ My middle-aged, well-educated American friends unquestionably¶ have a waning confidence that they will pass on to their children and¶ their grandchildren a world as clean, safe, peaceful, and full of promise¶ as the one we grew up in. Unimaginable budget deficits; rising¶ competition from populous and dynamic Asian countries; declining¶ educational, moral, and cultural standards; the rise of seemingly¶ insurmountable environmental crises; the coarsening of public¶ discourse; and the disappearance of inspirational, admirable¶ leadership have all contributed to our sense that we now live in a¶ Spenglerian era of Western decline. A New York magazine cover line¶ actually referred to this as the era of “Post-Hope America,” the same¶ week Foreign Policy magazine’s cover headline asked, plaintively,¶ “What Ails America?”¶ So, when I think about what I’ve seen reflected in thorium’s glossy¶ surface in my three years of research, it’s simple: hope. Hope that¶ technology can lead us out of the mess into which technology has¶ gotten us. Hope that through divine Providence or intelligent design or¶ the random workings of quantum mechanics, Earth has been granted¶ an inexhaustible energy source that will not destroy the systems and¶ balances that sustain life. Hope that my son, now 12 and a gifted¶ mathematician, may help engineer a thorium power revolution that¶ will solve the energy crisis, dissipate the threat of nuclear annihilation,¶ restore a sense of higher purpose and collective endeavor, and keep¶ the lights on for another few millennia at least. In about a century and¶ a half, the Age of Hydrocarbons delivered us a world of shrinking ice¶ caps, resource wars, mass extinctions, and creeping drought. It could¶ take us less than a century to reverse those trends and usher in the Age¶ of Thorium.¶ For millions of years, thorium has been there, awaiting the right¶ time, the right circumstances, and the right minds to bring it to light¶ and enable it to provide thousands of years of clean, safe, affordable¶ energy. Alvin Weinberg was right. The time is now. The technology¶ exists, the economics are favorable, and the need is urgent. The choice¶ is ours.

#### Current support is insufficient—appropriations fast-track development

Cannarra, 5/5/11 [Engineering and Environmental Consultant Member: AAAS, IEEE, Sierra Club Supporter: EDF, Greenpeace, NAPF, Nature Conservancy, NRDC, RAN, UCS, WWF… Affiliated with the Thorium Energy Alliance Thorium – A Safe, Abundant and ‘Fertile’ Power Source Dr. Alexander Cannara,http://cybercemetery.unt.edu/archive/brc/20120627230324/http://brc.gov/sites/default/files/comments/attachments/thoriumarticle\_a\_cannara\_0.pdf]

Today, for example, we in the US have limited support for better reactor Designs. We even have little interest in utility-funded, standard reactor construction. It’s not that alternate nuclear-power paths were never opened. It’s that Cold War policies dampened our own research, leaving the world with few developed options now that they’re essential. There is no source of power as dense and environmentally friendly as properly-chosen nuclear power. There’s no fission source as cheap or as lasting as the Thorium breeder. Yet, we in the US also have a regulatory agency, the NRC, holding just a few basic LWR power-plant designs for prospective builders to choose from, with some mix and match of components. And, each of those designs requires about $10 billion and many years to complete. No utility can invest that, which is why our present administration has promoted loan guarantees to get new plants built. Yet, even that hasn’t worked. Furthermore, the US NRC reports to Congress and can do only what that body mandates and funds**.** No work on alternative reactor designs, fuel cycles and rules can be expected from the NRC itself without new appropriations. Even a 1977 EPRI report(8) on the usefulness of Thorium in LWRs gained no industry action. Some new work has been funded by DoE (7), but not yet near the level needed, even if it continued from the excellent decades of work funded by the AEC and DoD at ORNL(5). Similarly, private investors see no near-term return, but great risk, because nuclear reactors require extensive design for safety and regulation – the function of government agencies andresearch**.** The present situation is odd, yet with some hope, as will be explained. “Nowadays [1994] I often hear arguments about whether the decision to concentrate on the LWR was correct. I must say that at the time I did not think it was; and 40 years later we realize, more clearly than we did then, that safety must take precedence even over economics—that no reactor system can be accepted unless it is first of all safe. However, in those earliest days we almost never compared the intrinsic safety of the LWR with the intrinsic safety of its competitors. We used to say that every reactor would be made safe by engineering interventions. We never systematically compared the complexity and scale of the necessary interventions for [different] reactors. So in this respect I would say that [AEC head] Ken Davis’ insistence on a single line, the LWR, was premature.” (Weinberg (5)) In this light, consider the reality all peoples of the world now share, though disproportioned by wealth. To meet just the internationally-estimated need to reduce greenhouse-gas (GHG) emissions now (January 2011) by a modest 4% per year, 2050 must see our (then) 9 billion souls emitting just 1 ton of CO2 per capita per year(1). And, with sea acidification and rise (see Rignot)(1) soon threatening over 100 million people, we need to be building and running one new, 1GWe emissions-free power plant each week for decades. A city-bound New Yorker currently causes emissions of 10 tons/year. A car-using Denver-ite 5/6/2011 Page 7 causes twice that. And, an average California home causes 7 tons of CO2 per year to be emitted, just from its internal energy use (see CEC reports). Only in remote, poor communities in Africa does any person now cause just 1 ton of CO2 to be added to Earth’s atmosphere each year. Sustainability, even at 1-ton per capita per year, is far from our reach. Regardless of pro/con debates on climate change, we are collectively making a Pascal Wager against already evident climate change growing worse due to our emissions – we’re “betting the farm” despite good hints as early as Nobel Laureate S. Arrhenius’ 1896 and 1905 papers on possible effects of unnatural CO2 emissions(1). Later, we didn’t listen to post-WWII analytical reports to governments; and our governments didn’t even follow up on research we’d paid for that pointed the way to safe, non-emitting nuclear power -- 50 years before this writing. Some Generation IV (8) efforts are finally in motion, but another decade will pass before any demonstration system will run. The emissions-free power debt will then be 1GWe x 10 x 52 (a plant a week unbuilt) or more, just for US needs. Perhaps the new Chinese commitment(4) will be speedier, but the shortfall will remain stupendous, worldwide. We need serious efforts today, if we wish to leave a future to our descendants. This article will explain why what has long been known about Thorium as a fertile nuclear fuel leads us to a viable future for Earth’s power and water needs. And, it will use as example the complementary reactor architecture designed by the same people who gave us the LWR, but who knew better was needed. Thus, this article is dedicated to Alvin Weinberg, H. MacPherson and their ORNL teams, who were aware of global warming before Wikipedia and spent 20 years (1954-1974) designing and operating MSRs. They led the way to safely fuelling our future via Thorium (3,4).

#### Plot twist! (Back to heg)

**Kagan, 12** [2/7/12, Robert, The World America Made, Master Harvard, Ph.D American U, Columnist for the Washington Post, listed a top 100 public intellectual, p. Amazon Kindle]

The unusual combination of vast power and remarkable global acceptance of that power is the main factor that has **deterred great-power war.** We are dazzled by democratization, globalization, and interdependence, and believe these are the new developments that have made our world so different. But these trends have been ebbing and flowing for more than a century, and they have not prevented catastrophic wars in the past and cannot be relied upon in the future. The much-vaunted democratic peace theory would be more persuasive if the great powers were, in fact, all democracies. It could explain why Germany and France have not gone to war, but it does not explain why China and Russia, two great-power autocracies, have yet to become involved in conflicts with other great powers. Economic interdependence did not prevent two world wars in the twentieth century, and even today great powers cannot be relied upon to base all decisions of peace and war on economic considerations. One could imagine China attacking an independence-minded Taiwan despite the possible economic consequences. The American wars in Iraq and Afghanistan have not exactly been a boon to the American economy. Neither men nor nations live by bread alone. Nationalism, honor, fear, and other human emotions, as well as calculations of power, shape the behavior of nations just as they shape the behavior of the people who inhabit nations. The common view that there can be no wars for territory, because territory no longer matters in this digitalized age of economic interdependence, is also questionable. One only has to look at the military deployments of nations like China, Russia, India, and Pakistan to see that, to them, territory matters very much indeed. China insists that restoring and preserving its “territorial integrity”—including Tibet, Hong Kong, and Taiwan—are a “core interest,” as is control of the mineral resources and shipping lanes of the South China Sea. Wars have been fought, and could be fought again, over the disputed border between **India and China** at Arunachal Pradesh, between **India and Pakistan** in Kashmir, and **over** the territorial boundaries of **Georgia**. Russian claims to the Crimea in Ukraine and in **the Arctic** will likely be subjects of dispute in the future. The question of an independent Kurdistan embroils **Iraq**, **Turkey**, and **Syria** in territorial disputes. And of course there is the territorial dispute between **Israel and Palestine**, which has led to four wars in the past and may do so again. Can we place our faith in nuclear weapons to keep the peace among great powers? There are those who think so, and some have even suggested arming all nations in the world with nuclear weapons as a way of guaranteeing world peace. But the “nuclear peace” would seem even less reliable than the “democratic peace.” It is possible to imagine two nuclear powers fighting a strictly conventional war. In fact, it is precisely such a war that both China and the United States are spending hundreds of billions of dollars preparing for. India and Pakistan daily prepare for conventional war over Kashmir, despite their nuclear arsenals. In the seventeenth, eighteenth, and nineteenth centuries, great powers fought many limited wars for limited ends without seeking each other’s annihilation. Nor is the horror of nuclear weapons a sufficiently reliable guarantee against their use. During the Cold War world leaders spoke more often about the possibility of nuclear war than we may care to remember. The revered George C. Marshall spoke of how important it was that the Soviets understand “that the United States would really use the atomic bomb against them in the event of war.”58 Near the end of the Korean War, Dwight Eisenhower explicitly warned the Chinese that he would not be “limited by any world-wide gentleman’s agreement” regarding the use of nuclear weapons, and he commented to his own advisers that a large concentration of Chinese troops made “a good target for this type. And peoples have become socialized to love peace and hate war, then the nations of the world would be systematically disarming. But they are not, only Europe is disarming. The United States, China, India, Russia and Japan as well as lesser powers including Brazil, Iran and Turkey are still willing to pay large amounts of money to prepare themselves for war. **What deters them from using those weapons** against one another is not conscience or commerce but a distribution of power in the world that **makes success** highly **unlikely**. Were the distribution of power to change, were there to be a genuine shift in the balance of power towards greater equality, then these great and rising powers might pursue more ambitious policies because **war would be** a more **viable** option.

### 2ac case

#### Superpower transitions necessitate global wars.

**Khanna 09** – Director of the Global Governance Initiative at the New America Foundation (Parag, The second world: how emerging powers are redefining global competition in the twenty-first century, p. 337-338)

Even this scenario is optimistic, for superpowers are by definition willing to encroach on the turf of others—changing the world map in the process. Much as in geology, such tectonic shifts always result in earthquakes, particularly as rising powers tread on the entrenched position of the reigning hegemon.56 The sole exception was the twentieth century Anglo-American transition in which Great Britain and the United States were allies and shared a common culture—and even that took two world wars to complete.57 As the relative levels of power of the three superpowers draw closer, the temptation of the number-two to preemptively knock out the king on the hill grows, as does the lead power’s incentive to preventatively attack and weaken its ascending rival before being eclipsed.58 David Hume wrote, “It is not a great disproportion between ourselves and others which produces envy, but on the contrary, a proximity.”59 While the density of contacts among the three superpowers makes the creation of a society of states more possible than ever—all the foreign ministers have one anothers’ mobile phone numbers—the deep differences in interests among the three make forging a “culture of peace” more challenging than ever.60 China seas, hyperterrorism with nuclear weapons, an attack in the Gulf of Aden or the Straits of Malacca. The uncertain alignments of lesser but still substantial powers such as Russia, Japan, and India could also cause escalation. Furthermore, America’s foreign lenders could pull the plug to undermine its grand strategy, sparking economic turmoil, political acrimony, and military tension. War brings profit to the military-industrial complex and is always supported by the large patriotic camps on all sides. Yet the notion of a Sino-U.S. rivalry to lead the world is also premature and simplistic, for in the event of their conflict, Europe would be the winner, as capital would flee to its sanctuaries. These great tensions are being played out in the world today, as each superpower strives to attain the most advantageous position for itself, while none are powerful enough to dictate the system by itself. Global stability thus hangs between the bookends Raymond Aron identified as “peace by law” and “peace by empire,” the former toothless and the latter prone to excess.61 Historically, successive iterations of balance of power and collective security doctrines have evolved from justifying war for strategic advantage into building systems to avoid it, with the post-Napoleonic “Concert of Europe” as the first of the modern era.62 Because it followed rules, it was itself something of a societal system.\* Even where these attempts at creating a stable world order have failed—including the League of Nations after World War I—systemic learning takes place in which states (particularly democracies) internalize the lessons of the past into their institutions to prevent history from repeating itself.63 Toynbee too viewed history as progressive rather than purely cyclical, a wheel that not only turns around and around but also moves forward such that Civilization (with a big C) could become civilized.64 But did he “give too much credit to time’s arrows and not enough to time’s cycle”?65 Empires and superpowers usually promise peace but bring wars.66 The time to recognize the current revolutionary situation is now—before the next world war.67

### 2ac heidegger k

#### Framework – the k must prove the whole plan is bad – any other interpretation kills fairness and trivializes effective decisionmaking skills

#### Value to life is inevitable, subjective, and they don’t control the link to it.

**Shermer, 8** –Michael, founder of the Skeptics Society and Editor of Skeptic Magazine, “"The Meaning of Life, the Universe, and Everything"”—Commencement Speech at Whittier College, 5/23/08 http://www.whittier.edu/News/Articles/2008CommencementSpeech.aspx

Purpose is personal, and there are countless activities people engage in to satisfy this deep-seated need.There are, however, a handful of powerful means by which we can bootstrap ourselves toward higher goals that have proven to be especially beneficial to both individuals and society. Science tells us that there are five things you can do to create meaning and purpose in your life. Here they are: 1. Love and family—the bonding and attachment to others increases one's sphere of moral inclusion to care about others as much as, if not more than, oneself. And here I shall take a moment to acknowledge the courage of the California State Supreme Court to increase the possibility of marital happiness to the tens of thousands of gays and lesbians in our state who wish to enjoy the same rights and liberties as everybody else. 2. Meaningful work and career—the sense of purpose derived from discovering one's passion for work drives people to achieve goals so far beyond the needs of themselves that they lift all of us to a higher plane, either directly through the benefits of the work, or indirectly through inspiration. And here let me shift my politics slightly rightward to tell you that not only is it okay to make a lot of money, it is a moral virtue to earn your way to wealth and prosperity, and that market capitalism—conjoined with liberal democracy—is the best hope for humanity's future that we have. 3. Recreation and play—it is vital to take time off from work, get away from the office, hang out with your friends, see new places, veg out, goof off, and explore new activities with no purpose other than their shear enjoyment. (In other words, build into your purpose no purpose at all.) 4. Social and political involvement—as a social primate species endowed by evolution with the moral emotions of guilt and pride, shame and joy, we have a social obligation to our local community and our larger society to participate in the process of determining how best we should live together, and a moral duty to reach out and help those in need. Research shows that those who do so are happier and more fulfilled people. 5. Transcendency and spirituality—a capacity unique to our species, as far as we can tell, that includes aesthetic appreciation, spiritual reflection, and transcendent contemplation through a variety of expressions such as art, music, dance, exercise, meditation, prayer, quiet contemplation, and religious revere, connecting us on the deepest level with that which is outside of ourselves.

#### Extinction outweighs ontology

Jonas 96 [Hans, Former Alvin Johnson Prof. Phil. At the New School for Social Research & Former Eric Voegelin Visiting Prof. at U. Munich, \*do not agree with gendered language, Mortality and Morality: A Search for the Good after Auschwitz, pg 111-2

With this look ahead at an ethics for the future, we are touching at the same time upon the question of the future of freedom. The unavoidable discussion of this question seems to give rise to misunderstandings. My dire prognosis that not only our material standard of living but also our democratic freedoms would fall victim to the growing pressure of a worldwide ecological crisis, until finally there would remain only some form of tyranny that would try to save the situation, has led to the accusation that I am defending dictatorship as a solution to our problems. I shall ignore here what is a confusion between warning and recommendation. But I have indeed said that such a tyranny would still be better than total ruin; thus, I have ethically accepted it as an alternative. I must now defend this standpoint, which I continue to support, before the court that I myself have created with the main argument of this essay. For are we not contradicting ourselves in prizing physical survival at the price of freedom? Did we not say that freedom was the condition of our capacity for responsibility—and that this capacity was a reason for the survival of humankind? By tolerating tyranny as an alternative to physical annihilation are we not violating the principle we established: that the How of existence must not take precedence over its Why? Yet we can make a terrible concession to the primacy of physical survival in the conviction that the ontological capacity for freedom, inseparable as it is from man’s being, cannot really be extinguished, only temporarily banished from the public realm. This conviction can be supported by experience we are all familiar with. We have seen that even in the most totalitarian societies the urge for freedom on the part of some individuals cannot be extinguished, and this renews our faith in human beings. Given this faith, we have reason to hope that, as long as there are human beings who survive, the image of God will continue to exist along with them and will wait in concealment for its new hour. With that hope—which in this particular case takes precedence over fear—it is permissible, for the sake of physical survival, to accept if need be a temporary absence of freedom in the external affairs of humanity. This is, I want to emphasize, a worst-case scenario, and it is the foremost task of responsibility at this particular moment in world history to prevent it from happening. This is in fact one of the noblest of duties (and at the same time one concerning self-preservation), on the part of the imperative of responsibility to avert future coercion that would lead to lack of freedom by acting freely in the present, thus preserving as much as possible the ability of future generations to assume responsibility. But more than that is involved. At stake is the preservation of the Earth’s entire miracle of creation, of which our human existence is a part and before which man reverently bows, even without philosophical “grounding.” Here too faith may precede and reason follow; it is faith that longs for this preservation of the Earth (fides quaerens intellectum), and reason comes as best it can to faith’s aid with arguments, not knowing or even asking how much depends on its success or failure in determining what action to take. With this confession of faith we come to the end of our essay ontology.

#### Management is inevitable- it’s only a question of what kind of intervention is used. Past interventions will result in extinction unless actively reversed

Levy 99- PhD @ Centre for Critical Theory at Monash

Neil, “Discourses of the Environment,” ed: Eric Darier, p. 215

If the ‘technological fix’ is unlikely to be more successful than strategies of limitation of our use of resources, we are, nevertheless unable simply to leave the environment as it is. There is a real and pressing need for space, and more accurate, technical and scientific information about the non-human world. For we are faced with a situation in which the processes we have already set in train will continue to impact upon that world, and therefore us for centuries. It is therefore necessary, not only to stop cutting down the rain forests, but to develop real, concrete proposals for action, to reverse or at least limit the effects of our previous interventions. Moreover, there is another reason why our behavior towards the non-human cannot simply be a matter of leaving it as it is, at least in so far as our goals are not only environmental but also involve social justice. For if we simply preserve what remains to us of wilderness, of the countryside and of park land, we also preserve patterns of very **unequal access to their resources and their consolations** (Soper 1995: 207).in fact, we risk exacerbating these inequalities. It is not us, **but the poor** of Brazil, **who will bear the brunt** of the misery which would result from a strictly enforced policy of leaving the Amazonian rain forest untouched, in the absence of alternative means of providing for their livelihood. It is the development of policies to provide such ecologically sustainable alternatives which we require, as well as the development of technical means for replacing our current greenhouse gas-emitting sources of energy. Such policies and proposals for concrete action must be formulated by ecologists, environmentalists, people with expertise concerning the functioning of ecosystems and the impact which our actions have upon them. Such proposals are, therefore, very much the province of Foucault’s specific intellectual, the one who works ‘within specific sectors, at the precise points where their own conditions of life or work situate them’ (Foucault 1980g: 126). For who could be more fittingly described as ‘the strategists of life and death’ than these environmentalists? After the end of the Cold War, it is in this sphere, more than any other, that man’s ‘politics places his existence as a living being in question’ (Foucault 1976: 143). For it is in facing the consequences of our intervention in the non-human world that the hate of our species, and of those with whom we share this planet, will be decided?

#### And, it doesn’t come first – the alt is nihilism – internal link turns value to life

Fain 11—Lecturer in the Committee on Degrees in Social Studies at Harvard University, Ph.D. in Philosophy and Psychoanalysis (Lucas, March 2011, *The Review of Metaphysics*, “Heidegger's Cartesian nihilism,” Academic OneFile, RBatra)

That Heidegger transforms happiness, classically understood as the completion of human nature, into the anxiety of being-towards-death may be deduced from the fact that it is death which signifies Dasein's "authentic potentiality-for-being-a-whole," (45) **with the consequence that ethical virtue is replaced by Dasein's pure resolve in the face of nothing**. That Heidegger's conception of care may likewise be construed as an impoverished version of the Platonic doctrine of eros is plainly evident by its purely formal structure, which renders it devoid of any capacity to rank-order objects of desire. (46) By way of contrast, Platonic eros moves hierarchically between the human and the divine (that is to say, between the base and the noble), whereas Heideggerian care moves horizontally, we should even say "horizonally," in the sense that "the ontological meaning of care is temporality," and "the existential-temporal condition of the possibility of the world lies in the fact that temporality, as an ecstatical unity [of future, past, and, present], has something like a horizon." (47) That horizon is circumscribed by Dasein's thrownness into the future, and Dasein's ownmost future is, of course, its death. Hence we read, "The primary phenomenon of primordial and authentic temporality is the future," and "The ecstatical character of the primordial future lies precisely in the fact that the future closes one's potentiality-for-being." (48) It is therefore through Dasein's resolute anticipation of its death that the meaning of being reveals itself as the "temporalizing of temporality." (49) But temporality reduced to itself is stripped of all love, beauty, and value. **It means simply the opening up of one's future possibilities, which is to say that the authentic meaning of being is without value, and being without value is meaningless, which is finally to say that the meaning of being terminates in nihilism.** (50) Heideggerian fundamental ontology does not therefore escape from Nietzschean chaos. Rather, it returns us to it, only without the noble illusion that life requires us to make it lovable. (51) **And this remains the case no matter whether we prefer the early language of "resoluteness" or Heidegger's later "turn" into Gelassenheit or "releasement."** For insofar as Heidegger's turn (Kehre) is meant to free the meaning of being from its attachment to any notion of active or passive willing, for example, of the kind indicated by the language of resolution, it releases us ever deeper into the nullity within which the world comes to presence. (52)

So much for the meaning of being. Despite his revolutionary proclamations, Heidegger holds us in a double bind. On the one hand, the history of metaphysics (and its completion in the era of modern technology) (53) grips us in a nihilistic forgetting of the question of being. On the other hand, fundamental ontology empties the meaning of being of value, and this too is nihilism. (54) What matters in the last analysis, however, is not whether Heidegger is a nihilist, but whether his teaching is the true teaching. And if, as Leo Strauss once said, our capacity to evaluate Heidegger's teaching comes down to a question of competence, our measure of competence depends on our capacity for valuation, or more accurately, for prudential judgment or a capacity to discern what makes it right. (55) Yet, on the basis of Heidegger's existential analysis, there can be no such ground of legitimation apart from the pure instance of resolution (Entschluss). And this is because fundamental ontology cannot tell us on the basis of its questioning into being why such questioning should be desirable, or why we should want to invoke a spiritual revolution that founds itself on the abstract question of being. **Instead, there must be some more primordial notion of the good that first directs us to the question of being**--as Nietzsche would say, to the question of being as a value. In saying this, however, I do hot wish to suggest that there must be some objective or quasi-objective standard of the good that is somehow "out there" waiting to be discovered, as if it were a vein of gold embedded in the rock. Yet it is plainly evident that a more primordial access to the good must underlie any capacity for rank-ordering values or existential possibilities, and it is precisely this feature of human experience that fundamental ontology abandons or occludes by abstracting the question of being from the so-called ontic or inauthentic dimension of ordinary experience.

Stated simply, **there is no reason why the question of being should be foundational for the future of philosophy**. Yet it must be said that Heidegger never relinquished his revolutionary aspirations for bringing metaphysics to its end. For as clearly as the text of 1927 stated the need to put the future of philosophy on "new foundations" (neue Fundamente), (56) Heidegger persisted up to and through 1959 in the hope that the turn to the question of being would promise a "new ground and foundation" (neuen Grand und Boden) upon which it might be possible to confront the epoch of metaphysical nihilism. (57) Of course, it may be entirely true that our releasement into the mystery of being grants us "the possibility of dwelling in the world in a totally different way." (58) **The question is why this should be at all desirable, especially if the thinking of being expires in nihilism.** And it is here that we find Heidegger without argument. As we read in a relevant passage from the "Letter on Humanism" of 1949:

Whether the realm of the truth of being is a blind alley or whether

it is the free space in which freedom conserves its essence is

something each one may judge after he himself has tried to go the

designated way, or even better, after he has gone a better way,

that is, a way befitting the question. (59)

I note in passing that we shall also have to judge whether the essence of freedom is itself a blind alley. But this just affirms my larger point. Heidegger returns us to the question of competence. But since fundamental ontology cannot stand the question of competence, we are left simply with a decision that leaves the future of philosophy hanging on the angst-ridden resolve that affirms itself in the face of death. (60) And this is Cartesianism all over again, in the sense that Heidegger's subordination of ethics to ontology--the decisive severing of the human relation to the good from the foundations of philosophy--amounts to the most radical late modern expression of the Cartesian legacy. **Rather than saving us from our fall into modern decadence, Heidegger's thought results finally in a deepening of the modern crisis.**

#### Calculative thought inevitable – they’ve calculated how to use the K to win a ballot

#### And, the alt collapses politics and causes global destruction

Biskowski 95 [Lawrence J. professor of political theory and political economy at the University of Georgia, “Politics versus Aesthetics: Arendt's Critiques of Nietzsche and Heidegger”, The Review of Politics, Vol. 57, No. 1, Winter 1995, pg 59-89]

Although Arendt considered Heidegger to be perhaps the most important philosopher of the twentieth century, she always objected to the political dangers and deformations inherent in this emphasis on the self. Heidegger's philosophy led him away from the common, public world and directed his gaze inward toward the self.67 But this could not help but distort his political judgment, which must take its bearings from the public world. Instead, as we have seen, Heidegger associates the public world with inauthentic existence, a pernicious form of socialization, and a falling away from true Being. In fact, Arendt says, he dismisses all those modes of human existence which rest on the fact that Man lives together in the world with his fellows. To put it historically, Heidegger's Self is an ideal which has been working mischief in German philosophy and literature since Romanticism. In Heidegger this arrogant passion to be a self has contradicted itself; for never before was it so clear as in his philosophy that this is probably the one being which Man cannot be.6

Without the world as a source of political and moral orientation, the self and its death become Heidegger's central concern: Only in the realization of death, which will take him away from the world, has Man the certainty of being himself...in other words, the essential character of Man's Being is determined by what he is not, his nothingness...Death may indeed be the end of human reality; at the same time it is the guarantee that nothing matters but myself. With the experience of death as nothingness I have the chance of devoting myself exclusively to being a Self, and once and for all freeing myself from the surrounding world.69 For Arendt, on the contrary, authentic existence is never isolated in this egoistic way but rather exists only in acknowledgment of and communication with others. It can develop only in the togetherness of human beings in the common, public world. The sort of fascination with the self advocated by Heidegger leaves one disconnected from the multiform, multiperspectival reality of the political world. Among its consequences are a failure to comprehend political events, poor judgment, and a peculiar form of political irresponsibility. Arendt first develops this theme in Rahel Varnhagen where the not altogether different Romantic cult of interiority is criticized. The turn inward toward the self made Rahel and the intellectuals and artists in her circle blind to political reality.70 Similarly, in The Origins of Totalitarianism, Arendt sees romantic self-fascination as contributing to the general conditions which made the twentieth century mass movements and their horrors possible.71 A resurgent romanticism in intellectual life may be symptomatic of a general playfulness of modern thought in which almost any opinion can gain ground temporarily. No real thing, no historical event, no political idea was safe from the all-embracing and all-destroying mania by which these first literati could always find new and original opportunities for new and fascinating opinions.72 This playfulness, which certainly has its advocates among today's literati, is one manifestation of the general condition of world-alienation which appears as a persistent theme in much of Arendt's work. Whatever the undoubted aesthetic, agonistic, or expressivist aspects or moments of action (which Arendt recognizes and emphasizes, particularly in contradistinction to instrumental rationality and those philosophies and worldviews which tend to reduce history and human life to a mere process), she makes clear that action and politics cannot be reduced to or even thought of merely in terms of aesthetic self-expression: "Human plurality, the faceless 'They' from which the individual Self splits to be itself alone is divided into a great many units, and it is only as a member of such a unit, that is, of a community, that men are ready for action."73 These communities and their institutions depend for continued existence upon acting men; their conservation is achieved by the same means that brought them into being...[U]tter dependence upon further acts to keep it in existence marks the state as a product of action.74 Finally, Arendt tells us, "the inspiring principle of action is love of freedom, and this both in the negative sense of freedom from oppression and in the positive sense of the establishment of Freedom as a stable, tangible reality."75 Precisely this is the task of politics. But Heidegger's turn inward and away from the political world has a pedigree that goes beyond romanticism. Arendt consistently maintained that even though Heidegger rivals Nietzsche as a critic of the philosophical tradition, he too shares its general regard for "the incomprehensible triviality" of the common, public world, the only escape from which is withdrawal "into that solitude which philosophers since Parmenides and Plato have opposed to the political realm."76 Indeed, Heidegger no less than Plato personified to Arendt what might be called the professional thinker, and succumbed to the characteristic temptations of the profession.77 Arendt makes clear that all thinking requires some measure of aloofness, seclusion, and distance from the world,78 but this characteristic is amplified and expanded in Heidegger's philosophy. In Dasein, thinking and being alive fold in on one another and become one.79 Authentic existence requires thinking, which in turn requires distance from "the they" and everyday life. Immersion in everyday life constitutes and requires withdrawal from true Being. For Heidegger, not unlike Plato, thinking requires one to leave the cave of worldly affairs. But as we have seen, Arendt suggests that such a departure may result in a loss of moral-practical orientation.80 And this constitutes in the end perhaps the best explanation of why Heidegger's awesome ability to think did not prevent him from evil-doing in the form of **his support for** the **Nazis**.81 Heidegger eventually turned away from the emphasis on self-assertion and Dasein's "ownmost" state of being found in Being and Time.8 As Arendt tells the story, Heidegger's intense study of Nietzsche led him to see even his own previous philosophy as having been motivated by a form of will to power.83 Still concerned that instrumental rationality, science, and technology degraded Dasein by reducing everything to presence-at-hand, he came to see his own philosophy as "enframed" in the very same refusal to let beings be at the heart of the Western technological worldview he so detested. The new alternative Heidegger formulated was a Zen-like attitude or disposition of serene, gliding aloofness-Gelassenheit-in which state thinkers would refrain from attempting to impose their own will on beings (whether through technology or even through arguing for "ownmost" or "most authentic" modes of being). Thus, like Nietzsche, Heidegger eventually repudiates the will, a capacity Arendt sees as necessary for action and freedom. But more significantly, Heidegger's turn or reversal leaves him as alienated from politics and the common, public world as before. From the point of view of Arendtian politics, Heidegger has merely exchanged one form of world-alienation (glorification of self-assertion and extrication from "the they") for another (a regarding of the world simply as an object of contemplation). Arendt shares with the early Heidegger the notion that to be in the world is to be a locus of understanding, possibility, and freedom in the midst of a surrounding texture of meaning and significance. For the early Heidegger, however, the world serves primarily as a medium for the aesthetic expression of the self. After his Kehre, the world became something primarily to be regarded with serene, disinterested, contemplative wonder. This marked a return to the origins of philosophy in thaumazein. But philosophy and politics **are not the same**; the latter requires active engagement with the world, at least if the world is to be a fit home for mortal beings endowed with the capacity for action and the possibility of freedom.

incorporation affirms unavoidable use, but denies domination

Dreyfus, 06 (Professor of Philosophy at the University of California, Berkeley (Hubert, "Nihilism, Art, Technology, and Politics", the Cambridge Companion to Heidegger)

Heidegger, however, sees that "it would be foolish to attack technology blindly. It would be shortsighted to condemn it as the work of the devil. We depend on technical devices; they even challenge us to ever greater advances."(DOT 53, G 24) Instead, Heidegger suggests that there is a way we can keep our technological devices and yet remain true to ourselves as receivers of clearings: **We can affirm the** unavoidable **use of technical devices, and** also **deny them the right to dominate us**, and so to warp, confuse, and lay waste our nature. (DOT 54, G 24-25) To understand how this might be possible, we need an illustration of Heidegger's important distinction between technology and the technological understanding of being. Again we can turn to Japan. In contemporary Japan traditional, nontechnological practices still exist alongside the most advanced high-tech production and consumption. The TV set and the household gods share the same shelf – the styrofoam cup co-exists with the porcelain tea cup. We thus see that the Japanese at least, can enjoy technology without taking over the technological understanding of being. For us to be able to make a similar dissociation, Heidegger holds, we must rethink the history of being in the West. Then we will see that although a technological understanding of being is our destiny, it is not our fate. That is, although our understanding of things and ourselves as resources to be ordered, enhanced, and used efficiently has been building up since Plato, we are not stuck with that understanding. Although the technological understanding of being governs the way things have to show up for us, we can hope for a transformation of our current cultural clearing. Only those who think of Heidegger as opposing technology will be surprised at his next point. Once we see that technology is our latest understanding of being, we will be grateful for it. This clearing is the cause of our distress, yet if it were not given to us to encounter things and ourselves as resources, nothing would show up as anything at all, and no possibilities for action would make sense. And **once we realize** -- in our practices, of course, not just as matter of reflection -- that we receive our technological understanding of being, **we have stepped out of** the **technological understanding** of being, for **we then** see that what is most important in our lives is not subject to efficient enhancement -- indeed, the drive to control everything is precisely what we do not control. This transformation in our sense of reality -- this overcoming of thinking in terms of values and calculation -- is precisely what Heideggerian thinking seeks to bring about. Heidegger seeks to make us see that our practices are needed as the place where an understanding of being can establish itself, so we can overcome our restricted modern clearing by acknowledging our essential receptivity to understandings of being.

#### Globalized technological thought is good. Rejecting technological thought also rejects technological innovation and dooms us to extinction. This also defends our ontology

**Heaberlin, 4** – nuclear engineer, led the Nuclear Safety and Technology Applications Product Line at the Pacific Northwest National Laboratory (Scott, A Case for Nuclear-Generated Electricity, p. 31-40)

Well, then let's not do that, huh? Well, no, not hardly, because without that use of fertilizers we couldn't produce the food to feed the population. We just couldn't do it. Here are some comparisons."

If you used no fertilizers or pesticides you could get 500 kilograms of grain from a hectare in a dry climate and as much as 1000 kilograms in a humid cli­mate. If you got organic and used animal manure as fertilizer, assuming you could find enough, you might get as much as 2000 kilograms per hectare. For a sense of scale, the average in the United States, where recall we only get half the food value to hectare as the intensively farmed Chinese crop land, we get about 4500 kilograms per hectare on the average. In serious cornfields with fertilizer, irrigation, and pesticides, the value is 7000 kilograms per hectare.

Modern mechanized, chemically supported agriculture produces 7 to 14 times the food that you would get without those advantages. Even the best organic farming would produce only 30 to 45% of the food value you would get from the same sized chemically fertilized farm, and that is assuming you could get the manure you needed to make it work.

In very stark terms, without the chemically enhanced farming we would have probably something like one-fifth the food supply we have now. That means four-fifths the population would not be fed, at least as we are organized now. So, no, just giving up on fertilizers is not in the deal.

However, we could get the hydrogen and energy from sources other than natural gas. Nuclear energy could be used to provide electricity to extract hydrogen from water and produce the process heat required to combine the hydrogen and nitrogen from the air. That is just a thought to stick in your mind. While we are looking at energy use in agriculture, here are a few more numbers for you.10 If you look at the energy input into agriculture and the energy you get out, you see some interesting facts. By combining the energy used to make fertilizers and pesticides, power irrigation, and run the farm machinery in the United States, we use about 0.7 kcal of fossil fuel energy for each 1 kcal of food we make. This doesn't include the energy needed to process and transport the food. In Europe where they farm more intensely, the amount of energy out is just about the same as energy in. In Germany and Italy the numbers are 1.4 and 1.7 kcal energy input to each 1 kcal output respectively. The point is you need energy to feed people, well at least a lot of people.

Which gets us back to Cohen and his question. One of the studies he examined looked at a "self-sustaining solar energy system." For the United States, this would replace all fossil energy and provide one-fifth to one-half the current energy use. The conclusion of the study was that this would either produce" a significant reduction in our standard of living ... even if all the energy conservation measures known today were adopted" or if set at the current standard of living, "then the ideal U.S. population should be targeted at 40-100 million people." The authors of that study then cheerfully go on to point out that we do have enough fossil fuel to last a least a century, as long as we can work out the pesky environmental problems. So, you can go to a "self-sustaining" energy economy as long as you are willing to shoot between 2 out of 3 and 6 out of 7 of your neighbors.

And this is a real question. The massive use of fossil fuel driven agriculture to provide the fertilizers and pesticides, and power the farm equipment, is a) vitally important to feed everyone, and b) something we just can't keep up in a business-as-usual fashion. Sustainable means you can keep doing it. Fossil energy supplies are finite; you will run out some time. Massive use of fossil energy and the greenhouse gases they produce also may very well tip the planet into one of those extinction events in which a lot of very bad things happen to a lot of the life on the earth.

O.K. to Cohen's big question, how many people can the earth support? What it comes down to is that the "Well, it depends" answer depends on

• what quality of life you will accept,

• what level of technology you will use, and

• what level of social integration you will accept.

We have seen some of the numbers regarding quality of life. Clearly if you are willing to accept the Bangladesh diet, you can feed 1.8 times more people than if you chose the United States diet.

If you choose the back-to-nature, live like our hearty forefathers, level of technology, you can feed perhaps one-fifth as many people as you can with modern chemical fertilized agriculture. The rest have to go.

And here is the tough one. You can do a lot better, get a lot more people on the planet, if you just force a few things. Like, no more land wasted in growing grapes for wine or grains for whiskey and beer. No cropland used for tobacco. No more grain wasted on animals for meat, just grain for people. No more rich diets for the rich countries, share equally for everyone. No more trade barriers; too bad for the farmers in Japan and France, those countries would just have to accept their dependence on other countries for their food. It is easy to see that at least some of those might actually be a pretty good thing; however, the kicker is how do you get them to happen? After all, Mussolinill did make the trains run on time. How could you force these things without a totalitarian state? Are you willing to give up your ability to choose for yourself for the common good? It is not pretty, is it?

Cohen looked at all the various population estimates and concluded that most fell into the range of 4 to 16 billion. Taking the highest value when researchers offered a range, Cohen calculated a high median of 12 billion and taking the lower part of the range a low median of 7.7 billion. The good news in this is 12 billion is twice as many people as we have now. The bad news is that the projections for world population for 2050 are between 7.8 and 12.5 billion. That means we have got no more than 50 years before we exceed the nominal carrying capacity of the earth. Cohen also offers a qualifying observation by stating the "First Law of Information," which asserts that 97.6% of all statistics are made up. This helps us appreciate that application of these numbers to real life is subject to a lot of assumptions and insufficiencies in our understanding of the processes and data.

However, we can draw some insights from all of this. What it comes down to is that if you choose the fully sustainable, non-fossil fuel long-term options with only limited social integration, the various estimates Cohen looked at give you a number like 1 billion or less people that the earth can support. That means 5 out of 6 of us have got to go, plus no new babies without an offsetting death.

On the other hand, if you let technology continue to do its thing and perhaps get even better, the picture need not be so bleak. We haven't made all our farmland as productive as it can be. Remember, the Chinese get twice the food value per hectare as we do in the United States. There is also a lot of land that would become arable if we could get water to it. And, of course, in case you need to go back and check the title of this book, there are alternatives to fossil fuels to provide the energy to power that technology.

So given a positive and perhaps optimistic view of technology, we can look to some of the high technology assumption based studies from Cohen's review. From the semi-credible set of these, we can find estimates from 19 to 157 billion as the number of people the earth could support with a rough average coming in about 60 billion. This is a good time to be reminded of the First Law of Information. The middle to lower end of this range, however, might be done without wholesale social reprogramming. Hopefully we would see the improvement in the quality of life in the developing countries as they industrialize and increase their use of energy. Hopefully, also this would lead to a matching of the reduction in fertility rates that has been observed in the developed countries, which in turn would lead to an eventual balancing of the human population.

The point to all this is the near-term future of the human race depends on technology. If we turn away from technology, a very large fraction of the current and future human race will starve. If we just keep on as we are, with our current level of technology and dependence on fossil fuel resources, in the near term it will be a race between fertility decrease and our ability to feed ourselves, with, frankly, disaster the slight odds-on bet. In a slightly longer term, dependence on fossil fuels has got to lead to either social chaos or environmental disaster. There are no other end points to that road. It doesn't go anywhere else.

However, if we accept that it is technology that makes us human, that technology uniquely identifies us as the only animal that can choose its future, we can choose to live, choose to make it a better world for everyone and all life. This means more and better technology. It means more efficient technology that is kinder to the planet but also allows humans to support large numbers in a high quality of life. That road is not easy and has a number of ways to screw up. However, it is a road that can lead to a happier place, a better place.

Two Concluding Thoughts on the Case for Technology

Two more points and I will end my defense of technology. First, I want to bring you back from all the historical tour and all the numbers about population to something more directly personal. Let me ask you two questions.

What do you do for a living?

What did you have for breakfast?

Don't see any connection between these questions or of their connection to·the subject of technology? Don't worry, the point will come out shortly. I am just trying to bring the idea of technology back from this grand vision to its impact on your daily life.

Just as a wild guess, your answer to the first question was something that, say 500 years ago, didn't even exist. If we look 20,000 years ago, the only job was" get food." Even if you have a really directly socially valuable job like a medical doctor, 20,000 years ago you would have been extraneous. That is, the tribe couldn't afford you. What, no way! A doctor could save lives, surely a tribe would value such a skill. Well, sure, but the tribe could not afford taking one of their members out of the productive */I* getting the food" job for 20 years while that individual learned all those doctor skills.

If you examine the "what you do for a living" just a bit I think you will see a grand interconnectedness of all things. I personally find it pretty remarkable that we have a society that values nuclear engineers enough that I can make a living at it. Think about it. Somehow what I have done has been of enough value that, through various taxpayer and utility ratepayers, society has given me enough money for food and shelter. The tribe 20,000 years ago wouldn't have put up with me for a day.

You see, that is why we as humans are successful, wildly successful in fact. We work together. "Yeah, sure we do," you reply, " read a newspaper lately?" Well, *O.K.,* we fuss and fight a good deal and some of us do some pretty stupid and pretty mean things. But the degree of cooperation is amazing if you just step back a bit.

O.K., what did you have for breakfast: orange juice, coffee, toast, maybe some cereal and milk? Where do these things come from? Orange juice came from Florida or California. Coffee came from South America. Bread for the toast came perhaps from Kansas; cereal, from the Mid-West somewhere. The jam on the toast may have come from Oregon, or maybe Chile. Milk is probably the only thing that came from within a hundred miles of your breakfast table. Think about it. There were hundreds of people involved in your breakfast. Farmers, food-processing workers, packaging manufacturers, transportation people, energy producers, wholesale and retail people. Perhaps each one only spent a second on their personal contribution to your personal breakfast, but they touch thousands of other people's breakfasts as well. In turn, you buying the various components of your breakfast supported, in your part, all those people. They in turn, in some way or another, bought whatever you provide to society that allowed you to buy breakfast. Pretty amazing, don't you think?

Now when you look at all that, think about what ties all the planetwide interconnection, Yep, you guessed it: technology. Without technology, you get what is available within your personal reach, and what you produce is available only to those who are near enough that you can personally carry it to them on your own two feet. Technology makes our world work. It gives you personally a productive and socially valuable way to make both a living and to provide your contribution to the rest of us**.**

I want you to stop a minute and really think about that. What would your life be like without technology? Could you do what you currently do? Would anyone be able to use what you do? Would anyone pay you for that? "But I am a school teacher," you say, "of course, they would pay me!" Are you sure? Why do you need schools if there is no technology? All I need is to teach the kid how to farm and how to hunt. Sons and daughters can learn that by working in the fields along with their parents. See what I mean?

Now, I have hopefully reset your brain. Sure, you are still going to be hit with daily "technology is bad" messages. Hopefully, you are a bit more shielded against that din, and you have been given some perspective to balance that message and are prepared to see the true critical value of technology to human existence. The point is that technology is what makes us human. Without it, we are just slightly smarter monkeys.

You may feel that 6 billion of us are too many, and that may very well be. I personally don't know how to make that value decision. Which particular person does one select as being one of the excess ones?

However, the fact is that there are 6 billion of us, and it looks like we are headed for 10 to 12 billion in the next 50 years, Without not only the technology we have, but significantly better and more environmentally friendly technology, the world is going to get ugly as we approach these numbers,

On the other hand, with the right technologies we can not only support those numbers, we can do it while we close the gap between the haves and have-nots. We can make it a better place for everyone. It takes technology and the energy to drive it. Choosing technology is what we have to do to secure the evolutionary selection of us as a successful species, Remember, some pages back in discussing the unlikely evolutionary path to us, I said we are not the chosen, unless. Unless we choose us. This is what I meant. We are totally unique in all of evolutionary history. We humans have the unique ability and opportunity to choose either our evolutionary success or failure. A choice of technology gives us a chance. A choice rejecting technology dooms us as a species and gives the cockroaches the chance in our place. Nature doesn't care what survives, algae seas, dinosaurs, humans, cockroaches, or whatever is successful. If we care, we have to choose correctly.

As an aside, let me address a point of philosophy here. If any of this offends your personal theology, I offer this for your consideration. Genesis tells us God gave all the Earth to humanity and charged us with the stewardship thereof. So it is ours to use as well as we can. That insightful social philosopher Niccolo Machiavelli put it this way in 1501:

"What remains to be done must be done by you; since in order not to deprive us of our free will and such share of glory as belongs to us, God will not do everything Himself."

*O.K.,* you are saying, "I give." You have beaten the socks off me. Technology is good; technology is the identifying human trait and our only hope. But what is this stuff about choosing technology or not? Technology just happens doesn't it? I mean, technology always advances, it always has, so why the big deal?

Well, that is my last point on technology. It doesn't always just happen, and people have chosen to turn away from technology. In what might have seemed at the time to be a practical social decision, huge future implications were imposed on many generations to come. It has happened. Let me take you on one more trip through history. I think you will find it enlightening. In *Guns, Germs, and Steel,* Jared Diamond explores the question of why the European societies came to be dominate over all the other human cultures on earth. It is a fascinating story and provides a lot of insight into how modern societies evolved. In moving through history, he comes across a very odd discontinuity. He observes that if you came to earth from space in the year 1400 A.D., looked around, and went home to write your research paper on the probable future of the earth, you would clearly conclude the Chinese would run the entire planet shortly. Furthermore, you could conclude they would do it pretty darn well. If those same extraterrestrial researchers were to pop into their time machine and come back to earth in any year from say 1800 to now, they would be totally amazed to see China as a large, but relatively backward, country, struggling to catch up with their European and American peers.

To understand the significance of this, you have to go on that research trip with the extraterrestrials and look at China before 1400. In *The Lever af Riches,* Joel Mokyr dedicates one chapter looking at the comparisons of technology development in China to that in Europe. He lists the following as technology advantages China had in the centuries before 1400:

• Extensive water control projects, alternately draining and irrigating

land, significantly boosting agricultural production

• Sophisticated iron plow introduced sixth century B.C.

• Seed drills and other farm tools, introduced around 1000 *A.D.*

• Chemical and organic fertilizers and pesticides used

• Blast furnaces and casting of iron as early as 200 B.C., not known in Europe until fourteenth century

• Advanced use of power sources in textile production, not seen in Europe until the Industrial Revolution

• Invention of compass around 960 A.D.

• Major advances in maritime technology (more in a bit on this)

• Invention of paper around 100 A.D. (application as toilet paper by *590 A.D.).*

In the year 1400 AD., China was a world power, perhaps the only true world power. Their technology in agriculture, textiles, metallurgy, and maritime transportation were far in advance of any other country. They had a strong central government and a very healthy economy.

Their naval strength provides a real insight into the degree of this dominance. Dr. Diamond sends us to an extremely readable book *When China Ruled the Seas-The Treasure Fleet of the Dragon Throne 1405-1433* by Dr. Louise Levathes. Dr. Levathes takes us on an inside tour of the Chinese empire during these years. She focuses on the great treasure fleets that China set forth in these early years of the fifteenth century. In her book she has a wonderful graphic that overlays a Chinese vessel of the treasure fleet (-1410) with Columbus's *St. Maria* (1492). At 85 feet in length and three masts, the *St. Maria* is dwarfed by the nine-masted, 400-foot-long Chinese vessel.

The Chinese sailed fleets of these magnificent vessels throughout oceans of South Asia, to India, and even as far as the eastern coast of Africa. With this naval domination China claimed tribute from Japan, Korea, the nations of the Malay Archipelago, and various states within what is now India. Through both trade and the occasional application of military force, China provided an enlightened and progressive direction for all the nations within this sphere of influence. If two princes in India were fighting over a throne, it was the recognition, or lack thereof, from the Chinese emperor that decided who would rule. Setting a policy of religious inclusion and tolerance, the Chinese engaged the Arabian traders and calmed religious disputes within Asia.

With applications of power sources in textiles and advanced metallurgy, the Chinese were in the same position in 1400 as the British were in 1750, ready to launch into the Industrial Revolution. They traded with nations thousands of miles from home with vast, sophisticated shipping fleets. They were poised to extend this trade all the way to Europe and perhaps find the New World by going east instead of the European's going west in search of the rich Chinese markets.

But if we pop into that extraterrestrial time machine and drop into China in 1800, we find a technologically backward nation, humbled by a relatively small force of Europeans with "modern" military technology who wantonly imposed their will on the Chinese. The Chinese have been struggling to catch up with European and American technology ever since and so far not quite being able to do that. The domination of China by the Japanese during World War II shows how complete the turnaround was. In 1400 Japan was but one of many vassal states huddled about the feet of the Imperial Chinese throne. In 1940 the Japanese military crushed the Chinese government while marching on to control much of South Asia.

What could have happened to turn this clear champion of technology, trade, enlightened leadership with all its advantages over both its neighbors and yet-distant foreign competitors into such a weak, backward giant?

Mokyr goes through a pretty complete list of potential causes. He looks at diet, climate, and inherent philosophical mindset rejecting each as a credible actor mainly on the bases that all of these conditions were present during the period of technological and economic growth as well as the subsequent stagnation. Therefore, these were not determining factors in the turnabout. In the end he concludes, as does Diamond and Levathes, that it was just politics.

Yep, that is right. It was good, old human politics. Dr. Levathes gives us a delightful insider's view of the personalities and politics of Imperial progressions during this critical time period. To make a short story of it, the party that had been in control during the expansionist period supported the great treasure fleets, commerce with foreign nations, use and expansion of technology, and a rather harsh control of the rival party. The rival party was based on Confucian philosophy that preached a rigid, inward-looking, controlled existence.

When the Confucian party gained control of the throne, they had their opportunity to push back on the prior ruling party that had oppressed them so harshly for so long. And they did. They wanted nothing to do with foreigners; we have all we need at home, here in China, they said. The fleet was disbanded and the making of ocean-going vessels forbidden. Technology was no longer "encouraged." Again, their position was what we have is good enough, stop with all this new nonsense. Over a period of just a few years, the course of the entire nation was shifted from what would have appeared to be a bright future as the leading power in the world to a large, but relatively insignificant, backwater, rich in history and culture, but all backward looking to a former glory.

That was it. A shift in the political agenda. At the time, to the leaders in control, one that made sense. Focus at home, use what you have now, create order, discipline, control. In 50 years Japanese pirates controlled the coast of China, and the former ruler of the seas from Asia to Africa could not get out of their harbors safely.

So, you see **if the "technology is bad" message gets incorporated into too many of our daily decisions,** we can turn from our bright future into something else. The difference is that this time the stakes are much higher than they were in fifteenth century China. If we, in the developed nations, make the wrong choices, we doom all of humanity by our folly. It is not just that we miss the potential bright future, we miss the chance to avoid the combined human population growth and resources exhaustion disaster coming at us like a runaway train. Technology is the only way to prevent that train wreck. We can hear the siren's call of anti-technology, come back to nature and let the train run us down in a bloody mess, or we can try our best to use technology wisely and win free to make a better life for everyone.

### 2ac states cp

#### Doesn’t solve the case – restrictions are codified in federal law – prevents the requisite licensing, means the cp fails to cause commercialization – that’s 1ac Martin AND

MIT, 10 [Massachusetts Institute of Technology, “Nuclear Energy Research and Development Roadmap: Report to Congress”, April 2010, http://ocw.mit.edu/courses/nuclear-engineering/22-033-nuclear-systems-design-project-fall-2011/readings/MIT22\_033F11\_read\_core\_doe.pdf]

In the United States, it is the responsibility of industry to design, construct, and operate commercial nuclear power plants. However, DOE has statutory authority under the Atomic Energy Act **to promote** and support **nuclear** energy **technologies** **for commercial applications**. In general, appropriate government roles include researching high-potential technologies beyond the investment horizon of industry **and** also **reducing the technical risks** of new technologies. In the case of new commercial reactor designs, potential areas of NE involvement could include: Enabling new technologies to be inserted into emerging and future designs by providing access to unique laboratory resources for new technology development and, where appropriate, demonstration. • Working through the laboratories and universities to provide unique expertise and facilities to industry for R&D in the areas of: o Innovative concepts and advanced technologies. o Fundamental phenomena and performance data. o Advanced modeling and simulation capabilities. APRIL 2010 22 34 NUCLEAR ENERGY RESEARCH AND DEVELOPMENT ROADMAP o New technology testing and, if appropriate, demonstration. o Advanced manufacturing methods. Representative R&D activities that support each of the roles stated above are presented below. The level of DOE investment relative to industry investment will vary across the spectrum of these activities, with a generally increasing trend in DOE investment for longer-term activities. Finally, there is potential to leverage and amplify effective U.S. R&D through collaborations with other nations through multilateral and bilateral agreements including the Generation IV International Forum, which is investigating multiple advanced reactor concepts. DOE is also a participant in OECD/NEA and IAEA initiatives that bear directly on the development and deployment of new reactor systems.

And, doesn’t solve prolif leadership - Hargraves and Wallace say only a national initiative sends a credible signal and creates barriers to use – NRC credibility is key that’s Bengelsdorf – only federal action solves nuclear cred

Fertel, 05 - Senior Vice President And Chief Nuclear Officer Nuclear Energy Institute (Marvin, CQ Congressional Testimony, “NUCLEAR POWER'S PLACE IN A NATIONAL ENERGY POLICY,” 4/28, lexis) //DH

Industry and government will be prepared to meet the demand for new emission-free baseload nuclear plants in the 2010 to 2020 time frame only through a sustained focus on the necessary programs and policies between now and then. As it has in the past, strong Congressional oversight will be necessary to ensure effective and efficient implementation **of** the federal government's **nuclear** energy **programs, and to maintain America's** **leadership in nuclear technology** development and its influence over important diplomatic initiatives like nonproliferation. Such efforts have provided a dramatic contribution to global security, as evidenced by the U.S.-Russian nonproliferation agreement to recycle weapons-grade material from Russia for use in American reactors. Currently, more than 50 percent of U.S. nuclear power plant fuel depends on converted Russian warhead material. Nowhere is continued congressional oversight more important than with DOE's program to manage the used nuclear fuel from our nuclear power plants. Continued progress toward a federal used nuclear fuel repository is necessary to support nuclear energy's vital role in a comprehensive national energy policy and to support the remediation of DOE defense sites. Since enactment of the 1982 Nuclear Waste Policy Act, DOE's federal repository program has repeatedly overcome challenges, and challenges remain before the Yucca Mountain facility can begin operation. But as we address these issues, it is important to keep the overall progress of the program in context. There is international scientific consensus that a deep geologic repository is the best solution for long-term disposition of used military and commercial nuclear power plant fuel and high-level radioactive byproducts. The Bush administration and Congress, with bipartisan support, affirmed the suitability of Yucca Mountain for a repository in 2002. Over the past three years, the Energy Department and its contractors have made considerable progress providing yet greater confirmation that this is the correct course of action and that Yucca Mountain is an appropriate site for a national repository. --During the past year, federal courts have rejected significant legal challenges by the state of Nevada and others to the Nuclear Waste Policy Act and the 2002 Yucca Mountain site suitability determination. These challenges questioned the constitutionality of the Yucca Mountain Development Act and DOE's repository system, which incorporates both natural and engineered barriers to contain radioactive material safely. In the coming year, Congress will play an essential role in keeping this program on schedule, by taking the steps necessary to provide increased funding for the project in fiscal 2006 and in future years. Meeting DOE's schedule for initial repository operation requires certainty in funding for the program. This is particularly critical in view of projected annual expenditures that will exceed $1 billion beginning in fiscal 2007. Meeting these budget requirements calls for a change in how Congress provides funds to the project from monies collected for the Nuclear Waste Fund. The history of Yucca Mountain funding is evidence that the current funding approach must be modified. Consumer fees (including interest) committed to the Nuclear Waste Fund since its f6rmation in 1983 total more than $24 billion. Consumers are projected to pay between $750 million to $800 million to the fund each year, based on electricity generated at the nation's 103 reactors. This is more than $2 million per day. Although about $8 billion has been used for the program, the balance in the fund is nearly $17 billion. In each of the past several years, there has been a gap between the annual fees paid by consumers of electricity from nuclear power plants and disbursements from the fund for use by DOE at Yucca Mountain. Since the fund was first established, billions of dollars paid by consumers of electricity from nuclear power plants to the Nuclear Waste Fund-intended solely for the federal government's used fuel program-in effect have been used to decrease budget deficits or increase surpluses. The industry believes that Congress should change the funding mechanism for Yucca Mountain so that payments to the Nuclear Waste Fund can be used only for the project and be excluded from traditional congressional budget caps. Although the program should remain subject to congressional oversight, Yucca Mountain appropriations should not compete each year for funding with unrelated programs when Congress directed a dedicated funding stream for the project. The industry also believes that it is appropriate and necessary to consider an alternative perspective on the Yucca Mountain project. This alternative would include an extended period for monitoring operation of the repository for up to 300 years after spent fuel is first placed underground. The industry believes that this approach would provide ongoing assurance and greater confidence that the repository is performing as designed, that public safety is assured, and that the environment is protected. It would also permit DOE to apply evolving innovative technologies at the repository. Through this approach, a scientific monitoring program would identify additional scientific information that can be used in repository performance models. The project then could update the models, and make modifications in design and operations as appropriate. Congressional committees like this one can help ensure that DOE does not lose sight of its responsibility for used nuclear fuel management and disposal, as stated by Congress in the Nuclear Waste Policy Act of 1982. The industry fully supports the fundamental need for a repository so that used nuclear fuel and the byproducts of the nation's nuclear weapons program are securely managed in an underground, specially designed facility. World-class science has demonstrated that Yucca Mountain is the best site for that facility. A public works project of this magnitude will inevitably face challenges. Yet, none is insurmountable. DOE and its contractors have made significant progress on the project and will continue to do so as the project enters the licensing phase. Congressional oversight also can play a key role in maintaining and encouraging the stability of the NRC's regulatory process. Such stability is essential for our 103 operating nuclear plants and equally critical in licensing new nuclear power plants. Congress played a key role several years ago in encouraging the NRC to move toward a new oversight process for the nation's nuclear plants, based on quantitative performance indicators and safety significance. Today's reactor oversight process is designed to focus industry and NRC resources on equipment, components and operational issues that have the greatest importance to, and impact on, safety. The NRC and the industry have worked hard to identify and implement realistic security requirements at nuclear power plants. In the three-and-a-half years since 9/11, the NRC has issued a series of requirements to increase security and enhance training for security programs. The industry complied-fully and rapidly. In the days and months following Sept. 11, quick action was required. Orders that implemented needed changes quickly were necessary. Now, we should return to the orderly process of regulating through regulations. The industry has spent more than $1 billion enhancing security since September 2001. We've identified and fixed vulnerabilities. Today, the industry is at the practical limit of what private industry can do to secure our facilities against the terrorist threat. NRC Chairman Nils Diaz and other commissioners have said that the industry has achieved just about everything that can be reasonably achieved by a civilian force. The industry now needs a transition period to stabilize the new security requirements. We need time to incorporate these dramatic changes into our operations and emergency planning programs and to train our employees to the high standards of our industry-and to the appropriately high expectations of the NRC. Both industry and the NRC need congressional oversight to support and encourage this kind of stability. CONCLUSION Electricity generated by America's nuclear power plants over the past half-century has played a key part in our nation's growth and prosperity. Nuclear power produces over 20 percent of the electricity used in the United States today without producing air pollution. As our energy demands continue to grow in years to come, nuclear power should play an even greater role in meeting our energy and environmental needs. The nuclear energy industry is operating its reactors safely and efficiently. The industry is striving to produce more electricity from existing plants. The industry is also developing more efficient, next-generation reactors and exploring ways to build them more cost-effectively. The public sector, including the oversight committees of the U.S. Congress, can help maintain the conditions that ensure Americans will continue to reap the benefits of our operating plants, and create the conditions that will spur investment in America's energy infrastructure, including new nuclear power plants. One important step is passage of comprehensive energy legislation that recognizes nuclear energy's contributions to meeting our growing energy demands, ensuring our nation's energy security and protecting our environment. Equally important, however, is the need to ensure effective and efficient implementation of existing laws, like the Nuclear Waste Policy Act, and to provide federal agencies with the resources and oversight necessary to discharge their statutory responsibilities in the most efficient way possible. The commercial nuclear power sector was born in the United States, and nations around the world continue to look to this nation for leadership in this technology and in the issues associated with nuclear power. Our ability to influence critical international policies in areas like nuclear nonproliferation, for example, depends on our ability to maintain a leadership role in prudent deployment, use and regulation of nuclear energy technologies here at home, in the United States, and on our ability to manage the technological and policy challenges-like waste management-that arise with all advanced technologies.

#### And, policy through the DOE is essential to create effective international norms and spur tech development

MIT, 10 [Massachusetts Institute of Technology, “Nuclear Energy Research and Development Roadmap: Report to Congress”, April 2010, http://ocw.mit.edu/courses/nuclear-engineering/22-033-nuclear-systems-design-project-fall-2011/readings/MIT22\_033F11\_read\_core\_doe.pdf]

A goal-driven, science-based approach is essential to achieving the stated objectives while exploring new technologies and seeking transformational advances. This science-based approach, depicted in Figure 1, combines theory, experimentation, and high-performance modeling and simulation to develop the fundamental understanding that will lead to new technologies. Advanced modeling and simulation tools will be used in conjunction with smaller-scale, phenomenon-specific experiments informed by theory to reduce the need for large, expensive integrated experiments. Insights gained by advanced modeling and simulation can lead to new theoretical understanding and, in turn, can improve models and experimental design. This R&D must be informed by the basic research capabilities in the DOE Office of Science (SC). NE maintains access to a broad range of facilities to support its research activities. Hot cells and test reactors are at the top of the hierarchy, followed by smaller-scale radiological facilities, specialty engineering facilities, and small non-radiological laboratories. NE employs a multi-pronged approach to having these capabilities available when needed. The core capabilities rely on DOE-owned irradiation, examination, chemical processing and waste form development facilities. These are supplemented by university capabilities ranging from research reactors to materials science laboratories. In the course of conducting this science-based R&D, viii APRIL 2010 10 NUCLEAR ENERGY RESEARCH AND DEVELOPMENT ROADMAP infrastructure needs will be evaluated and considered through the established planning and budget development processes. There is potential to leverage and amplify effective U.S. R&D through collaboration with other nations via multilateral and bilateral agreements, including the Generation IV International Forum. DOE is also a participant in Organization of Economic Cooperation and Development/Nuclear Energy Agency (OECD/NEA) and International Atomic Energy Agency (IAEA) initiatives that bear directly on the development and deployment of new reactor systems. In addition to these R&D activities, international interaction supported by NE and other government agencies will be essential in establishment of international norms and control regimes to address and mitigate proliferation concerns.

#### The plan solves resource wars

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Increasing population stresses natural resources. The world population is growing to an estimated 9 billion people, all competing for diminishing natural resources - fresh water, oil, agricultural land, and food. The largest population growth is in the most impoverished countries, where people die young from starvation, disease, and war; and bear more children. Yet affordable, reliable electricity is a key to economic prosperity in the developing nations, which suffer from energy poverty. Basic electric power allows modest economic prosperity, with time for women to learn, work, become independent, and make reproductive choices, leading to a sustainable population. Cheap oil is ending. World economies depend on oil for transportation fuels. As conventional petroleum resources dwindle, supplies are being extended by drilling deeper, in more hostile environments, refining heavy crude, and mining tar sands, at ever higher costs and ever higher CO2 emissions. Yet powering small vehicles with electricity from nuclear power plants will reduce oil dependency. And high temperature heat from advanced nuclear reactors can synthesize substitute liquid fuels. Air pollution kills millions. Soot from burning coal causes respiratory illness and annually kills tens of thousands of people in the US, hundreds of thousands in China, and a million worldwide. Yet nuclear electric power plants emit no soot. Energy insecurity leads to conflict. Nations lack energy security for stability and peace. Japan depends on imported liquefied natural gas for energy; the US on petroleum; France on uranium. Supply disruptions can wreck national economies. Yet domestic thorium energy resources are sufficient for every nation to attain energy security.

#### Goes nuclear

**Wooldridge 9** – political writer and former lecturer at Cornell University (Frosty, “Humanity galloping toward its greatest crisis in the 21st century”

http://www.australia.to/index.php?option=com\_content&view=article&id=10042:humanity-galloping-toward-its-greatest-crisis-in-the-21st-century&catid=125:frosty-wooldridge&Itemid=244)

It is clear that most politicians and most citizens do not recognize that returning to “more of the same” is a recipe for promoting the first collapse of a global civilization. The required changes in energy technology, which would benefit not only the environment but also national security, public health, and the economy, would demand a World War II type mobilization -- and even that might not prevent a global climate disaster. Without transitioning away from use of fossil fuels, humanity will move further into an era of resource wars (remember, Africom has been added to the Pentagon’s structure -- and China has noticed), clearly with intent to protect US “interests” in petroleum reserves. The consequences of more resource wars, many likely triggered over water supplies stressed by climate disruption, are likely to include increased unrest in poor nations, a proliferation of weapons of mass destruction, widening inequity within and between nations, and in the worst (and not unlikely) case, a nuclear war ending civilization.

### 2ac elections

**No impact to a strike – doesn’t escalate**

**Poor 2/16**—quoting Charles Krauthammer (Jeff, 2/16/12, <http://dailycaller.com/2012/02/16/krauthammer-israeli-strike-on-iran-will-not-cause-a-world-war-video/>, RBatra)

On Wednesday’s “Special Report Online” segment on FoxNews.com, syndicated columnist Charles Krauthammer said that if Israel decides to attack Iran in order to thwart its development of nuclear weapons, the collateral damage wouldn’t start a third world war.

Krauthammer based that hypothesis on Iran not having allies that would be willing to intervene significantly on a military level. (RELATED: More analysis from Charles Krauthammer)

“It could cause a regional war,” Krauthammer said. “It will not cause a world war by any means. It’s not August 1914, because Iran has no great power allies who will intervene militarily. Iran is going to be alone with its clients, Syria, Hezbollah and Hamas — all of whom are on their heels right now.”

He said it would require Iran acting out in an irrational way and luring the United States into engagement for any conflict to become more widespread.

“If Iran is smart, it will not attack the United States in retaliation because that would involve us,” he said. “It would retaliate against Israel and it could remain a limited engagement. Now of course, irrationality is possible and you cannot predict. **If the Iranians either close the Strait of Hormuz or attack Americans at the naval facility in Bahrain, that would be suicide because that would occasion American intervention**, almost like Wilson in the First World War in the sinking of the Lusitania. You don’t do that if you’re rational, but who knows. The Iranians haven’t always been rational.”

#### Romney and Obama would both support a strike

Sheldon Richman 8- 6-2012 Obama, Sheldon Richman is editor of The Freeman, published by The Foundation for Economic Education in Irvington, New York, and serves as senior fellow at The Future of Freedom Foundation. Romney Are Reckless on Iran http://www.fff.org/comment/com1208d.asp

You will strain your eyes looking for a significant difference between President Obama’s and Mitt Romney’s positions on Iran and the prospects of an Israeli attack on the Islamic republic. Both say “all options are on the table.” All. That includes a full-scale military attack with even nuclear weapons. This isn’t alarmism. Iran’s facilities are undoubtedly well protected. No light force would be capable of taking them out. The Romney campaign created a stir recently when a key foreign-policy adviser, Dan Senor, seemed to up the ante by saying, “If Israel has to take action on its own, in order to stop Iran from developing that [nuclear weapons] capability, the governor would respect that decision.” The remark apparently went too far, because Romney had to clarify his position. “I respect the right of Israel to defend itself,” he told CBS. But “because I’m on foreign soil, I don’t want to be creating new foreign policy for my country or in any way to distance myself from the foreign policy of our nation.” This indicates that Senor said nothing that Romney wishes to disavow. Senor just said it in the wrong place — on foreign soil. Americans have this foolish rule that “politics stops at the water’s edge.” But as the classical-liberal critic of foreign intervention Felix Morley once said, politics stops at the water’s edge only when policy stops at the water’s edge — which, for the American empire, it does not.

#### No difference between Obama and Romney

Friedman 9/14—associate editor at Foreign Policy, former reporter for CSM (Uri, 9/14/12, Where's Romney's contrast with Obama on Iran?, <http://blog.foreignpolicy.com/posts/2012/09/14/wheres_romneys_contrast_with_obama_on_iran>, RBatra)

But, crucially, Romney **hasn't gone as far** as his surrogates have in drawing a red line at nuclear capability. Romney advisor Dan Senor, for example, previewed the candidate's Jerusalem remarks by saying "it is not enough just to stop Iran from developing a nuclear program" since "the capability, even if that capability is short of weaponization, is a pathway to weaponization." In an interview with the New York Times this week, advisor Eliot Cohen said Romney "would not be content with an Iran one screwdriver's turn away from a nuclear weapon" but did not specify the point at which the development of Iran's nuclear capability -- a highly technical process that may already be quite far along depending on how you define the slippery term -- would be unacceptable.

The ABC interview didn't offer many other insights **into how Romney's Iran policy would differ from Obama's.** Romney advocated for "crippling sanctions" -- a track the Obama administration has pursued aggressively. He said "Iran as a nuclear nation is unacceptable to the United States of America" -- echoing Obama's assertion that "when the United States says it is unacceptable for Iran to have a nuclear weapon, we mean what we say." He explained that the United States must make clear that it will "take any action necessary to prevent ... Iran becoming nuclear"; Obama has said that "when it comes to preventing Iran from obtaining a nuclear weapon, I will take no options off the table."

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Energy not key to the election

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: You just mentioned that we don’t know who the next president is going to be and sticking to this topic how big an impact do you see energy prices having on this year's presidential elections? Mish: I don’t think energy prices are what's on people's minds. What's on people's minds right now are jobs. Oil prices have kind of stabilized and in the very short-term they are likely to stay stable unless there are some dramatic results in the Mid-East or a dramatic slowdown in the US economy. Both are possible, but a major US slowdown is arguably more likely. Regardless, I think energy prices are going to be a minor election issue.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### The debates and labor statistics will determine the election

**Lombardo, 9/12**/12 - Global CEO, StrategyOne (Steve, “Why This Election Comes Down to Two Days in October,” Huffington Post, <http://www.huffingtonpost.com/steve-lombardo/election-monitor-why-this_b_1877815.html>)

Several national polls released this week show that President Obama received a small but meaningful bounce after the conventions. The bounce -- in the 3-5 point range -- is within the median for convention bounces since 1964. The problem for Republicans is that Romney got no bounce from his convention. In fact, his vote share likely shrunk a point or two in the last two weeks. While the Republican convention may have strengthened Romney's position with the base, it did little to expand his coalition. The momentum from "You didn't build that" has been halted.

However, we see nothing in the data yet to suggest this is anything but a dead heat. For all the hand wringing over the GOP convention and the Romney campaign they are in a dead heat with an incumbent President with 55 days to go. When you look at likely voters in key swing states, this thing is truly 50/50.

Here is our take as of 12 a.m. EST:

The murder of Ambassador Stevens and the unrest in Libya will thrust both candidates into the foreign policy fray. It will be very interesting to see how each handles the coming hours and days and how much the media -- and ultimately voters -- focuses on the issue.

Look for a higher level of advertising spend from the Romney campaign in key battleground states over the next two weeks. History has shown that the candidate who is clearly in the lead by mid to late September will likely be the winner in November. That doesn't mean things can't change in October -- they can. But sentiment will start to firm up in the next two weeks. The Romney campaign has a $60 million cash-on-hand advantage, and they should use it now. Team Obama defined Romney in the spring using their cash advantage; the Romney campaign should not wait until October. They need to change the dynamic before October 1.

The two biggest dates of the campaign are October 3rd and October 5th. The first debate will be held on Wednesday, October 3rd at the University of Denver at 9 p.m. EST. For three reasons this will be far and away the most important debate:

It is the first and therefore, unless there is a major blunder, is likely to be the one that sets the image of Romney in stone.

We really do not believe that the other two will matter if Romney has a poor debate performance here. Romney has to win this debate pure and simple.

This one is purely on domestic policy, i.e. the economy. If Romney can't win this one, he is unlikely to win the other two, barring a miscue by the President.

On October 5th at 8:30 a.m. EST the Bureau of Labor Statistics will release the September unemployment numbers. This will be the most impactful announcement of the campaign. If the unemployment rate goes up it could be devastating for the president's reelection chances. Similarly, if it goes down -- especially if it goes below 8 percent -- it may pretty much secure an Obama victory in November.

#### Romney will win because Obama’s approval ratings are too low

**Talgo, 9/16/12 –** commentator for Neon Tommy, a Los Angeles-based news source sponsored by the Annenberg School for Communication and Journalism covering breaking news (Tyler, “Why Romney Will Win The Election” <http://www.neontommy.com/news/2012/09/why-romney-will-win-election>)

Given the post-convention polling bounces, some may give Obama the advantage at this stage of the race, although the bounces are subsiding. For example, new NBC/WSJ polls of three swing states have Obama leading Romney by 49 to 44 percent in Florida and Virginia, and by 50 to 43 percent in Ohio. However, when we take a closer look at the numbers, a different story is revealed. In the Florida and Virginia polls, Democrats were oversampled by 5 percent, and in Ohio they were oversampled by 10 percent. Not convinced? Here’s another fact: recent CBS/NYT/Quinnipiac polls oversampled Democrats by nine percent in Florida and by eight percent in Ohio. The Florida poll had Obama at 51 percent and Romney at 45 percent, and the Ohio poll had Obama at 50 percent and Romney at 44 percent; so, both leads were smaller than the oversampling gap. If you ask me, the advantage here clearly goes to Romney; and, believe me, these are not the only examples.

All of this is revealed in the context of a time in which Republicans are much more enthusiastic than Democrats. Last month the number of Americans who consider themselves Republicans was the highest ever recorded since 2002 at 37.6 percent, compared to only 33.3 percent who consider themselves Democrats.

So, assuming that all else is equal, what does it mean when a national poll says something like 47 percent for Obama and 44 percent for Romney, or vise versa? The nature of the missing 10 percent is one of the most important factors that come to play in all presidential reelection campaigns. Historically, the final results in an election are almost always worse than polling suggests for an incumbent president. If you took the undecided vote, according to Gallup, from every general election since 1964 that featured an incumbent president seeking reelection, 89 percent of it went to the president’s challenger. You can bet that the Obama camp understands that a 47-44 poll in its favor is not good news at all. This is why it’s virtually unheard-of for an incumbent president to win reelection when he's polling below 50 percent.

#### The plan creates jobs in key swing states -- boosts reelection probability.

Korte, 4-27-12

[Gregory, USA Today, “Politics stands in the way of nuclear plant's future,” http://www.usatoday.com/money/industries/energy/story/2012-04-13/usec-centrifuges-loan-guarantees/54560118/1]

. USEC estimates the project at its peak will generate 3,158 jobs in Ohio, and 4,284 elsewhere. Pike County, home to the centrifuges, has a 13% unemployment rate — the highest in Ohio. The median household income is about $40,000. The average job at USEC pays $77,316. Centrifuge parts are stacked up in Piketon. "It's as shovel-ready as they come," says spokeswoman Angela Duduit. Indeed, the project has enjoyed bipartisan support. A USA TODAY review of DOE records shows that no fewer than 46 members of Congress — 32 Republicans and 14 Democrats — have pressured the Obama administration to approve the loan guarantee for USEC. "Quick action is paramount," said one bipartisan letter. "It is imperative that this application move forward now," said another. The congressional support comes from states such as Ohio, Pennsylvania, Tennessee, Kentucky, West Virginia, Missouri, Alabama, Indiana, Maryland, North Carolina and South Carolina— an almost exact overlay of the states that would benefit from the 7,442 jobs the company says would be created.

#### Public supports nuclear power expansion -- no safety concerns.

Bowman, 4-18-12 [Karlyn, American Enterprise Institute, “Polls on the environment, energy, global warming and nuclear power,” http://www.aei.org/papers/politics-and-public-opinion/polls/polls-on-the-environment-energy-global-warming-and-nuclear-power-april-2012/]

\* President Obama is getting low marks on his handling of gas prices. In a February 2012 AP/GfK-Roper poll, 39 percent approved of the job he is doing in this area. Significant majorities say rising gas prices have caused difficulties in their households. \* The majority of Americans still think nuclear power is safe. In a March 2012 Gallup poll, 57 percent favored using nuclear energy as one way to provide electricity for the United States. But people still wouldn’t want to build a nuclear plant in their backyard. Only 35 percent told CBS pollsters in March 2011 that they would approve of a nuclear power plant in their community, and 62 percent disapproved. \* Americans like an “all-of-the-above” energy strategy that includes more energy production, developing alternative energy sources, more conservation and nuclear power.

#### Israel cannot attack Iran

**PanArmenian 2/16** (2/16/12, “Armenian expert says Israel can’t strike Iran alone,” http://www.panarmenian.net/eng/news/94108/Armenian\_expert\_says\_Israel\_cant\_strike\_Iran\_alone, RBatra)

The European Union has not officially confirmed yet the information regarding suspension of Iranian oil export to 6 countries, according to Armenian political analyst.

“Iran is certain about sanctions against the Iranian oil import to harm the EU first. Iran has already started searching for new markets. For instance, oil supplies to India increased by 37%,” Roman Smbatyan told PanARMENIAN.Net

Dwelling on Israel’s stance on Iran issue and statements on possible strike on Iran, the expert noted that Iran has no potential for launch of hostilities by itself.

“Israel can’t attack Iran alone, without the U.S. assistance which currently faces complex situation as to forthcoming presidential elections and international financial crisis,” Mr. Smbatyan said.

#### Their authors have been wrong before

**Friedman 1/25**—associate editor at Foreign Policy (Uri, 1/25/12, <http://blog.foreignpolicy.com/posts/2012/01/25/whats_new_in_the_latest_speculation_over_whether_israel_will_attack_iran>, RBatra)

The New York Times Magazine is out today with a 7,585-word piece by Ronen Bergman on whether Israel will attack Iran. After speaking with top Israeli civilian, military, and intelligence leaders, the Israeli journalist arrives at a frightening conclusion: "Israel will indeed strike Iran in 2012."

Of course, we've heard this claim before. In August 2009, Micah Zenko warned at the Los Angeles Times that if Iran failed to respond to international proposals on its nuclear program by September, the "world should be prepared for an Israeli attack on Iran's suspected nuclear weapons facilities." In September 2010, the Atlantic's Jeffrey Goldberg noted that "one day next spring," Israeli officials might very well inform their U.S. counterparts that Israeli Prime Minister Benjamin Netanyahu had dispatched fighter jets to strike Iranian nuclear facilities. John Bolton, the former U.S. ambassador to the United Nations, has repeatedly issued timelines regarding an Israeli strike on Iran. Anshel Pfeffer predicts an attack this spring.

#### Their impact is empirically denied

**LA Times 2/3** (2/3/12, http://latimesblogs.latimes.com/world\_now/2012/02/will-israel-attack-iran-its-been-asked-before.html, RBatra)

Will Israel attack Iran? The question is everywhere since Israeli journalist Ronen Bergman concluded in the New York Times Magazine: "After speaking with many senior Israeli leaders and chiefs of the military and the intelligence, I have come to believe that Israel will indeed strike Iran in 2012."

It's a very serious question, and not just for Israel and Iran. "Rarely if ever have the stakes been higher," Harvard fellow Chuck Freilich recently opined for the Los Angeles Times:

... on the one hand, a threat to Israel's very existence, and the Jewish people have already undergone one Holocaust in recent history. Israel was established so that the Jewish people would never again face the threat of extermination. Never again.

Conversely, the consequences of acting are also potentially dire, even assuming a successful attack. Iran already has the technical means to produce a nuclear bomb, and an attack could set the program back by no more than a few years — of value in itself but not a solution.

But it's worth remembering that the same question has been all over the media before. At Foreign Policy magazine, Blake Hounshell dubs it "Washington's favorite parlor game." Just look at headlines, including both news articles and opinion pieces from newspapers and news websites:

November 2011: Chicago Tribune, Will Israel bomb Iran?

November 2010: The Atlantic, Will Israel Attack Iran by Christmas?

August 2010: The Week, Will Israel attack Iran in the next three days?

April 2010: Middle East Post, Will Israel attack Iran?

August 2009: Talking Points Memo, Will Israel Attack Iran This Year?, Los Angeles Times, Expect Israel to hit Iran without warning

April 2009: Salon.com, Will Israel attack Iran?

July 2008: The Atlantic, Will Israel Attack Iran?, ABC News, Will Israel Attack Iran?

May 2008: The Daily Star (Lebanon), As things look, Israel may well attack Iran soon

February 2008: Haaretz, Pentagon: Israel increasingly likely to attack Iran

December 2007: The Daily Beast, What Will Israel Do? (The writer says that a unilateral military strike against Iran has grown more likely.)

March 2005: Philippine Daily Inquirer, Israel has plans to attack Iran, says London Times

August 2004: The New York Times, Sharon on the warpath: Is Israel planning to attack Iran?

### 1ar

#### No root cause– prefer proximate causes

**Moore, 04** [John Norton, Professor of Law at the University of Virginia He formerly served as the first Chairman of the Board of the United States Institute of Peace and as the Counselor on International Law to the Department of State, Winter, “Beyond the Democratic Peace: Solving the War Puzzle”, 44 Va. J. Int'l L. 341, Lexis Law]

If major interstate war is predominantly a product of a synergy between a potential nondemocratic aggressor and an absence of effective deterrence, what is the role of the many traditional "causes" of war? Past, and many contemporary, theories of war have focused on the role of specific disputes between nations, ethnic and religious differences, arms races, poverty and social injustice, competition for resources, incidents and accidents, greed, fear, perceptions of "honor," and many other factors. Such factors may well play a role in motivating aggression or generating fear and manipulating public opinion. The reality, however, is that while some of these factors may have more potential to contribute to war than others, there may well be an **infinite set of motivating factors**, or human wants, motivating aggression. It is not the independent existence of such motivating factors for war but rather the circumstances permitting or encouraging high-risk decisions leading to war that is the key to more effectively controlling armed conflict. And the same may also be true of democide. The early focus in the Rwanda slaughter on "ethnic conflict," as though Hutus and Tutsis had begun to slaughter each other through spontaneous combustion, distracted our attention from the reality that a nondemocratic Hutu regime had carefully planned and orchestrated a genocide against Rwandan Tutsis as well as its Hutu opponents. [n158](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1329520437445&returnToKey=20_T13973620735&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.647208.6119287203#n158) Certainly if we were able to press a button and end poverty, racism, religious intolerance, injustice, and endless disputes, we would want to do so. Indeed, democratic governments must remain committed to policies that will produce a better world by all measures of human progress. The broader achievement of democracy and the rule of law will itself assist in this progress. No one, however, has yet been able to demonstrate the kind of robust correlation with any of these "traditional" causes of war that is reflected in the "democratic peace." Further, given the difficulties in overcoming many of these social problems, an approach to war exclusively dependent on their solution may **doom us to war for generations** to come.

#### Monteiro’s wrong

**Busby 12**, Josh, assistant professor of public affairs at the Lyndon B. Johnson School of Public Affairs [“Josh Busby on Unipolarity and International Relations,” January 6th, http://www.strausscenter.org/strauss-news/josh-busby-on-unipolarity-and-international-relations.html] HURWITZ

Strauss Scholar, Joshua Busby, wrote a three-part piece on the blog The Duck of Minerva, responding to two articles published by University of Chicago scholars Nuno Monteiro, and Sebastian Rosato and John Schuessler. The articles, and Busby’s response, focus on international relations, unipolarity and the realist approach to foreign policy. Busby’s first post critiques Nuno Monteiro’s article, “Unrest Assured: Why Unipolarity Is Not Peaceful” published in International Security. Monteiro argued that unipolarity has been less peaceful than other time periods. Busby disagrees with this argument, citing the contemporary era may create a “presentist bias” due to the overemphasis of our own lived experience and the omnipresence of the news media. Finally Busby addressed Moneiro’s argument that unipolarity drives conflict. Busby argues that **domestic-level factors in** both the United States and **potential adversaries, rather than U.S. power** alone, help explain recent conflicts.

#### No risk of “endless warfare”- we should embrace pragmatism in security

Gray 7—Director of the Centre for Strategic Studies and Professor of International Relations and Strategic Studies at the University of Reading, graduate of the Universities of Manchester and Oxford, Founder and Senior Associate to the National Institute for Public Policy, formerly with the International Institute for Strategic Studies and the Hudson Institute (Colin, July, “The Implications of Preemptive and Preventive War Doctrines: A Reconsideration”, <http://www.ciaonet.org/wps/ssi10561/ssi10561.pdf>)

7. A policy that favors preventive warfare expresses a futile quest for absolute security. It could do so. Most controversial policies contain within them the possibility of misuse. In the hands of a paranoid or boundlessly ambitious political leader, prevention could be a policy for endless warfare. However, the American political system, with its checks and balances, was designed explicitly for the purpose of constraining the executive from excessive folly. Both the Vietnam and the contemporary Iraqi experiences reveal clearly that although the conduct of war is an executive prerogative, in practice that authority is disciplined by public attitudes. Clausewitz made this point superbly with his designation of the passion, the sentiments, of the people as a vital component of his trinitarian theory of war. 51 It is true to claim that power can be, and indeed is often, abused, both personally and nationally. It is possible that a state could acquire a taste for the apparent swift decisiveness of preventive warfare and overuse the option. One might argue that the easy success achieved against Taliban Afghanistan in 2001, provided fuel for the urge to seek a similarly rapid success against Saddam Hussein’s Iraq. In other words, the delights of military success can be habit forming. On balance, claim seven is not persuasive, though it certainly contains a germ of truth. A country with unmatched wealth and power, unused to physical insecurity at home—notwithstanding 42 years of nuclear danger, and a high level of gun crime—is vulnerable to demands for policies that supposedly can restore security. But we ought not to endorse the argument that the United States should eschew the preventive war option because it could lead to a futile, endless search for absolute security. One might as well argue that the United States should adopt a defense policy and develop capabilities shaped strictly for homeland security approached in a narrowly geographical sense. Since a president might misuse a military instrument that had a global reach, why not deny the White House even the possibility of such misuse? In other words, constrain policy ends by limiting policy’s military means. This argument has circulated for many decades and, it must be admitted, it does have a certain elementary logic. It is the opinion of this enquiry, however, that the claim that a policy which includes the preventive option might lead to a search for total security is **not at all convincing**. Of course, folly in high places is always possible, which is one of the many reasons why popular democracy is the superior form of government. It would be absurd to permit the fear of a futile and dangerous quest for absolute security to preclude prevention as a policy option. Despite its absurdity, this rhetorical charge against prevention is a stock favorite among prevention’s critics. It should be recognized and dismissed for what it is, a debating point with little pragmatic merit. And strategy, though not always policy, **must be nothing if not pragmatic**.

#### Violence declining now – heg is the reason

**Owen 11** [John M. Owen Professor of Politics at University of Virginia PhD from Harvard "DON’T DISCOUNT HEGEMONY" Feb 11 [www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/](http://www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/)]

Andrew Mack and his colleagues at the Human Security Report Project are to be congratulated. Not only do they present a study with a striking conclusion, driven by data, free of theoretical or ideological bias, but they also do something quite unfashionable: they bear good news. Social scientists really are not supposed to do that. Our job is, if not to be Malthusians, then at least to point out disturbing trends, looming catastrophes, and the imbecility and mendacity of policy makers. And then it is to say why, if people listen to us, things will get better. We do this as if our careers depended upon it, and perhaps they do; for if all is going to be well, what need then for us?

Our colleagues at Simon Fraser University are brave indeed. That may sound like a setup, but it is not. I shall challenge neither the data nor the general conclusion that **violent conflict around the world has been decreasing** in fits and starts since the Second World War. When it comes to violent conflict among and within countries, things have been getting better. (The trends have not been linear—Figure 1.1 actually shows that the frequency of interstate wars peaked in the 1980s—but the 65-year movement is clear.) Instead I shall accept that Mack et al. are correct on the macro-trends, and focus on their explanations they advance for these remarkable trends. With apologies to any readers of this forum who recoil from academic debates, this might get mildly theoretical and even more mildly methodological.

Concerning international wars, one version of the “nuclear-peace” theory is not in fact laid to rest by the data. It is certainly true that nuclear-armed states have been involved in many wars. They have even been attacked (think of Israel), which falsifies the simple claim of “assured destruction”—that any nuclear country A will deter any kind of attack by any country B because B fears a retaliatory nuclear strike from A.

But the most important “nuclear-peace” claim has been about *mutually* assured destruction, which obtains between two robustly nuclear-armed states. The claim is that (1) rational states having second-strike capabilities—enough deliverable nuclear weaponry to survive a nuclear first strike by an enemy—will have an overwhelming incentive not to attack one another; and (2) we can safely assume that nuclear-armed states are rational. It follows that states with a second-strike capability will not fight one another.

Their colossal atomic arsenals neither kept the United States at peace with North Vietnam during the Cold War nor the Soviet Union at peace with Afghanistan. But the argument remains strong that those arsenals did help keep the United States and Soviet Union at peace with each other. Why non-nuclear states are not deterred from fighting nuclear states is an important and open question. But in a time when calls to ban the Bomb are being heard from more and more quarters, we must be clear about precisely what the broad trends toward peace can and cannot tell us. They may tell us nothing about why we have had no World War III, and little about the wisdom of banning the Bomb now.

Regarding the downward trend in *international* war, Professor Mack is friendlier to more palatable theories such as the “democratic peace” (democracies do not fight one another, and the proportion of democracies has increased, hence less war); the interdependence or “commercial peace” (states with extensive economic ties find it irrational to fight one another, and interdependence has increased, hence less war); and the notion that people around the world are more anti-war than their forebears were. Concerning the downward trend in *civil* wars, he favors theories of economic growth (where commerce is enriching enough people, violence is less appealing—a logic similar to that of the “commercial peace” thesis that applies among nations) and the end of the Cold War (which end reduced superpower support for rival rebel factions in so many Third-World countries).

These are all **plausible mechanisms** for peace. What is more, none of them excludes any other; all could be working toward the same end. That would be somewhat puzzling, however. Is the world just lucky these days? How is it that an array of peace-inducing factors happens to be working coincidentally in our time, when such a magical array was absent in the past? The answer may be that one or more of these mechanisms reinforces some of the others, or perhaps some of them are mutually reinforcing. Some scholars, for example, have been focusing on whether economic growth might support democracy and vice versa, and whether both might support international cooperation, including to end civil wars.

We would still need to explain how this charmed circle of causes got started, however. And here let me raise another factor, perhaps even less appealing than the “nuclear peace” thesis, at least outside of the United States. That factor is what international relations scholars call hegemony—specifically American hegemony.

A theory that many regard as discredited, but that refuses to go away, is called hegemonic stability theory. The theory emerged in the 1970s in the realm of international political economy. It asserts that for the global economy to remain open—for countries to keep barriers to trade and investment low—one powerful country must take the lead. Depending on the theorist we consult, “taking the lead” entails paying for global public goods (keeping the sea lanes open, providing liquidity to the international economy), coercion (threatening to raise trade barriers or withdraw military protection from countries that cheat on the rules), or both. The theory is skeptical that international cooperation in economic matters can emerge or endure absent a hegemon. The distastefulness of such claims is self-evident: they imply that it is good for everyone the world over if one country has more wealth and power than others. More precisely, they imply that it has been good for the world that the United States has been so predominant.

There is no obvious reason why hegemonic stability theory could not apply to other areas of international cooperation, including in security affairs, human rights, international law, peacekeeping (UN or otherwise), and so on. What I want to suggest here—suggest, not test—is that American hegemony might just be a deep cause of the steady decline of political deaths in the world.

How could that be? After all, the report states that United States is the third most war-prone country since 1945. Many of the deaths depicted in Figure 10.4 were in wars that involved the United States (the Vietnam War being the leading one). Notwithstanding politicians’ claims to the contrary, a candid look at U.S. foreign policy reveals that the country is as ruthlessly self-interested as any other great power in history.

The answer is that U.S. hegemony might just be a **deeper cause of the proximate causes outlined by** Professor Mack. Consider economic growth and openness to foreign trade and investment, which (so say some theories) **render violence irrational**. American power and policies may be responsible for these in two related ways. First, at least since the 1940s Washington has prodded other countries to embrace the market capitalism that entails economic openness and produces **sustainable** economic growth. The United States promotes capitalism for selfish reasons, of course: its own domestic system depends upon growth, which in turn depends upon the efficiency gains from economic interaction with foreign countries, and the more the better. During the Cold War most of its allies accepted some degree of market-driven growth.

Second, the U.S.-led western victory in the Cold War damaged the credibility of alternative paths to development—communism and import-substituting industrialization being the two leading ones—and left market capitalism the best model. The end of the Cold War also involved an end to the billions of rubles in Soviet material support for regimes that tried to make these alternative models work. (It also, as Professor Mack notes, eliminated the superpowers’ incentives to feed civil violence in the Third World.) What we call globalization is caused in part by the emergence of the United States as the global hegemon.

The same case can be made, with somewhat more difficulty, concerning the spread of democracy. Washington has supported democracy only under certain conditions—the chief one being the absence of a popular anti-American movement in the target state—but those conditions have become much more widespread following the collapse of communism. Thus in the 1980s the Reagan administration—the most anti-communist government America ever had—began to dump America’s old dictator friends, starting in the Philippines. Today Islamists tend to be anti-American, and so the Obama administration is skittish about democracy in Egypt and other authoritarian Muslim countries. But general U.S. material and moral support for liberal democracy remains strong.

The trouble with hegemonic stability theory is that it is difficult to test. The difficulty lies in the unobservable qualities of hegemony: it is about not simply material power—guns and money—but “soft power,” persuasion, ideas, things difficult to quantify and measure. Still, many scholars of international relations continue to think that there is much to the theory. The implications are large. If American hegemony does indeed underpin, at least indirectly, the virtuous macro-trends outlined in Professor Mack’s essay—the overall downward trend in wars and political deaths—then the decline in American hegemony many analysts are now seeing is about much more than the humbling of a superpower.

#### US won’t do more mindless interventions

Mandelbaum 11 (Michael Mandelbaum, A. Herter Professor of American Foreign Policy, the Paul H. Nitze School of Advanced International Studies, Johns Hopkins University, Washington DC; and Director, Project on East-West Relations, Council on Foreign Relations, “CFR 90th Anniversary Series on Renewing America: American Power and Profligacy,” Jan 2011) <http://www.cfr.org/publication/23828/cfr_90th_anniversary_series_on_renewing_america.html?cid=rss-fullfeed-cfr_90th_anniversary_series_on-011811&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+cfr_main+(CFR.org+-+Main+Site+Feed>

MANDELBAUM: I think it is, Richard. And I think that this period really goes back two decades. I think the wars or the interventions in Somalia, in Bosnia, in Kosovo, in Haiti belong with the interventions in Afghanistan and Iraq, although they were undertaken by different administrations for different reasons, and had different costs. But all of them ended up in the protracted, unexpected, unwanted and expensive task of nation building. Nation building has never been popular. The country has never liked it. It likes it even less now. And I think we're not going to do it again. We're not going to do it because there won't be enough money. We're not going to do it because there will be other demands on the public purse. We won't do it because we'll be busy enough doing the things that I think ought to be done in foreign policy. And we won't do it because it will be clear to politicians that the range of legitimate choices that they have in foreign policy will have narrowed and will exclude interventions of that kind. So I believe and I say in the book that the last -- the first two post-Cold War decades can be seen as a single unit. And that unit has come to an end.

#### No impact

Thompson, 03 [Michael, founder and editor of Logos and teaches political theory at Hunter College, CUNY. His new book, Islam and the West: Critical Perspectives on Modernity has just been released from Rowman and Littlefield Press, “Iraq, Hegemony and the Question of American Empire”, http://www.logosjournal.com/thompson\_iraq.htm]

It is rare that political debates typically confined to the left will burst into the mainstream with any degree of interest, let alone profundity. But this has not been the case with the question of American empire and the recent military campaigns in places such as Iraq and Afghanistan. For many on the left, this was a political question with a cut and dried answer: the American-led military campaign was a clear expression of its imperial policies and motives, the object of which is economic global dominance. But in some ways, such assumptions voiced by much of the American and European left, specifically among its more dogmatic and sectarian strains, mischaracterize and even misunderstand the reality of American global power and the possible contributions of the western political tradition more broadly.

With each passing day the events in Iraq deliberately evoke the question of American empire, and not without good reason. The neoconservative position on this has been to see American policies and its position in the world as that of a hegemon: a nation which seeks to lead the constellation of world nations into the end of history itself where the fusion of "free" markets and liberal democracy is seen to be the institutional panacea for the world's ills and with this the enlargement of capital's dominion. But the deepening morass of the occupation of Iraq belies such intentions. Paul Bremer's statement that "we dominate the scene [in Iraq] and we will continue to impose our will on this country," is a concise statement betraying not America's imperial motives, but, rather, the way that its hegemonic motives have ineluctably been pushed into a logic of imperial control. America has, in other words, become **an empire by default**, not by intention, and the crucial question now is: how are we to respond?

## round 2—neg v. kentucky gs

### 1nc k

#### The need to expand production rests on an object-oriented view of nature that leads to extinction

**Dahm and Bannas 2011** (Daniel, Stephen, <http://poldev.revues.org/835>)

The biosphere and geosphere exist in close dynamic interdependency. Their relational structure is gaining degrees of complexity whose causal relatedness is far beyond analytical objectivity. In particular, linear determinisms – still common in most scientific analyses – are reaching their limits. The fundamental uncertainty of ecological interdependencies and processes is multiplying within the cultural dimensions of the anthroposphere. Human value concepts and interpretations of reality (lat. res = thing) are becoming bio-ecological and climate ecological parameters. Economic and political strategies are directly affecting the geo-bio-ecological budgets, material and energy flows, accumulation, distribution and the ecological balance – in space as well as in time. 2The wide range of life-threatening conflicts today range from the destructive climate impacts by greenhouse gases as CO2, Methane and others and the atmospheric enrichment with particulate matter, up to the extensive degradation and desertification of soils and landscapes worldwide, the far-reaching pollution and exhaustion of water resources as well as the wasteful use of fossil resources, to the systematic destruction of marine and land ecosystems, and the rapid extinction of the wide variety of life forms. **Humans are rarely able to understand** clearly the **complex chains of cause and effect**, but we know that humans play a decisive role in these processes. But much easier to link directly to human behaviour and the human world of ideas is the broad spectrum of severe, destructive and far-reaching conflicts that humanity is facing daily. 3The only field in which humans are able to interact and communicate with their ecological environment is that of “culture”. It is only through culture that human-nature-relations are interpreted and strategically translated and realised. By means of cultures of knowledge, of economics, politics, social and civil relations, etc., humans set limits and openings for their position in “the world”, and their patterns of actions and opportunities. 2. The human-nature-relation: an epistemological disconnect

4Scientifically this relationship represents one of **the** most fundamental epistemological (of the theory of cognition) schisms in history: the contact between a materialistic view of reality and the immaterial “Wirklichkeit” of a living world in dynamic interdependency. “The insights of modern physics – of quantum physics – suggest a new interpretation of the world that carries us beyond the materialistic-mechanistic worldview. Instead of the world assumed until now – a mechanical, temporally determined “reality” of objectifiable things, the real Wirklichkeit (a world that effects) turns out to be basically “potentiality”: an indivisible, immaterial, temporally essentially indeterminate and genuinely creative bonding of relations that determines only “can”-probabilities, a differentiated potential for a material-energetic realization.” (Dürr, Dahm & Lippe, 2005) Such a “schism” cannot be resolved (as historically expected for a long time in the development of the sciences particularly in the philosophies) primarily by means of a change in our spiritual relationship to our world. Rather, and more drastically, humanity is confronted with this epistemological schism through its interaction with the living world, which both includes and borders humanity. The scenarios of bio-geo-ecological crises present human beings in a life-threatening way with the **narrowness of their interpretations** of the world and of their patterns of behaviour, and challenge them to adopt a new course of action. This goes hand in hand with a confrontation between the diverse cultural strategies and views of reality. 5Living complexes do not follow the mechanistic ideas of the old physics. The manifestations of life emerge and vanish in a highly dynamic flow of interactions. In this way, reality is created in a permanent transformative process. The description of ecology, biological and cultural plurality, and human impacts on nature, demands the describing and consequent inclusion of the in-betweens and go-betweens (Turnbull, D. 2004), of aspects of an inter-connected relatedness that are not measurable. Within such intelligence, the aspects of fuzziness and uncertainty are indivisibly integrated in the comprehension of nature, life and ecology. The consequences for actions and strategies from the local to the global level are presumably drastic, calling for a re-orientation in economic, political, socio-cultural and ecological matters. 6 Since the 15th century, a narrow, centralistic world view, which strives to iron out all differences between diverse philosophical outlooks and create homogeneity, has come to dominate as never before. This can be seen especially clearly in the colonisation of virtually the entire known world by western European powers. This was followed by the one-sided monopolisation of the spiritual, living and material resources of our Earth by the European-style power centres. 7 These strategies and ways of thinking, adapted all over the world, and the view of humanity that is closely connected with them, have a causal link with the materialistic-mechanistic world view that is still favoured around the globe, i.e. the object-related division of life resulting from the desire to control it (frequently referred to as the Cartesian-Newtonian world view). 8At the start of the modern era, in the 17th century, the changes wrought by the Cartesian revolution engendered diverse and far-reaching processes of social restructuring. This intellectual and philosophical change, having matured for some time, also began to affect the nature of economic activity and the organisation of the state. Put simply, a “God-given” world order was replaced by an impression of unlimited power to shape the world. This brought with it a materialistic view of reality and reduced the relationship between humans and nature to one concerned first and foremost with the production of energy and materials.

#### Our alternative prioritizes consideration of historical interests over unsustainable promises offered by messianic energy promises

**Byrne and Toly 6** (john, Noah, “Energy as a Social Project: Recovering a Discourse” Transforming Power: Energy, Environment, And Society in Conflict. Eds John Byrne, Noah Toly, and Leigh Glover. Pgs 1-32. Transaction Publishers. )

From climate change to acid rain, contaminated landscapes, mercury pollution, and biodiversity loss,2 the origins of many of our least tractable environmental problems can be traced to the operations of the modern energy system. A scan of nightfall across the planet reveals a social dilemma that also accompanies this system’s operations: invented over a century ago, electric light remains an experience only for the socially privileged. Two billion human beings—almost one-third of the planet’s population—experience evening light by candle, oil lamp, or open fire, reminding us that energy modernization has left intact—and sometimes exacerbated—social inequalities that its architects promised would be banished (Smil, 2003: 370 - 373). And there is the disturbing link between modern energy and war.3 Whether as a mineral whose control is fought over by the powerful (for a recent history of conflict over oil, see Klare, 2002b, 2004, 2006), or as the enablement of an atomic war of extinction, modern energy makes modern life possible and threatens its future. With environmental crisis, social inequality, and military conflict among the significant problems of contemporary energy-society relations, the importance of a social analysis of the modern energy system appears easy to establish. One might, therefore, expect a lively and fulsome debate of the sector’s performance, including critical inquiries into the politics, sociology, and political economy of modern energy. Yet, contemporary discourse on the subject is disappointing: instead of a social analysis of energy regimes, the field seems to be a captive of euphoric technological visions and associated studies of “energy futures” that imagine the pleasing consequences of new energy sources and devices.4 One stream of euphoria has sprung from advocates of conventional energy, perhaps best represented by the unflappable optimists of nuclear power who, early on, promised to invent a “magical fire” (Weinberg, 1972) capable of meeting any level of energy demand inexhaustibly in a manner “too cheap to meter” (Lewis Strauss, cited in the New York Times 1954, 1955). In reply to those who fear catastrophic accidents from the “magical fire” or the proliferation of nuclear weapons, a new promise is made to realize “inherently safe reactors” (Weinberg, 1985) that risk neither serious accident nor intentionally harmful use of high-energy physics. Less grandiose, but no less optimistic, forecasts can be heard from fossil fuel enthusiasts who, likewise, project more energy, at lower cost, and with little ecological harm (see, e.g., Yergin and Stoppard, 2003). Skeptics of conventional energy, eschewing involvement with dangerously scaled technologies and their ecological consequences, find solace in “sustainable energy alternatives” that constitute a second euphoric stream. Preferring to redirect attention to smaller, and supposedly more democratic, options, “green” energy advocates conceive devices and systems that prefigure a revival of human scale development, local self-determination, and a commitment to ecological balance. Among supporters are those who believe that greening the energy system embodies universal social ideals and, as a result, can overcome current conflicts between energy “haves” and “havenots.” 5 In a recent contribution to this perspective, Vaitheeswaran suggests (2003: 327, 291), “today’s nascent energy revolution will truly deliver power to the people” as “micropower meets village power.” Hermann Scheer echoes the idea of an alternative energy-led social transformation: the shift to a “solar global economy... can satisfy the material needs of all mankind and grant us the freedom to guarantee truly universal and equal human rights and to safeguard the world’s cultural diversity” (Scheer, 2002: 34).6 The euphoria of contemporary energy studies is noteworthy for its historical consistency with a nearly unbroken social narrative of wonderment extending from the advent of steam power through the spread of electricity (Nye, 1999). The modern energy regime that now powers nuclear weaponry and risks disruption of the planet’s climate is a product of promises pursued without sustained public examination of the political, social, economic, and ecological record of the regime’s operations. However, the discursive landscape has occasionally included thoughtful exploration of the broader contours of energy-environment-society relations. As early as 1934, Lewis Mumford (see also his two-volume Myth of the Machine, 1966; 1970) critiqued the industrial energy system for being a key source of social and ecological alienation (1934: 196): The changes that were manifested in every department of Technics rested for the most part on one central fact: the increase of energy. Size, speed, quantity, the multiplication of machines, were all reflections of the new means of utilizing fuel and the enlargement of the available stock of fuel itself. Power was dissociated from its natural human and geographic limitations: from the caprices of the weather, from the irregularities that definitely restrict the output of men and animals. By 1961, Mumford despaired that modernity had retrogressed into a lifeharming dead end (1961: 263, 248): ...an orgy of uncontrolled production and equally uncontrolled reproduction: machine fodder and cannon fodder: surplus values and surplus populations... The dirty crowded houses, the dank airless courts and alleys, the bleak pavements, the sulphurous atmosphere, the over-routinized and dehumanized factory, the drill schools, the second-hand experiences, the starvation of the senses, the remoteness from nature and animal activity—here are the enemies. The living organism demands a life-sustaining environment. Modernity’s formula for two centuries had been to increase energy in order to produce overwhelming economic growth. While diagnosing the inevitable failures of this logic, Mumford nevertheless warned that modernity’s supporters would seek to derail present-tense7 evaluations of the era’s social and ecological performance with forecasts of a bountiful future in which, finally, the perennial social conflicts over resources would end. Contrary to traditional notions of democratic governance, Mumford observed that the modern ideal actually issues from a pseudomorph that he named the “democraticauthoritarian bargain” (1964: 6) in which the modern energy regime and capitalist political economy join in a promise to produce “every material advantage, every intellectual and emotional stimulus [one] may desire, in quantities hardly available hitherto even for a restricted minority” on the condition that society demands only what the regime is capable and willing to offer. An authoritarian energy order thereby constructs an aspirational democracy while facilitating the abstraction of production and consumption from non-economic social values. The premises of the current energy paradigms are in need of critical study in the manner of Mumford’s work if a world measurably different from the present order is to be organized. Interrogating modern energy assumptions, this chapter examines the social projects of both conventional and sustainable energy as a beginning effort in this direction. The critique explores the neglected issue of the political economy of energy, underscores the pattern of democratic failure in the evolution of modern energy, and considers the discursive continuities between the premises of conventional and sustainable energy futures.

### 1nc t

#### Removing export or trade restrictions is untopical—border measures are not restrictions on production

Lothar Ehring (Assistant to Mr. Péter Balás, Deputy Director-General at the Directorate-General for Trade of the European Commission, responsible for multilateral affairs, as well as trade defence instruments and bilateral trade relations with Eastern Europe and Central Asia. Until 2008, Lothar Ehring served in the Unit of the European Commission's Directorate-General for Trade that is responsible for Legal Aspects of Trade Policy. He was the Coordinator for legal issues of multilateral trade, handled several WTO disputes and also represented the European Community in the negotiations on the reform of the WTO Dispute Settlement Understanding) and Gian Franco Chinale 2011 “Regulation of Energy in International Trade Law: Wto, Nafta and Energy Charter” p. 134-5

The perfect example to test and discuss this interpretation is the famous case of OPEC production quotas. These quotas. as implemented at the national levels of OPEC members, are horizontal restrictions on production. They limit exportation no more than domestic sales, and yet the argument is made time and again that they fall foul of Article XI:I of the GATT 1994.” The proponents of this thesis recognize that they are on thin ice. given that production limitations are as remote from being border measures as a restriction can possibly be. Equally clear is the fact that a production limitation definition does not discriminate against exports, neither de jure nor de facto. The proponents of the OPEC GATT-illegality attempt to overcome this conclusion with the argument that for some of the oil exporting countries in question, the near totality of the production goes to export. This. however, is legally irrelevant to the question of whether there is a discrimination against or higher burden on exports. The quantitative relationship between domestic consumption and exports can be very imbalanced for reasons of production and consumption capacities, in large part for reasons of a country’s size and the foreign demand for the product concerned. Also the conceptual argument that a restriction on production can be decomposed into a restriction on exportation as well a restriction on domestic sales is not plausible. The production restriction is precisely and inseparably both at the same time and this makes a qualitative difference that is impossible to set aside.

#### Vote neg:

#### 1. Ground – removing trade barriers lets them avoid relevant production debates and counterplans, which guts the operative topical term and grants them unpredictable external offense and disad answers.

#### 2. Limits – border policy involves a separate lit base that makes it impossible to anticipate topic evolution. Domestic topics are already complex on enough levels that adding a new foreign policy sector makes it unmanageable.

#### 3. Extra topicality- the plan only excludes production from the review process, which includes things that aren’t restrictions.

### 1nc courts cp

#### The United States Supreme Court should rule crude oil and natural gas production from Exon-Florio reviews unenforceable by federal agencies.

#### Courts have authority to rule over energy production

Brenda Bowers April 2011 “Future Of American Energy Production At Stake In US Supreme Court – Big Government” http://brendabowers.wordpress.com/2011/04/19/%C2%BB-future-of-american-energy-production-at-stake-in-us-supreme-court-big-government/

We all know how important energy is in our lives, just as commercial energy is critical to free market capitalism and the pursuit of prosperity in America. Now, thanks to environmental activists and several states, that may all be at risk in the US Supreme Court. In 2004, unhappy that the duly elected Bush administration wasn’t restricting carbon emissions in the alleged cause of global warming, environmental activism prompted several states to file a “public nuisance” lawsuit, which would empower the courts in this regard. They lost in the lower court but that was reversed in 2007. This case is novel, and far more aggressive and disruptive than the global warming case the Court previously permitted. In a 2007 decision, Massachusetts v. EPA, a closely divided Court agreed with 12 states and several cities that the Environmental Protection Agency has authority to regulate carbon dioxide as a pollutant under the Clean Air Act. Though that case dealt with a narrow claim to enforce a federal statute, the Court’s decision emboldened what had already become a cottage industry of lawsuits designed to slow global warming by asking federal courts to enact what interest groups have been unable to secure through the democratic process: carbon caps and other limits on the way energy is produced in this country. Under the guise of “public nuisance,” the plaintiffs in these suits seek to impose enormous damages and binding emissions caps on energy companies. The plaintiffs have acknowledged that their goal is a veritable sea change in the way energy is produced, sold, and used in this country. Incredibly, they assert that these companies can make major changes to lower emissions – such as the adoption of wind and solar alternatives – “without significantly increasing the cost of electricity.” But never before has the “public nuisance” doctrine been used to set national economic and energy policy. While litigation may be therapeutic for those frustrated by political inaction, this case is at odds with this country’s legal tradition. Meanwhile, a recently elected Republican House is taking steps to go in the other direction through budget cuts to the EPA. Environmental activism in the US is, in effect, looking to up-end the democratic process – an all too common theme across the Left – by empowering the courts to make policy in perhaps the single most critical policy area for American prosperity.

#### This solves and competes – it doesn’t ‘reduce’ a legal restriction – it just makes it unenforceable

William Treanor (associate professor of law at Fordham University) and Gene Sperling (Deputy assistant to the president for economic policy University of Minnesota) 1993 “Prospective overruling and the revival of Unconstitutional statutes” JSTOR

Unlike the Supreme Court, several state courts have explicitly addressed the revival issue. The relevant state court cases have concerned the specific issue of whether a statute that has been held unconstitutional is revived when the invalidating decision is over- turned.42 With one exception, they have concluded that such statutes are immediately enforceable. The most noted instance in which the revival issue was resolved by a court involved the District of Columbia minimum wage statute pro- nounced unconstitutional in Adkins. After the Court reversed Adkins in West Coast Hotel, President Roosevelt asked Attorney General HomerCummings for an opinion on the status of the District of Columbia's statute. The Attorney General responded, The decisions are practically in accord in holding that the courts have no power to repeal or abolish a statute, and that notwithstanding a decision holding it unconstitutional a statute continues to remain on the statute books; and that if a stat- ute be declared unconstitutional and the decision so declaring it be subsequently overruled the statute will then be held valid from the date it became effective.43 Enforcement of the statute followed without congressional action.44 When this enforcement was challenged, the Municipal Court of Appeals for the District of Columbia inJawish v. Morlet 45 held that the decision in West Coast Hotel had had the effect of making the statute enforceable. The court observed that previous opinions addressing the revival issue proceed on the principle that a statute declared unconstitutional is void in the sense that it is inoperative or unenforceable, but not void in the sense that it is repealed or abolished; that so long as the decision stands the statute is dormant but not dead; and that if the decision is reversed the statute is valid from its first effective date.46 The court declared this precedent sound since the cases were "in ac- cord with the principle 'that a decision of a court of appellate jurisdic- tion overruling a former decision is retrospective in its operation, and the effect is not that the former decision is bad law but that it never was the law.' "47 Adkins was thus, and had always been, a nullity. The court acknowledged that, after Adkins, it had been thought that the District of Columbia's minimum wage statute was unconstitutional. As the court put it, "'[J]ust about everybody was fooled.' "48 Nonetheless, the court's view was that since the minimum wage law had always been valid, although for a period judicially unenforceable, there was no need to reenact it.49 Almost all other courts that have addressed the issue of whether a statute that has been found unconstitutional can be revived have reached the same result as theJawish court, using a similar formalisticanalysis.50 The sole decision in which a court adopted the nonrevival position is Jefferson v. Jeferson,51 a poorly reasoned decision of the Louisiana Supreme Court. The plaintiff in Jeferson sought child sup- port and maintenance from her husband. She prevailed at the trial level; he filed his notice of appeal one day after the end of the filing period established by the Louisiana Uniform Rules of the Court of Ap- peals. The Court of Appeals rejected his appeal as untimely, even though the Louisiana Supreme Court had previously found that the ap- plicable section of the Uniform Rules violated the state constitution. One of Ms. Jefferson's arguments before the state Supreme Court was that that court's previous ruling had been erroneous and that the rules should therefore be revived. In rejecting this claim and in finding for the husband, the Court stated: Since we have declared the uniform court rule partially unconstitutional, it appears to be somewhat dubious that we have the right to reconsider this ruling in the instant case as counsel for the respondent judges urges us to do. For a rule of court, like a statute, has the force and effect of law and, when a law is stricken as void, it no longer has existence as law; the law cannot be resurrected thereafter by a judicial de- cree changing the final judgment of unconstitutionality to con- stitutionality as this would constitute a reenactment of the law by the Court-an assumption of legislative power not dele- gated to it by the Constitution.52 The Louisiana Court thus took a mechanical approach to the revival question. According to its rationale, when a statute is found unconstitutional, it is judicially determined never to have existed. Revival there- fore entails judicial legislation and thereby violates constitutionally mandated separation of powers: because the initial legislative passage of the bill has no legitimacy, the bill's force is considered to be purely a creature of judicial decision-making. Jefferson has little analytic appeal. Its view of the separation of pow- ers doctrine is too simplistic. Contrary to the Jeferson rationale, a "re- vived" law is not the pure product of judicial decision-making. It is, instead, a law that once gained the support of a legislature and that has never been legislatively repealed. Its legitimacy rests on its initial legis- lative authorization. Moreover, the view that a statute that has been found unconstitutional should be treated as if it never existed may have had some support in the early case law, but it has been clearly rejected by the Supreme Court. Instead of treating all statutes that it has found unconstitutional as if they had never existed, the Court has recognized a range of circumstances in which people who rely on an overturned decision are protected. Indeed, as will be developed, the doctrine of prospective overruling evolved to shield from harm those who relied on subsequently overruled judicial decisions.53 In short, the one case in which there was a holding that a statute did not revive does not offer a convincing rationale for nonrevival.

### 1nc elections

#### Obama is winning but it will be close and it’s reversible – popularity is key

**Brownstein, 9/21/12** - a two-time finalist for the Pulitzer Prize for his coverage of presidential campaigns, is National Journal Group's Editorial Director, in charge of long-term editorial strategy.(Ronald, National Journal, “Heartland Monitor Poll: Obama Leads 50 Percent to 43 Percent” <http://www.nationaljournal.com/2012-presidential-campaign/heartland-monitor-poll-obama-leads-50-percent-to-43-percent-20120921?page=1>)

President Obama has opened a solid lead over Mitt Romney by largely reassembling the “coalition of the ascendant” that powered the Democrat to his landmark 2008 victory, the latest Allstate/National Journal Heartland Monitor Poll has found.

The survey found Obama leading Romney by 50 percent to 43 percent among likely voters, with key groups in the president’s coalition such as minorities, young people, and upscale white women providing him support comparable to their levels in 2008.

The survey, conducted by Ed Reilly and Jeremy Ruch of FTI Communications, a communications and strategic consulting firm, surveyed 1,055 likely voters by landline and cell phone from Sept. 15-19. It has a margin of error of plus or minus 3 percentage points. Full results from the survey, including a detailed look at Americans’ attitudes about opportunity and upward mobility, will be released in the Sept. 22 National Journal.

The Heartland Monitor’s results are in line with most other national surveys in recent days showing Obama establishing a measurable lead, including this week’s new Pew Research Center and NBC/Wall Street Journal polls. The saving grace for Republicans is that even as these surveys show Obama opening a consistent advantage, the president has not been able to push his support much past the critical 50 percent level, even after several difficult weeks for Romney that began with a poorly reviewed GOP convention. That suggests the president faces continued skepticism from many voters that **could allow Romney** to draw **a second wind** if he can stabilize his tempest-tossed campaign.

The poll found Obama benefiting from a small increase in optimism about the country’s direction. Among likely voters, 37 percent said the country was moving in the right direction. Even looking at all adults, the "right track" number now stands at 35 percent, its best showing since the April 2010 Heartland Monitor.

Obama’s approval rating in the new survey also ticked up to 50 percent, with 46 percent disapproving. That’s a slight improvement from May, when the survey of all adults found 47 percent approving and 48 percent disapproving. Among all adults, Obama’s rating improved to 49 percent approving and 45 percent disapproving, also one of his best showings since January 2010.

Those gains are critical, because as always with an incumbent president, attitudes toward Obama’s performance powerfully shape the race. Among likely voters who approve of Obama’s job performance, he leads Romney in the ballot test by 93 percent to 3 percent; those who disapprove prefer Romney by 87 percent to 5 percent.

#### The plan makes China a pivotal election issue – China bashing gave the GOP the advantage in the midterms

**Yingzi, 10** (Tan, “US likely to give nod to CNOOC deal, despite opposition” 10/14, China Daily,

<http://www.chinadaily.com.cn/bizchina/2010-10/14/content_11409139.htm>

Several proposed Chinese investment projects in the US have encountered political obstacles this year. Some Congress members blamed China for the high US unemployment rate and regard the emerging economy's global expansion as a national security threat.¶ China has appeared as a "scapegoat" for the wobbly US economy in the fierce campaign for November's midterm elections. At least 29 candidates have aired advertisements blaming their opponents for being too sympathetic to China, the New York Times reported on Saturday.¶ Strong political opposition to the CNOOC deal is likely, given the recent congressional objections to Anshan Iron and Steel Group's investment in a small US steel company, said Scissors from the Heritage Foundation.

#### Romney would support Iran strikes

Robert W. Merry 8-1-2012; editor of The National Interest and the author of books on American history and foreign policyRomney Edges U.S. toward War with Iran http://nationalinterest.org/commentary/romney-edges-us-toward-war-iran-7275

The major newspapers all understood that GOP presidential candidate Mitt Romney’s expressions in Jerusalem last weekend were important, which is why they played the story on page one. But only the New York Times captured the subtle significance of what he said. The paper’s coverage, by Jodi Rudoren and Ashley Parker, reported that Romney sought to adhere to the code that says candidates shouldn’t criticize the president on foreign soil. “But,” they added, “there were subtle differences between what he said—and how he said it—and the positions of his opponent.” Most significantly, while Obama talks about stopping Iran from obtaining nuclear weapons, Israel insists Tehran should be prevented from having even the capacity to develop nuclear weapons. This means no nuclear development even for peaceful purposes. Romney embraced the Israeli language. In doing so, he nudged his nation closer to war with Iran. Based on Israeli prime minister Benjamin Netanyahu’s oft-repeated expressions, he clearly seems bent on attacking Iran to destroy or delay its nuclear program and, if possible, undermine the Iranian regime. And he wants America at his side when he does it. Obama has been seeking to dissuade Israel from contemplating such an assault in order to give the president’s austere sanctions regimen a chance to work. But what does he mean by “a chance to work?” If he means a complete capitulation by Iran, he’s dreaming, of course. History tells us that nations don’t respond to this kind of pressure by accepting humiliation. That’s the lesson of Pearl Harbor, as described in my commentary in these spaces. Many close observers of the Iran drama believe there may be an opportunity for a negotiated outcome that allows Iran to enrich uranium to a limited extent—say, 5 percent—for peaceful purposes. Iran insists, and most experts agree, that the Non-Proliferation Treaty allows such enrichment for energy production. In any event, numerous signatories to the NPT do in fact maintain limited enrichment programs for peaceful ends. Obama seems torn between pursuing such an outcome and embracing the Israeli position, which demands that Iran foreswear all enrichment and any peaceful nuclear development. In last spring’s Istanbul meeting between Iran and the so-called P5+1 group (the United States, Britain, France, China, Russia and Germany), there seemed to be a genuine interest on the part of those six nations to explore an outcome that would allow for some enrichment by Iran. Five weeks later in Baghdad, the P5+1 group seemed to backtrack and insist upon zero enrichment. Talks are ongoing but only among low-level technical people; any serious negotiations are on hold pending the election. Thus Obama has managed to maintain his flexibility during the delicate campaign period. But now we have Romney in Israel essentially telling the people there that they need fear no ambivalence on his part. If elected, he will embrace the Netanyahu position, which is designed to ensure the collapse of any negotiations attending anti-Iran sanctions, which Netanyahu already has labeled a failure. “We have to be honest,” he said over the weekend, during Romney’s visit, “and say that the sanctions and diplomacy so far have not set back the Iranian program by one iota.” That’s the view that Romney subtly embraced in Jerusalem.

#### Great power war

Trabanco 2009 – Independent researcher of geopolitical and military affairs (1/13/09, José Miguel Alonso Trabanco, “The Middle Eastern Powder Keg Can Explode at Anytime,” http://www.globalresearch.ca/index.php?context=va&aid=11762)

In case of an Israeli and/or American attack against Iran, Ahmadinejad's government will certainly respond. A possible countermeasure would be to fire Persian ballistic missiles against Israel and maybe even against American military bases in the regions. Teheran will unquestionably resort to its proxies like Hamas or Hezbollah (or even some of its Shiite allies it has in Lebanon or Saudi Arabia) to carry out attacks against Israel, America and their allies, effectively setting in flames a large portion of the Middle East. The ultimate weapon at Iranian disposal is to block the Strait of Hormuz. If such chokepoint is indeed asphyxiated, that would dramatically increase the price of oil, this a very threatening retaliation because it will bring intense financial and economic havoc upon the West, which is already facing significant trouble in those respects. In short, the necessary conditions for a major war in the Middle East are given. Such conflict could rapidly spiral out of control and thus a relatively minor clash could quickly and dangerously escalate by engulfing the whole region and perhaps even beyond. There are many key players: the Israelis, the Palestinians, the Arabs, the Persians and their respective allies and some great powers could become involved in one way or another (America, Russia, Europe, China). Therefore, any miscalculation by any of the main protagonists can trigger something no one can stop. Taking into consideration that the stakes are too high, perhaps it is not wise to be playing with fire right in the middle of a powder keg.

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from **promiscuous intervention** in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he **is not qualified to be president**. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

### 1nc solvency

#### The plan solves nothing, they can’t access their Carroll evidence – he says it requires changing the definition of national security to effect all forms of CFIUS review. The plan only excludes certain energy assets from review – it doesn’t change the scope of national security – that’s their 1ac Carroll solvency evidence

#### Can’t solve – CFIUS wind energy suit

**Shierman, 9/20/**12 (Eric, “Fed foreign investment review committee abusing its power?” Oregon Catalyst, <http://oregoncatalyst.com/19321-fed-foreign-investment-review-committee-abusing-power.html>)

A terribly counterproductive and arbitrarily political ruling of the Obama administration to shut down the development of a startup Oregon energy company presents a remarkable abuse of power that has so far gone completely unreported here locally. Ironically, I’m not referring to a coal company either. Obama is shutting down a wind energy company.¶ Ralls Corporation, named after the Texan town it originates from, has purchased four small Oregon startup wind farms that were unable to tap into the green energy gravy train. These Oregon startups had acquired wind farm development rights, power distribution agreements, and all the required regulatory approval, but they lacked the capital to purchase the wind turbines.¶ Ralls intends to risk its own capital building this business here in Oregon to develop the capacity to produce and sell 40 megawatts in our state’s electricity market. So what’s not to love? I have been critical of wind energy projects that risk public money, but if a firm wants to have at it on its own dime I say best of luck to them. So why were they shut down by Mr. “all the above” energy strategy? Could it be that Ralls will be competing with subsidized firms in Obama’s patronage support network? Could it be that Ralls will not be purchasing GE turbines?¶ We don’t know. The Obama administration refuses to say. The Committee on Foreign Investment in the United States (CFIUS) has simply vetoed the project, declaring this investment in the Oregon economy a threat to national security. Made up of the heads of Treasury, DOJ, State, DHS, Commerce, Energy, and a few others, this high level committee is the most powerful government organ you have never heard of. It is not required to sign off on every business deal, but when they choose to review one, their veto is final. There is no process of appeal.¶ This incredibly strong executive power of the Presidency can be exercised any time there is some foreign element to a domestic business transaction. Given the integrated nature of our global economy that finds a non US actor in nearly every major aspect of our domestic commerce, this has some potential to become an almost dictatorial power if left unchecked.¶ In the case of Ralls, the jurisdiction is certainly clear, this investment is being made by two Chinese private investors, Dawei Duan and Jialiang Wu, but the CFIUS only issued a veto. It failed to give any reasons for its actions or even offer any conditions by which the committee’s concerns, whatever they are, could be resolved. The CFIUS simply prohibited the transaction outright while even going so far as to prohibit Ralls’ Oregon assets from being sold to a US buyer to cut their losses. It’s as if the Obama administration’s goal is simply to condemn the project itself, using the nationality of the investors as a mere jurisdictional fig leaf.

#### Chinese protectionism triggers the same impact

**Wolf, 11** - President and Chief Executive Officer of Wolf Group Asia (WGA), and has been an advisor to companies in the telecommunications industry in China since 1993.(David, “Cross Post: In Defense of the CFIUS” 5/6, <http://siliconhutong.com/2011/05/06/cross-post-in-defense-of-the-cfius/>)

At its heart, though, the short book is a reasoned defense of what the authors clearly believe to be a fair process, if not quite a model for similar processes overseas. Their greatest concern is in the matter of transparency, and it is worth dwelling on that for a bit.¶ China is in the habit of rejecting foreign investments with greater frequency, an expression of an all-but-explicit national industrial policy that implicitly questions the value of foreign ownership of Chinese companies. That foreign firms – most recently YUM Brands – continue to pursue acquisitions of healthy Chinese corporations in blithe ignorance of this policy implies either willful ignorance on the part of executives, legal counsel, and investment banks, or that it is time for China to be more transparent in the criteria it uses to evaluate foreign investments.¶

#### The alternative to CFIUS is greater politicization

MICHAELS ’11 (Jon D.; Acting Professor – UCLA School of Law, “The (Willingly) Fettered Executive: Presidential Spinoffs in National Security Domains and Beyond,” 97 Va. L. Rev. 801, l/n)

In addition, by insulating the crucial work of CFIUS from the President, there is likely to be a higher level of consistency over time (and between presidential administrations) than if the President had sole discretion. 311 This is because the interests advanced by cabinet officials involved in the decisionmaking may reflect common institutional goals across administrations, rather than just partisan or presidential objectives. 312 Consistency over time is especially important in this space given the need to accommodate core regulatory questions, diplomatic considerations, national-security concerns, and the interests of the parties to the proposed transaction - coupled with the inability to explain publicly what, if anything, [880] distinguishes superficially inconsistent outcomes. 313 Without judicial review, changes in presidential administrations would lead to destabilizing about-faces in administrative governance of foreign investment. 314 Although much is made in the administrative law literature about ossification, 315 the converse - administrative vacillation - can be just as problematic. It is problematic not just for legitimacy reasons but also because uncertainty substantially increases costs to regulated parties. 316 American companies seeking to attract foreign investors and foreign investors seeking business opportunities in the United States already express unease about having to submit to CFIUS review. Prospective investors would have even colder feet and perhaps fewer deals would be pursued, especially in the months leading up to a presidential transition, were foreign-investment regulation more variable and unpredictable. 317 Investigations, mitigation negotiations, and final recommendations [881] that need to go through the Committee's inter-agency deliberative ringer - and thus are not simply a function of presidential predilections 318 - potentially go a long way in minimizing that unease. Further, this deliberative process conveys to participants that the legally and politically unaccountable framework for foreign-investment review is nevertheless rational and rigorous. 319 [882] Though the foreign investors might not on their own be clued in to this and other subtleties, many rely on a relatively small group of experienced lawyers who deal regularly with CFIUS and can counsel their clients accordingly. 320

### 1nc trade adv

#### Trade disputes don’t escalate – solidified international norms

**Ikenson, 12** [March 5th, Daniel, [Daniel Ikenson](http://www.cato.org/people/daniel-ikenson) is director of the Herbert A. Stiefel Center for Trade Policy Studies at the Cato Institute,

<http://www.cato.org/publications/free-trade-bulletin/trade-policy-priority-one-averting-uschina-trade-war>]

An **emerging narrative** in 2012 is that a proliferation of protectionist, treaty-violating, or otherwise illiberal Chinese policies is to blame for worsening U.S.-China relations. China trade experts from across the ideological and political spectra have lent credibility to that story. Business groups that once counseled against U.S. government actions that might be perceived by the Chinese as provocative have changed their tunes. **The term "**trade war**" is no longer taboo**.¶ The media have portrayed the United States as a victim of underhanded Chinese practices, including currency manipulation, dumping, subsidization, intellectual property theft, forced technology transfer, discriminatory "indigenous innovation" policies, export restrictions, industrial espionage, and other ad hoc impediments to U.S. investment and exports. ¶ Indeed, it is beyond doubt that certain Chinese policies have been provocative, discriminatory, protectionist, and, in some cases, violative of the agreed rules of international trade. But there is more to the story than that. U.S. policies, politics, and attitudes have contributed to rising tensions, as have rabble-rousing politicians and a confrontation-thirsty media. If the public's passions are going to be inflamed with talk of a trade war, prudence demands that the war's nature be properly characterized and its causes identified and accurately depicted.¶ Those agitating for tough policy actions should put down their battle bugles and consider that trade wars are never won. Instead, such wars claim victims indiscriminately and leave significant damage in their wake. Even if one concludes that China's list of offenses is collectively more egregious than that of the United States, the most sensible course of action — for the American public (if not campaigning politicians) — is one that avoids mutually destructive actions and finds measures to reduce frictions with China.¶ Nature of the U.S.-China Trade War¶ It should not be surprising that the increasing number of commercial exchanges between entities in the world's largest and second largest economies produce frictions on occasion. But the U.S.-China economic relationship **has** not descended **into an** existential call to arms**.** Rather, both governments have taken protectionist actions that are legally defensible or plausibly justifiable within the rules of global trade. That is not to say that those measures have been advisable or that they would withstand closer legal scrutiny, but to make the distinction that, unlike the free-for-all that erupted in the 1930s, these trade "skirmishes" have been prosecuted in a manner that speaks to a mutual recognition of the primacy of — if not respect for — the rules-based system of trade. And that suggests that the kerfuffle is containable and the recent trend reversible.1

#### And, alt causes outweigh and prove trade is empirically denied

**Zappone, 12** [January, Chris, Sydney Morning Herald, 'Murky protectionism' on the rise - but no trade war, <http://www.smh.com.au/business/world-business/murky-protectionism-on-the-rise--but-no-trade-war-20120110-1pt3t.html>]

At the outset of the global financial crisis, the world’s leaders pledged to resist calls to shield their local economies in order to prevent a trade war that could further damage global growth.¶ Four years on, with China slowing, Europe heading into recession and a political environment soured by successive financial crises, the question arises: how long will policymakers be able to resist those calls for more protectionism?¶ “Free trade is going to be under pressure,” said Lowy Institute international economy program director Mark Thirlwell. “Since 2007-08 the case for moving to greater trade liberalisation has got tougher and the demands for protection have increased.”¶ Only last week, China, which is grappling with a slowdown, raised the prospect of a trade war with the European Union in response to the EU's implementation of a carbon emissions tax on air travel to and from Europe. Earlier last month China imposed tariffs up to 21 per cent on US-made cars, affecting about $US4 billion imports a year.¶ Advertisement ¶ Across the Pacific, US politicians in the throes of an election year with 8.5 per cent unemployment have issued more strident calls for China to “play by the rules” and **allow the yuan to appreciate** faster against the US dollar. The US has also asked the World Trade Organisation to probe China's support for its solar panel industry **and the restrictions** Beijing has placed **on US poultry imports**.¶ In fact, the most recent WTO data shows that the number of trade restrictive measures enacted by members rose 53 per cent to 339 occurrences over the year to October.¶ Yet the WTO admits that the motives behind the spate of actions aren’t always simply to protect local jobs. “Not all measures categorised as trade restrictive may have been adopted with such an intention,” the body said.¶ In Brazil, for example, the steep rise in the value of its currency, the real, has sparked a torrent of car imports into the country - similar to the online-overseas shopping boom in Australia. Brazil has in turn put a one-year provisional 30 per cent increase on auto imports, to counterbalance the effects of their strong currency.¶ In the US, China and Australia, infrastructure spending measures contain “buy local” requirements to stoke domestic growth, not necessary punish foreign businesses. The federal government in September streamlined its anti-dumping system that eases the way for companies to ask for investigations into imported goods that come in below market value to Australia. Again, well within the rules.¶ “What we’ve seen is a gradual ratcheting up of trade intervention,” said Mr Thirlwell, amounting to what he calls “murky protectionism” or government intervention through support for industries or complaints to global trade authorities.¶ To date, observers such as Mr Thirlwell say most countries have remained remarkably resistant to throwing up significant trade barriers.¶ For example, in November, the US, Australia and seven other Asian-Pacific nations including Japan, outlined the plan for an ambitious multilateral Trans-Pacific Partnership trade block worth 40 per cent of the world’s trade, in an effort to increase the flow of cross-border goods and investment. Japan, China and South Korea are also in the later stages of negotiation over a free trade deal between those three nations.¶ Australian National University international trade lecturer John Tang **doesn’t believe the world is on the edge a new round of protectionism**.¶ “I don’t see a general sea change towards protectionism for major trading blocks but that may be because so much of the industrialised world is relying on developing countries to sustain their exports,” he said.¶ Nevertheless, a shift in the political reality of the US, China or elsewhere could change that, he said.¶ Washington DC-based Brookings Institution fellow Joshua Meltzer said that if the euro zone broke up, elevating the crisis to a new stage, nations may switch to much more protective measures.¶ ‘‘I wouldn’t go so far to say the global economy is so integrated that we could never have anything that would approach a trade war,” said Washington DC-based Brookings Institution fellow Joshua Meltzer. “But I don’t think we’re on that track.”

#### Trade does not solve war—there’s no correlation between trade and peace

**MARTIN, MAYER, AND THOENIG 2008 (**Phillipe, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, and Centre for Economic Policy Research; Thierry MAYER, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, CEPII, and Centre for Economic Policy Research, Mathias THOENIG, University of Geneva and Paris School of Economics, The Review of Economic Studies 75)

Does globalization pacify international relations? The “liberal” view in political science argues that increasing trade flows and the spread of free markets and democracy should limit the incentive to use military force in interstate relations. This vision, which can partly be traced back to Kant’s Essay on Perpetual Peace (1795), has been very influential: The main objective of the European trade integration process was to prevent the killing and destruction of the two World Wars from ever happening again.1 Figure 1 suggests2 however, that during the 1870–2001 period, the correlation between trade openness and military conflicts is not a clear cut one. The first era of globalization, at the end of the 19th century, was a period of rising trade openness and multiple military conflicts, culminating with World War I. Then, the interwar period was characterized by a simultaneous collapse of world trade and conflicts. After World War II, world trade increased rapidly, while the number of conflicts decreased (although the risk of a global conflict was obviously high). There is no clear evidence that the 1990s, during which trade flows increased dramatically, was a period of lower prevalence of military conflicts, even taking into account the increase in the number of sovereign states.

#### Doha proves even sudden collapse of free trade will not cause war

The Seattle Times 7-31-2008

Economists disagree on the Doha round's potential benefits; estimates of economic gain that could have been reaped through additional trade range from $4 billion to $100 billion. Set against the rapid expansion of global trade to $13.6 trillion last year from $7.6 trillion five years ago, however, the bottom-line loss from Doha's failure is "not a market issue," said Julian Callow, an economist at Barclays Capital in London. Nor is the world on the edge of the kind of protectionist wave that ended the last period of globalization in the early 20th century and contributed to two world wars, analysts say. Countries are likely to go on negotiating bilateral trade deals with each other, such as the U.S.-South Korea free-trade deal earlier this year.

### 1nc relations adv

#### The plan is a drop in the bucket relative to overall disputes

**Stokes and Hatchigian, 12** [U.S.-China Relations in an Election Year Taking the Long View in a Season of Heated Rhetoric, Jacob, Research Assistant at the Center for a New American Security (CNAS), where his research focuses on U.S. national security and defense policy. His writing has appeared in CNN.com, Politico, BusinessWeek, *The Baltimore Sun*, *The Guardian* and *The American Prospect*, among other publications, Senior Fellow at American Progress.¶ <http://webcache.googleusercontent.com/search?q=cache:QG6048mP53AJ:www.americanprogressaction.org/issues/2012/03/pdf/us_china_relations.pdf+&hl=en&gl=us>]

This report examines the 10 most debated challenges in the U.S.-China relation-¶ ship in the 2012 presidential and congressional campaign season, exploring¶ differences between progressive and conservative approaches to China. We¶ detail these 10 issues in the pages that follow, but briefly, here is a summation of the top challenges and the different approaches advocated by conservatives and¶ taken by progressives.¶ • Ensuring fair trade. The Obama administration’s policy of vigorous enforce-¶ ment and results-oriented dialogue beats conservatives’ refusal to invest in¶ American competitiveness at home; empty, antagonistic rhetoric toward China;¶ and highly inconsistent positions on trade cases. The Obama administration has¶ announced a new trade-enforcement unit and has brought more major trade¶ cases against China than any of its predecessors.¶ • Progress on currency. The Obama administration’s efforts, on its own and with¶ other nations, to pressure China to deal with its undervalued currency have¶ resulted in progress, though more remains to be done. The administration is **keeping the pressure on**. The conservative answer is both needlessly antago-¶ nistic and ineffective.¶ • China owning U.S. debt. China owning just more than 8 percent of our federal¶ debt is not leverage China can use without unacceptably harming its own interests.¶ Conservative hysterics and fearmongering about this complex issue is misplaced.¶ • Chinese direct investment. Chinese investment in our country can be a major¶ source of capital and jobs going forward. We should allow proven national ¶ 4 Center for American Progress Action Fund | U.S.-China Relations in an Election Year¶ security processes to weed out threats to our nation and avoid excessive¶ paranoia around Chinese purchases, lest we miss investment-led growth¶ opportunities. Conservatives should take heed.¶ • Championing human rights. The Obama administration has consistently **called**¶ **China out on human rights**, speaking privately and publicly with Chinese¶ leaders, meeting with the Dalai Lama twice, and giving our diplomats new¶ forums to engage fully with their Chinese counterparts and the Chinese peo-¶ ple to improve human rights and religious freedoms in China. Conservatives’¶ only answer is even more forceful browbeating of Chinese leaders—emotion-¶ ally satisfying, but not an effective tactic to make real change.¶ • America the Pacific power. Under the Obama administration new trade part-¶ nerships, defense arrangements, and serious connections with regional orga-¶ nizations all support deeper U.S. engagement in Asia. Extremist conservative¶ rhetoric claiming the administration is not investing adequately in defense in¶ Asia is nonsense.¶ • Addressing China’s military. China’s military has grown rapidly in recent years,¶ albeit from a very low base. While some technologies are worrisome, the¶ United States retains a huge advantage over China. The Obama administration¶ is responding to China’s military buildup but is not exaggerating the threat, in¶ contrast to conservative efforts to use the “China threat” to justify unsustain-¶ able increases in military spending.¶ • Supporting regional allies. Asian nations continue to turn to America to ensure¶ peace and security. The United States is meeting that need by strengthening rela-¶ tions with our Pacific friends and allies. Relationships with Japan, South Korea,¶ and Australia are rock-solid, and the United States joined with regional players¶ to push back on Chinese belligerence. Conservatives ignore this track record in¶ desperate attempts to tag the Obama administration as abandoning our allies.¶ • A friend to Taiwan. The Obama administration has sold unprecedentedly large¶ packages of arms to Taiwan, including major fighter upgrades, while also upping¶ outreach to the island in ways that will not destabilize cross-Strait relations.¶ Conservatives are left complaining that the current administration, like the Bush¶ administration before it, did not sell Taiwan the most advanced jet fighters.¶ The Obama¶ administration¶ is responding to¶ China’s military¶ buildup but is¶ not exaggerating¶ the threat, in¶ contrast to¶ conservative efforts¶ to use the “China¶ threat” to justify¶ unsustainable¶ increases in military¶ spending.¶ 5 Center for American Progress Action Fund | U.S.-China Relations in an Election Year¶ • Tackling cybersecurity. From the start the Obama administration has identi-¶ fied cybersecurity as an issue of grave concern and mounted a comprehensive¶ response. Conservatives who condemn the administration’s response do not¶ understand its scope; they also offer little in the way of new ideas for combat-¶ ing the threat.¶ In the pages that follow, we will present in more detail these 10 challenges along-¶ side the response of the Obama administration and the misplaced criticisms and¶ hostile rhetoric of many conservatives.

#### Cooperation is ineffective – internal constraints block common action

**Xinbo, 12** [Wu Xinbo is Professor at the Center for American Studies, Fudan University, Forging Sino–US Partnership in the Twenty-First Century: opportunities and challenges, Journal of Contemporary China, p. UM libraries, preview available at <http://www.tandfonline.com/doi/abs/10.1080/10670564.2011.647429#preview>]

Whether China and the US can forge a genuine partnership depends on their capability to overcome bilateral differences and expand their cooperation in areas of common interests, while the latter will be even more essential given the fact that the Sino–US relationship is still growing. However, **common interests do not necessarily guarantee common actions.** In fact, efforts to forge a Sino–US partnership are confronted with a **series of challenges** arising from both sides.¶ On the US side, one problem lies in the lack of experience in working with a rising power like China. Since moving to the center of the world stage following World War II, the United States has accumulated experience in dealing with rising powers like the Soviet Union, Japan and Germany. While the containment strategy proved successful in coping with Soviet expansion during the Cold War, the alliance strategy worked well to secure Japanese and German acceptance of US leadership when both countries reemerged as major economic powers in the 1960s. China, however, is different from those rising countries. Unlike the Soviet Union, it is not pursuing an antagonistic relationship with the US, nor is it, like Japan and Germany, following US leadership in international affairs as a small brother. For Washington, Beijing is neither a complete enemy nor a sheer friend. Both competitive and cooperative dimensions exist in Sino–US relations. The competitive factors may not lead to strategic confrontation if well managed, yet confrontation may happen if not well managed. Meanwhile, the cooperative factors may not automatically lead to cooperation, as it requires such serious efforts as hard bargaining, skillful trade-offs and the demonstration of a spirit of respect and equality. Given its cultural and historical background, the United States lacks such sophistication to deal with a country like China. Although the US has learned a lot since the mid-1990s about how to deal with a rising China, it still has a long way to go to enrich experiences, improve skills and adjust mentality.¶ Another outstanding challenge originating on the US side **is the** constraint of its domestic politics. While US democracy may arguably provide a good example for internal good governance, its foreign policy lacks continuity and credibility due to political cycles coming out of election politics and the interplay of interest group politics.[28](http://www.tandfonline.com.proxy.library.emory.edu/doi/full/10.1080/10670564.2011.647429#FN0028) China policy in particular has fallen victim to internal politics from time to time. While Chinese leaders always emphasize the need to adopt strategic and long-term perspective on bilateral relations, US leaders, driven by political cycles, invariably pay more attention to tactical and short-term gains in interactions with China. It is true that China's domestic politics also increasingly works to affect its handling of relations with the US, but such impact is largely manageable and has caused much less volatility than US domestic politics does to bilateral ties. It is the volatility in US China policy that frustrates Chinese efforts and desires to secure a steady development of relations with the US. It also undermines endeavors to build mutual trust between the leaderships in both countries. ¶ On the Chinese side, a series of political, economic and security factors constrain its capability to extend the cooperation that the US expects. Politically, China appears more sympathetic with some authoritarian regimes that the US may find less tolerable, and Beijing may resist Washington's efforts to exert pressure on them through the United Nations. As a result, China is often accused of protecting those ‘rogue’ or ‘repressive’ regimes. Economically, although China now ranks as the second largest world economy, it is still a developing country in terms of per capital GDP and overall level of social–economic development, hence China refuses to shoulder international responsibilities that it views beyond its capacity, and the US may perceive China as unwilling to live up to its major power status. On the security front, given the differences in respective geopolitical interests between China and the US in the Asia–Pacific, Beijing's approach to some regional issues, such as the Korean peninsula issue, differs from that of the US. Such differences highlight bilateral competition rather than cooperation in the region.¶ Mutual trust holds the key to partnership-building. However, **the lack of mutual trust is an outstanding feature of current Sino–US relations**. This should be attributed not only to the real differences in respective national interests, but also to misperceptions that each possesses toward the other. A primary US misperception is that China aspires to undermine its position in the Asia–Pacific. China, on the other hand, always suspects that the US intends to contain it. Both sides are aware of the other's major concerns and try to assure each other. For instance, in both joint statements of 2009 and 2011, the United States reiterated that ‘it welcomes a strong, prosperous, and successful China that plays a greater role in world affairs’, while China suggested that it ‘welcomes the United States as an Asia–Pacific nation that contributes to peace, stability and prosperity in the region’. In spite of these assurances, however, those misperceptions remain strong, and both sides continue to try to find supporting evidence from the other's words and deeds.¶ Finally, some conceptual gaps between two countries also complicate their efforts to forge partnership in world affairs. What is China's international identity and responsibility? How to deal with the issue of sovereignty in the era of globalization and information? How strictly should the principle of non-interference in a sovereign country's internal affairs be abided by? How should foreign aid be best provided? What should a preferred international order looks like? And so on. Such differences will affect both the objectives the two countries seek to advance and the means they employ.

#### Cooperation is hindered by domestic politics and shifting blame

**Czarnezki**, **11** [Jason J. Professor of Law in the Environmental Law Center and Faculty Director of the U.S.-China¶ Partnership for Environmental Law at Vermont

Law School; A.B., J.D, “CLIMATE POLICY &¶ U.S.-CHINA RELATIONs”, Published After April 4th 2011. <http://www.vermontlaw.edu/Documents/Jason%20Czarnezki%20Climate%20Policy%20and%20China.pdf>]

Both the United States and China are **hindered by the reality of domestic politics and their ability to blame the other for lack of progress**. Professor¶ Cinnamon Carlarne, increasing future political pressure, described the 2010¶ Cancun Climate Change Conference as “a determinative point for both a 2¶ degree world and the continuing validity of the UNFCCC process,”44 but¶ COP-16 in Cancun has come and gone with little fanfare. The Cancun¶ process avoided the high-stakes drama of Copenhagen, successfully set up a¶ fund for adaptation measures in poor countries, created a mechanism for¶ technology transfer, approved a deal to protect tropical forests, and ensured¶ adherence to the goals put forward in the Copenhagen Accord.45 IV. DOMESTIC POLITICS¶ The United States and Chinese governments have **significant domestic**¶ **political pressures that limit their** ability **and** desire to come to a progressive¶ international agreement on climate change, and these pressures create the¶ type of chaos and self-interested behavior seen at Copenhagen.¶ China does not want to limit its amazing and historic economic growth¶ and development. The domestic justifications are sound and¶ understandable. Economic prosperity defines global power, many Chinese¶ still need to be brought out of poverty, and economic success provides the¶ necessary stability for the ruling Communist party to stay in power. As a¶ result, China is happy to become far more energy efficient, but will make¶ no emissions limitations promises that have the potential to limit overall¶ economic growth.¶ To this end, China has developed “carbon intensity” targets in an effort¶ to slow its greenhouse gas emissions and become more energy efficient.¶ China proposes to reduce carbon intensity—the amount of CO2 emitted per¶ unit of economic output—by forty to forty-five percent, compared with¶ 43. Agence France-Presse, China and U.S. Blame Each Other as Climate Talks Conclude,¶ PORTFOLI (Oct. 9, 2010, 7:39PM), http://portfo.li/o/255346-china-and-u-s-blame-each-other-as-climatetalks-¶ conclude.¶ 44. Carlarne, supra note 37, at 149.¶ 45. John M. Broder, Climate Talks End with Modest Deal on Emissions, N.Y. TIMES, Dec. 11,¶ 2010, http://www.nytimes.com/2010/12/12/science/earth/12climate.html.¶ 670 VERMONT JOURNAL OF ENVIRONMENTAL LAW [Vol. 12¶ 2005.46 Unfortunately, under this plan, even though the rate of emissions¶ will slow, overall emissions will continue to rise. This will eventually rub¶ up against “The China Problem”—that even if other countries reduce¶ emissions to zero, China’s growth and emissions alone, despite improving¶ energy intensity, have the potential to push global temperature above the¶ two degree Celsius threshold goal, and potentially further.47¶ Similar to China, the United States has domestic political and economic¶ considerations that have created roadblocks for international climate¶ agreements and domestic initiatives. These roadblocks include concerns¶ about limiting economic growth, a culture and infrastructure that support¶ high levels of driving and energy consumption, strong lobbying by energy¶ and automobile industries against greenhouse gas regulation, dismissal of¶ climate science, and anti-internationalism among both politicians and¶ citizens. As a result, the U.S. government has not enacted a single law¶ explicitly requiring any public or private entity to mitigate its greenhouse¶ gas impact on the global climate.¶

#### Assertive US stances don’t kill relations – clarity outweighs

**Cooke, 11** [ Clean Energy: U.S.-China Cooperation and Competition ¶ By Merritt T. (Terry) Cooke ¶ Terry Cooke is owner and principal of www.terrycooke.com, a corporate seminar/scenario firm and GC3 Strategy, an international advisory/consultancy business and is a Senior Fellow at FPRI. He is the author of the forthcoming monograph Sustaining U.S.-China Cooperation in Clean Energy. He also writes the U.S.-China Clean Energy blog at www.mterrycooke.wordpress.com, <http://www.fpri.org/pubs/Obama-Hu.Summit2011.cooke.pdf>]

The U.S.’s tougher tone in the traditional politics of bilateral relations and in the new politics of economic statecraft has not tripped up U.S.-China cooperation in clean energy or triggered a combative competitive response from China. If anything, it seems to have given China’s leaders a clearer sense of a more assertive and comprehensible American president. China now seems to see Obama as playing an established and recognizable “American tune” on the global stage. During his January state visit to Washington, Hu took pains to show the “smiling face” of Chinese “peaceful rise” diplomacy, replacing the “angry face” that had been on view after the Nobel Peace Prize award to Liu Xiaobo and a series of incidents in the South and East China Seas. Hu also skillfully brandished “China, Inc.’s” checkbook, presiding over more than US $45 billion of commercial deals during his visit with one-quarter of that amount going to clean energy deals with major U.S. firms.4 In negotiations during the state visit, China also appears to have ceded ground in the highly-charged dispute over China’s “indigenous innovation” policy in government technology procurement (which U.S. critics saw as disadvantaging U.S. providers or pressuring them to transfer intellectual property rights to Chinese firms).

This approach by China—a purring voice in response to twin U.S. growls— is understandable. The Chinese leadership, over many decades, has come to expect, and tends to respect, clear and principled postures of strength and clear assertions of legitimate interests from the United States. Chinese state-owned companies know that they cannot hope to become world-class if they do not acquire global market experience and global management skills. Access to U.S. markets provides an indispensable proving-ground. Chinese state-owned and private manufacturers depend on sales to U.S. markets in key areas, including, in the clean energy sector, photovoltaic solar products. They need U.S. markets to grow while they wait for a domestic market to be developed. Public attitudes in China are deeply confused by all the talk they hear of from U.S. sources about “Sputnik moments” and about the United States losing the innovation race to the Chinese. To their minds, innovation is in the U.S. market’s DNA and is the most notable feature missing from the Chinese market. The notion that Chinese innovation is an existential “Sputnik”-like threat to the United States, thus, does not describe for Chinese observers a recognizable reality. That may make it all the more alarming and effective as a rallying cry for U.S. action taking a tougher line against, and seeking to out compete, China in clean energy and other innovation-intensive sectors.

**Relations will not collapse. We promise**

**Rosecrance and Qingguo 2010** – \*political science professor at Cal and senior fellow at Harvard’s Belfer Center for Science and International Affairs, former director of the Burkle Center for International Relations at UCLA, \*\*PhD from Cornell, Professor and Associate Dean of the School of International Studies of Peking University (Jia Qingguo and Richard Rosecrance, Global Asia, 4.4, “Delicately Poised: Are China and the US Heading for Conflict?”, <http://www.globalasia.org/l.php?c=e251>, WEA)  
Sustained Cooperation?   
The fact that the rise of China is unlikely to lead to armed conflict with the US does not necessarily mean that the two countries can achieve a wholly cooperative relationship in the long term. For that to happen, the two need to have shared interests, aspirations, and mutually acceptable approaches to promoting their national goals. It appears that these conditions are increasingly becoming a reality.   
To begin with, after years of interaction, China and the US have developed a shared stake in cooperation. Their relationship has deepened to the point where their economic futures have become closely interlinked. Western demand, principally from the US, sustains a whole range of Chinese industries. Chinese investments support America’s deficit financing, with China holding more than $1 trillion of US government debt. The US, meanwhile, contributes greatly to China’s foreign trade surplus. If America stopped buying Chinese goods, it would put a serious crimp in Chinese economic growth. Chinese sovereign wealth funds are also moving into the US financial market to rebalance the amount of foreign direct investment on each side.   
The Emergence of Shared Values   
Chinese-American ties now range well beyond economics. As major beneficiaries of existing international arrangements, both China and the US have an important stake in many areas, including defending a free trade system, maintaining international peace and stability, opposing proliferation of weapons of mass destruction, fighting terrorism, ensuring secure energy supplies and reversing global warming. In addition, as a result of changes within China, the two countries increasingly find themselves sharing similar aspirations in the world. Among other things, China has replaced its centrally-planned economy with a market-oriented one. It has attached increasing importance to the rule of law. It has publicly advocated protection of human rights and has adopted many measures to improve its human rights situation. It has also tried to introduce democratic reforms such as nationwide village-level elections and measures to broaden participation in the selection of leaders at various levels of the Chinese government and in the policy making process. Recently, Chinese Premier Wen Jiabao said that China wants democracy and will make more efforts in this regard. These and other changes on the part of China have narrowed the value differences between the two countries and provided an expanding political basis for China-US cooperation.   
Finally, leaders of the two countries have learned how to cooperate after years of interaction. With the scope and depth of contacts increasing, China and the US find themselves with greater understanding and appreciation of each other’s legitimate interests and political sensitivities than ever before. Policy makers in the two countries not only know each other as counterparts, but also increasingly as personal friends. Many become acquainted long before they become important in their respective policy making institutions. Previous misunderstandings at the policy level are no longer serious. This has made miscalculation between the two countries less likely and facilitated cooperation. 

### 1nc economy adv

#### Hegemony is unnecessary and doesn’t solve anything

Preble 10 - director of foreign policy studies at the Cato Institute, taught history at St. Cloud State University and Temple University, was a commissioned officer in the U.S. Navy, Ph.D. in history from Temple University (Christopher, 8/13, “U.S. Military Power: Preeminence for What Purpose?”) <http://www.cato-at-liberty.org/u-s-military-power-preeminence-for-what-purpose/>)

Most in Washington still embraces the notion that America is, and forever will be, the world’s indispensable nation. Some scholars, however, questioned the logic of hegemonic stability theory from the very beginning. A number continue to do so today. They advance arguments diametrically at odds with the primacist consensus. Trade routes need not be policed by a single dominant power; the international economy is complex and resilient. Supply disruptions are likely to be temporary, and the costs of mitigating their effects should be borne by those who stand to lose — or gain — the most. Islamic extremists are scary, but hardly comparable to the threat posed by a globe-straddling Soviet Union armed with thousands of nuclear weapons. It is frankly absurd that we spend more today to fight Osama bin Laden and his tiny band of murderous thugs than we spent to face down Joseph Stalin and Chairman Mao. Many factors have contributed to the dramatic decline in the number of wars between nation-states; it is unrealistic to expect that a new spasm of global conflict would erupt if the United States were to modestly refocus its efforts, draw down its military power, and call on other countries to play a larger role in their own defense, and in the security of their respective regions. But while there are credible alternatives to the United States serving in its current dual role as world policeman / armed social worker, the foreign policy establishment in Washington has no interest in exploring them. The people here have grown accustomed to living at the center of the earth, and indeed, of the universe. The tangible benefits of all this military spending flow disproportionately to this tiny corner of the United States while the schlubs in fly-over country pick up the tab. In short, we shouldn’t have expected that a group of Washington insiders would seek to overturn the judgments of another group of Washington insiders. A genuinely independent assessment of U.S. military spending, and of the strategy the military is designed to implement, must come from other quarters.

#### There are no threats – regional actors can prevent war

Bandow, 11 – senior fellow at the Cato Institute. A former special assistant to Ronald Reagan, he is the author of Foreign Follies: America's New Global Empire (Xulon) [1-31-2011, Doug Bandow, “Solving the Debt Crisis: A Military Budget for a Republic”, January 31st, <http://www.cato.org/pub_display.php?pub_id=12746>]

More than two decades after the Cold War dramatically ended, the U.S. maintains a Cold War military. America has a couple score allies, dozens of security commitments, hundreds of overseas bases, and hundreds of thousands of troops overseas. Yet international hegemonic communism has disappeared, the Soviet Union has collapsed, Maoist China has been transformed, and pro-communist Third World dictatorships have been discarded in history's dustbin.

The European Union has a larger economy and population than America does. Japan spent decades with the world's second largest economy. South Korea has 40 times the GDP and twice the population of North Korea. As Colin Powell exclaimed in 1991, "I'm running out of demons. I'm running out of enemies. I'm down to Castro and Kim Il-sung."

Yet America accounts for roughly half of the globe's military outlays. In real terms the U.S. government spends more on the military today than at any time during the Cold War, Korean War, or Vietnam War. It is difficult for even a paranoid to concoct a traditional threat to the American homeland.

Terrorism is no replacement for the threat of nuclear holocaust. Commentator Philip Klein worries about "gutting" the military and argued that military cuts at the end of the Cold War "came back to haunt us when Sept. 11 happened." Yet the reductions, which still left America by far the world's most dominant power, neither allowed the attacks nor prevented Washington from responding with two wars.

And responding with two wars turned out to be a catastrophic mistake. Evil terrorism is a threat, but existential threat it is not. Moreover, the best response is not invasions and occupations — as the U.S. has learned at high cost in both Afghanistan and Iraq. Rather, the most effective tools are improved intelligence, Special Forces, international cooperation, and restrained intervention.

Attempts at nation-building are perhaps even more misguided than subsidizing wealthy industrialized states. America's record isn't pretty. The U.S. wasn't able to anoint its preferred Somali warlord as leader of that fractured nation. Washington's allies in the still unofficial and unstable nation of Kosovo committed grievous crimes against Serb, Roma, and other minorities. Haiti remains a failed state after constant U.S. intervention. The invasion of Iraq unleashed mass violence, destroyed the indigenous Christian community, and empowered Iran; despite elections, a liberal society remains unlikely. After nine years most Afghans dislike and distrust the corrupt government created by the U.S. and sustained only by allied arms.

The last resort of those who want America to do everything everywhere is to claim that the world will collapse into various circles of fiery hell without a ubiquitous and vast U.S. military presence. Yet there is no reason to believe that scores of wars are waiting to break out. And America's prosperous and populous allies are capable of promoting peace and stability in their own regions.

#### Economic decline solves great power war

**Bennett and Stam 2003** – \*Professor of Political Science at the Pennsylvania State University, \*\*Associate Professor in the Government Department at Dartmouth (D. Scott and Allan, University of Michigan Press, “The Behavioral Origins of War”, Chapter 5, http://www.press.umich.edu/pdf/0472098446-ch5.pdf, WEA)

Consistent with Goldstein’s (1988) arguments, we find periods of system-wide economic growth associated with increased risks of disputes escalating to all levels of disputes, including those involving the use of force and **large-scale war**. In table 5.16, we see that across all conflict categories, the increases in risk are generally of similar magnitude, with a 40 to 100 percent increase in the odds of conflict involving force during periods of economic upswing **compared to periods of downswing**. Only the probability of having disputes without the use of any force appears to drop slightly. A somewhat discouraging finding is that the associated increase in risk appears strongest for disputes escalating to war, where the risk of such conflicts appears to be 80 to 100 percent higher than the baseline risk of wan

These results stand in contrast to **debates in the 1980s** and early 1990s over relative versus absolute gains. Regime theorists such as Krasner and Keohane argued that states, when concerned with absolute (as compared to relative) gains, would be less conflict prone. This set off a long-running debate about the nature of states' preferences, which in the end devolved to a discussion of whether there was really any distinction between the two, with the most rigorous theoretical analysis demonstrating that even absolute gains could only be measured in some context, a relative one (Powell 1991). Our results suggest that there is something of a Faustian trade-off between economic gains and the likelihood of war during periods of sustained economic growth through- out the system, periods with absolute gains for all (or most) states, the incidence of war increases and rather dramatically so.

#### Economic collapse is the only way to prevent extinction from climate change

**Cohen 2010** – columnist for the Association for the Study of Peak Oil and Gas and Energy Bulletin (2/2, Dave, Peak Watch, “Economic Growth and Climate Change – No Way Out?”)

\*note: Tim Garrett – associate professor of atmospheric sciences at the University of Utah; Vaclav Smil – Distinguished Professor in the Faculty of Environment at the University of Manitoba

Historical data suggest that only recessions decrease anthropogenic CO2 emissions. Otherwise, **if the global economy is growing, so are emissions**. The consensus view, which I have called The Radical Hypothesis, presumes that at some future inflection point, the global economy will continue to grow while emissions shrink. Since nothing in our experience suggests the Radical Hypothesis is correct, and in so far as knowledgeable people can agree that it will be very hard to achieve the technological breakthroughs required to stabilize CO2 in atmosphere at acceptable levels (e.g. 450 ppmv), the most plausible way to achieve such targets, all else being equal, is a planned, orderly **contraction of the global economy**. Mankind would endeavor to both decarbonize the energy inputs to the economy and decrease those inputs. This implies that the global economy, as modeled by Tim Garrett, would be shrinking.

The mere assumption that technological progress will be sufficient to achieve the desired stabilization of greenhouse gases in the atmosphere does not guarantee success. This assumption, like the future economic growth that depends on it, is incontrovertible only because of the faith placed in it, i.e. it must be accepted without proof or verification. It is all well & good to say with great conviction that "failure is not an option" but in the real world, failure is definitely a possibility, so risks grow. Worse yet, unquestioning faith in the impossibility of failure retards efforts achieve the necessary (but still unrealized) technologies required to reduce emissions, for if technological progress—Pielke, et. al call this "spontaneous" innovation—is guaranteed (i.e. comes "for free"), we need not try very hard to make technological progress happen. What I have called The Assumption of Technological Progress should be tossed out in so far as it is no longer in humanity's best interests to maintain it.

In a "peak oil" scenario, CO2 emissions from conventional oil will remain flat or decrease sometime in the next decade and beyond. In so far as historical experience suggests that anthropogenic emission must be growing if the economy is, this implies a shrinking global economy. Specifically, the lack of a consistent (high & rising) oil price signal, combined with our inability to quickly & seamlessly switch to non-conventional liquids (from coal, the oil sands, etc.) to meet growing future demand, implies that economic growth will be negative or unstable in such a scenario. Thus, business-as-usual (BAU)—the standard growth story assumed by economists, climate researchers and others—will be disrupted for an extended period of time in a "peak oil" scenario. If the global economy will be in recession or prone to recession as conventional oil supplies decrease, emissions will very likely be further reduced during the transition to other liquid fuels sources. Ken Caldeira's counter-intuitive view that "peak oil" is not a climate savior, at least over the next few decades, does not survive close scrutiny. A new UK report from the The New Economics Foundation goes even further in the wrong direction, arguing that "peak oil" makes BAU scenarios worse. Just as Caldeira does, the NEF assumes, but does not closely examine, a painless transition to non-conventional liquids fuels from fossil sources.

In his response to Dangerous Assumptions, the University of Manitoba's Vaclav Smil emphasized that Long-range energy forecasts are no more than fairy tales.

Why argue about plausible rates of future energy-efficiency improvements? We have known for nearly 150 years that, in the long run, efficiency gains translate into higher energy use and hence (unless there is a massive shift to non-carbon energies) into higher CO2 emissions.

The speed of transition from a predominantly fossil-fueled world to conversions of renewable flows is being grossly overestimated: all energy transitions are multi-generational affairs with their complex infrastructural and learning needs. Their progress cannot substantially be accelerated either by wishful thinking or by government ministers’ fiats...

China, the world’s largest emitter of CO2, has no intention of reducing its energy use: from 2000 to 2006 its coal consumption rose by nearly 1.1 billion tonnes and its oil consumption increased by 55%.

Consequently, the rise of atmospheric **CO2** above 450 parts per million **can be prevented only by an unprecedented** (in both severity and duration) **depression** of the global economy, or by voluntarily adopted and strictly observed limits on absolute energy use. The first is highly probable; the second would be a sapient action, but apparently not for this species.

Although I agree in the main with Smil's conclusions, I have argued that his Either-Or proposition yields similar outcomes. If humankind were to voluntarily adopt and strictly observe limits on absolute energy use, the global economy would shrink according to the limits imposed, as implied in Tim Garrett's work. Moreover, Smil's reference to Jevon's Paradox (1st paragraph) also coincides with Tim Garrett's conclusion that greater energy efficiency merely stimulates greater energy consumption supporting more economic growth and higher CO2emissions (unless accompanied by a massive, but at present unrealistic, decarbonization of the energy supply).

For now, and in the "foreseeable" future, putting the breaks on economic growth appears to be the only practical way out of the climate dilemma. Unfortunately, this solution is politically impossible, a circumstance which is reinforced by economists' incontestable, unshakable belief that economic growth will continue in all future emissions (energy) scenarios. This conclusion rests upon the equally incontestable, unshakable Assumption of Technological Progress.

I will end by quoting climate activist George Monbiot. This passage is taken from the introduction to his book Heat. The introduction is called The Failure of Good Intentions.

Two things prompted me to write this book. The first was something that happened in May, 2005, in a lecture hall in London. I had given a talk about climate change, during which I argued that there was little chance of preventing runaway global warming unless greenhouse gases were cut by 80 per cent. The third question stumped me.

"When you get your 80 per cent cut, what will this country look like?"

I hadn't thought about it. Nor could I think of a good reason why I hadn't thought about it. But a few rows from the front sat one of the environmentalists I admire and fear the most, a man called Mayer Hillman. I admire him because he says what he believes to be true and doesn't care about the consequences. I fear him because his life is a mirror in which the rest of us see our hypocrisy.

"That's such an easy question, I'll ask Mayer to answer it."

He stood up. He is 75 but he looks about 50, perhaps because he goes everywhere by bicycle. He is small and thin and fit-looking, and he throws his chest out and holds his arms to his sides when he speaks, as if standing to attention. He was smiling. I could see he was going to say something outrageous.

"A very poor third-world country."

The inescapable conclusion in 2010 is that continued economic growth at near 20th century rates in the 21st century is incompatible with taking positive, effective steps to mitigate anthropogenic climate change. Moreover, such assumptions are not compatible with a near-term peak in the conventional oil supply. Our species faces unprecedented challenges in this new century. Our response to those challenges will define Homo sapiens in ways we never had to come to grips with during the Holocene (roughly the last 10,000 years) or before that in the Pleistocene. The problems we face in this century are unique, even on geological time-scales extending far into the past beyond the 200,000-year-old Human experience on Earth.

Both our limitations and our abilities, such as they are, will be displayed in the bright, harsh light of the energy & climate outcomes in the 21st century. Regardless of who we pretend to be, our response to these challenges will tell us who we really are.

#### Transition leads to sustainable localized communities

**Lewis 2000** – PhD, University of Colorado at Boulder (Chris H, “The Paradox of Global Development and the Necessary Collapse of Global Industrial Civilization” http://www.cross-x.com/archives/LewisParadox.pdf)

With the collapse of global industrial civilization, smaller, autonomous, local and regional civilizations, cultures, and polities will emerge. We can reduce the threat of mass death and genocide that will surely accompany this collapse by encouraging the creation and growth of sustainable, self-sufficient regional polities. John Cobb has already made a case for how this may work in the United States and how it is working in Kerala, India. After the collapse of global industrial civilization, First and Third World peoples won't have the material resources, biological capital, and energy and human resources to re-establish global industrial civilization. Forced by economic necessity to become dependent on local resources and ecosystems for their survival, peoples throughout the world will work to conserve and restore their environments. Those societies that destroy their local environments and economies, as modern people so often do, will themselves face collapse and ruin.

#### Environmental tipping points are real—de-dev is the only way out

**McPherson 2010** – professor emeritus of natural resources and the environment at the University of Arizona, where he taught and conducted research for 20 years. His scholarly efforts have produced nine books and well over 100 articles, and have focused for many years on conservation of biological diversity (12/1, Guy, “The road to nowhere”, <http://transitionvoice.com/2010/12/the-road-to-nowhere/>)

When I wrote about the topic of global climate change in [this space](http://transitionvoice.com/2010/10/a-climate-wake-up-call/) a mere two months ago, the situation was dire.

Each of a series of assessments indicated an increasingly disturbing outcome for global average temperature. The latest of those assessments, based on more data and more sophisticated models than prior efforts, suggest we have **passed tipping points** that may lead to the extinction of our own species, along with many others. A global average increase of two degrees Celsius likely leads to runaway greenhouse. This means destruction of most human habitat on Earth.

About six weeks after my brief review graced [Transition Voice](http://transitionvoice.com/), the situation took a turn for the worse. The International Energy Agency’s [World Energy Outlook](http://www.iea.org/w/bookshop/add.aspx?id=422)was released in early November. It contains a shocking assessment: We’re headed for a global average temperature increase of 3.5 C by 2035. If an increase of two degrees spells runaway greenhouse, you can bet the consequences of a 3.5 degree increase within 25 years is catastrophic.

The upside

On the other hand, I also pointed out unexpectedly good news in my previous essay. Completion of the ongoing **collapse of the** world’s industrial **economy** might prove sufficient to save the planet and us.

Although climate-change assessments fail to incorporate positive geo-physical feedbacks such as the release of [methane hydrates](http://www.ornl.gov/info/reporter/no16/methane.htm) and decreased [albedo](http://www.eoearth.org/article/Albedo?topic=54300), they also leave out the **negative feedback of**  world **economic collapse**. Yet it appears a single path — collapse of the world’s industrial economy — allows us to avoid runaway greenhouse and the associated extinction of Homo Sapiens.

Fortunately for us, we’re inadvertently following that path.

Assuming we transition from economic collapse to economic growth or to a [steady-state economy](http://steadystate.org/), what are the likely outcomes?

If we could wrest control of policy from the corporations who currently run the government, what choices would be wisest?

What are the costs and consequences of choosing to pursue action on the climate-change front?

Two roads diverged

First, let’s consider [two simple outcomes](http://www.bartleby.com/119/1.html) associated with the no-action alternative to which federal and state governments are firmly committed: (1) runaway climate change and (2) no significant change in climate.

If climate change turns out to be as dire as predicted, then pursuing the current no-action path leads to probable extinction of human life on Earth. First, though, we will cause mass human suffering by destroying our ability to grow food. We’ll also continue to cause the extinction of several hundred species daily. But never mind the non-human species we’re driving to extinction. After all, we’ve never expressed serious interest in them in the past. Instead let’s focus on the ability to [produce food](http://transitionvoice.com/2010/11/stop-clowning-around/) for our large and [growing human population](http://www.eoearth.org/article/Human_population_explosion).

Gleaning the truth

Many people assume food-producing regions will change locations as the planet heats up. If we can no longer produce grains in the Midwestern US, these folks believe, we’ll simply move the great American breadbasket further north. This would turn Canada into a food-producing superpower. Unfortunately, however, that’s an unlikely outcome. Canadian soils are no match for the deep, organic-rich soils of the American Midwest. Climate might be favorable for crop production as Canada warms, but grossly inadequate soil isn’t.

If climate chaos turns out to be a false alarm then the path of non action appears to be the correct one. We don’t have to make big economic sacrifices on behalf of an ambiguous future if Earth can tolerate infinite carbon emissions. This tidbit of good news comes with a warning, however. At some point, the thousands of species we’re driving to extinction catches up with us. At some point, wiping out the [pollinators](http://en.wikipedia.org/wiki/Pollinator), decomposers, and direct sources of our food turns out badly. We depend on other species for our own survival in ways we barely understand.

I’ll not make the ethical case for saving non-human species because I don’t know a dozen people in the industrialized world who care about them. But I’ll make a selfish one: we need those species for our own survival.

As with the no-action alternative, simplistically I will address two outcomes associated with the “take-action” side of the climate-change issue.

If we take significant action — which at this point probably entails allowing complete collapse of the world’s industrial economy — and climate change turns out to have been a hoax, then we’ve obviously made a horrible mistake by terminating the dream of never-ending economic growth. We will have destroyed the potential for every high school student in the US to spend a summer in Europe for immersion in another culture (sic). We will have caused economic hardship that will lead to destruction of the social safety net upon which we’ve come to depend. We will have caused people in industrialized countries to forgo fuel at gas stations, food at grocery stores, and water coming out of the municipal taps.

This scenario sounds horrific. But in fact, it’s [nirvāna](http://en.wikipedia.org/wiki/Nirvana).

Pull the plug, save the patient

Only by terminating the world’s industrial economy is there any hope for the thousands of species we drive to extinction every year. Only by terminating the world’s industrial economy is there any hope for the people in non-industrialized countries we oppress to prop up economic growth in the “developed” world. As a consequence, only by terminating the world’s industrial economy is there any hope for the future of our own species to squeeze through the [Sixth Great Extinction](http://www.sourcewatch.org/index.php?title=The_Sixth_Great_Extinction).

The second outcome, if we take action, is the potential for averting runaway greenhouse. Please read the prior paragraph again. All the benefits listed there are realized anew in light of the ongoing and accelerating climate-change apocalypse.

Further, averting climate chaos, if it’s possible at this late date, spares us environmental catastrophe in the near term. Averting climate chaos, if it’s possible at this late date, spares us catastrophic hurricanes, wildfires, floods, dust bowls, famines, epidemics, and climate refugees. Averting climate chaos, if it’s possible at this late date, spares us miserable lives and untimely deaths for the 205,000 new people we add each day to an overshot planet.

Resistance against the imperialism of never-ending economic growth is imperative, and not merely for our privileges. Our very survival as a species hangs in the balance. For those of us young enough to anticipate being alive in 2035, our survival as individuals is at stake.

### 2nc

#### Obama solves US – Sino relations

**Stokes and Hatchigian, 12** [U.S.-China Relations in an Election Year Taking the Long View in a Season of Heated Rhetoric, Jacob, Research Assistant at the Center for a New American Security (CNAS), where his research focuses on U.S. national security and defense policy. His writing has appeared in CNN.com, Politico, BusinessWeek, The Baltimore Sun, The Guardian and The American Prospect, among other publications, Senior Fellow at American Progress.¶ <http://webcache.googleusercontent.com/search?q=cache:QG6048mP53AJ:www.americanprogressaction.org/issues/2012/03/pdf/us_china_relations.pdf+&hl=en&gl=us>]

Conservatives and progressives today approach the challenge of China very differently. Many conservatives, including most of the Republican candidates for¶ the presidential nomination, are critiquing the Obama administration’s policies¶ on China—a tactic designed to chip away at President Barack Obama’s high poll¶ numbers on national security issues and distract from congressional obstruction-¶ ism on key steps to improve our economic competitiveness at home.¶ But they are not offering many sensible ideas. Today’s conservative approaches¶ on China—which too often end up shortsighted, inconsistent, emotional, and¶ belligerent—will fail. Strategies that aim for short-term political point scoring—or, even worse, calculated efforts to create a new Cold War enemy—will¶ undermine global security.¶ In contrast, the Obama administration’s approach is steady, clear-eyed, and¶ focused on results. The administration has pushed back on China multiple¶ times—taking China to task on unfair trade, forming a united front to get China¶ to back down from aggressive actions in the South China Sea, and selling arms to¶ Taiwan over furious protests from Beijing. President Obama’s Asia strategy, which¶ is deepening partnerships and engagement in the region, is designed to ensure that¶ as China grows it contributes to peace and stability and follows the rules of the¶ international system. At the same time the administration does not let differences¶ prevent the United States from working with Beijing on important joint challenges such as North Korea’s nuclear program and clean energy.1¶ This progressive approach offers the best tactic for dealing with China because for¶ the foreseeable future China will be both a rival and a partner. Our policymak-¶ ers have to play the long game, ensuring our strategies for China make sense not¶ just during campaign seasons but for this year, this decade, and beyond. Fostering¶ successful policies toward China requires a steady hand and a concerted effort to¶ refrain from overheated tirades and knee-jerk responses.

#### Romney will label China a currency manipulator – causes trade wars

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: In regards to presidential elections, how do you think energy will fare under Obama and under Romney? Which sectors will benefit, and which will suffer? Mish: Mitt Romney has declared that if he’s elected he is going to label China a currency manipulator and increase tariffs on China across the board. That's something that I believe he might be able to do by mandate. If he's elected and he does follow through, I think the result will be a global trade war the likes of which we have not seen since the infamous Smoot-Hawley Tariff Act compounded problems during the Great Depression. Simply put, I think that global trade will collapse if Romney wins and he follows through on his campaign promises.

#### Romney win would collapse the economy

Robert Reich 8-20-2012; Chancellor’s Professor of Public Policy at the Goldman School of Public Policy at the University of California at Berkeley. The Ryan-Romney Economic Plan Would Be A Disaster For America http://www.businessinsider.com/the-five-reasons-why-the-ryan-romney-economic-plan-would-be-a-2012-8

Mitt Romney hasn’t provided details so we should be grateful he’s selected as vice president a man with a detailed plan Romney says is “marvelous,” “bold and exciting,” “excellent,” “much needed,” and “consistent with” what he’s put out. So let’s look at the five basic features of this “marvelous” Ryan plan. FIRST: It would boost unemployment because it slashes public spending next year and the year after, when the economy is still likely to need a boost, not a fiscal drag. It would be the same austerity trap now throwing Europe into recession. According to the Economic Policy Institute, Ryan’s plan would mean 1.3 million fewer jobs next year than otherwise, and 2.8 million fewer the year after. SECOND: Ryan would take from lower-income Americans and give to the rich – who already have the biggest share of America’s total income and wealth in almost a century. His plan would raise taxes on families earning between 30 and 40 thousand dollars by almost $500 a year, and slash programs like Medicare, food stamps, and children’s health What would Ryan do with these savings? Reduce taxes on millionaires by an average of over $500,000 a year. THIRD: Ryan wants to turn Medicare into vouchers that won’t keep up with the rising costs of health care – thereby shifting the burden onto seniors. By contrast, Obama’s Affordable Care Act saves money on Medicare by reducing payments to medical providers like hospitals and drug companies. FOURTH: He wants to add money to defense while cutting spending on education, infrastructure, and basic research and development. America already spends more on defense than the next five biggest military spenders put together. Our future productivity depends on the public investments Ryan wants to cut. FIFTH: And finally, Ryan’s budget doesn’t even reduce the federal budget deficit – not for decades. Remember: He’s adding to military spending, giving huge additional tax cuts to the very rich, and stifling economic growth by cutting spending too early. The Center for Budget and Policy Priorities estimates Ryan’s Roadmap would push public debt to over 175 percent of GDP by 2050. So there you have it. The Ryan – Ryan-ROMNEY – economic plan. And the five reasons why it would be a disaster for America.

#### --Most recent polls in swing states and he’s leading among independents

**Schulters, 9/21**/12 – reporter at Politico (Emily, “Purple Poll: Obama gains momentum in swing states” Politco,

<http://www.politico.com/blogs/burns-haberman/2012/09/purple-poll-obama-gains-momentum-in-swing-states-136287.html?hp=r9>

From the latest Purple Poll numbers out today, President Obama gets his biggest swing-state lead so far this cycle -- as well as a lead among independents:

In our last poll, conducted in August immediately following the Paul Ryan announcement, Romney had a narrow 1-point lead over Obama in the race (47% to 46%). Today, Obama holds a 5-point lead across the 12 Purple States (49% to 44%), which is the largest lead either candidate has held since the PurplePoll began one year ago. ...

...While it is difficult to tease out the direct effects of each of these individual events, one important change is clear: President Obama now leads among independents across Purple states. Today, he holds a 5-point margin (48% to 43%). This is the first time he has held a lead among independents across Purple States in 7 months.

The poll shows a mixed picture in individual swing-state numbers: Obama leads in Colorado (by 3), North Carolina (by 2), Ohio (by 4) and Virginia (by 3), while Romney leads in Arizona (by 3) and Florida (by 1). Those numbers are fairly consistent with the trends we've seen in other polls lately -- Obama is picking up several-point leads in states like Ohio and Virginia, while Florida remains close. It's also one of the first times recently that we've seen a lead for Obama in North Carolina, which has generally run very close or given Romney a slight lead.

#### Obama leads in every poll since the convention in every swing state

**Silver, 9/21**/12 – statistician, editor of the NYT Fivethirtyeight blog (Nate, “Obama’s Convention Bounce May Not Be Receding” <http://fivethirtyeight.blogs.nytimes.com/2012/09/21/sept-20-obamas-convention-bounce-may-not-be-receding/>)

President Obama’s position inched forward in the FiveThirtyEight forecast on Thursday. His chances of winning the Electoral College are 76.1 percent, according to the forecast, up from 75.2 percent on Wednesday. Mr. Obama’s projected margin of victory in the national popular vote also increased slightly, to 3.4 percentage points.

By and large, the story that Thursday’s polls told was the same one as on Wednesday. Mr. Obama continues to get very strong results in state polls that use industry-standard methodology, meaning that they use live interviews and place calls to mobile phones along with landlines.

**In the 10 states** that have generally been ranked the **highest on our tipping-point list** — Ohio, Virginia, Florida, Wisconsin, Colorado, Nevada, Iowa, Pennsylvania, New Hampshire and Michigan — **there have been 21 such polls since the** Democratic **convention** ended. Mr. **Obama has led in all 21** of these surveys — and usually **by clear margins**. On average, he has held a six-point lead in these surveys, and he has had close to 50 percent of the vote in them.

#### And even accounting for worst-case estimates of polling bias, Obama has a 76% chance of winning – taking polls at face value gives him a 95% chance

**Silver, 9/21**/12 – statistician, editor of the NYT Fivethirtyeight blog (Nate, “Presidential Race Changes, but Swing States Stay the Same” <http://fivethirtyeight.blogs.nytimes.com/2012/09/21/sept-21-presidential-race-changes-but-swing-states-stay-the-same/#more-34851>)

Mr. Obama’s chances of winning the presidential election are listed at 76.9 percent by the forecast model, an incremental improvement from 76.1 percent on Thursday.

The trend over the last three days is clearer: Mr. Obama’s forecast is up from a 72.9 percent chance of winning the Electoral College on Tuesday. However, he remains off his highest point in the forecast early last week, when he topped out at 80.8 percent.

Emblematic of Mr. Obama’s good-but-not-great polling day were a set of polls from the firm Purple Strategies, which had him ahead in four of the five swing states: Ohio, Virginia, Colorado and North Carolina. However, Mr. Obama still trailed Mr. Romney by one point in Florida, according to the poll.

Purple Strategies had polled all of these states but North Carolina previously, and Mr. Obama’s standing improved on average by three percentage points from the polls they conducted in August.

This is consistent with the post-convention bounce that we’ve seen for Mr. Obama on the whole. The FiveThirtyEight “now-cast” estimates that if an election were held today, Mr. **Obama would have a 95 percent chance of winning** it. Additionally, he is projected to win the national popular vote by almost five points – up from about two points before the conventions. The three-point gain is the same as in the average Purple Strategies poll.

Our Nov. 6 forecast continues to be more conservative, however, as we still need to account for the possibility that Mr. Obama’s numbers are inflated by the aftereffects of his party’s convention. By this time next week, it will be safer to conclude that Mr. Obama’s gains are permanent, and the forecast will move toward Mr. Obama if Mr. Romney does not make some tangible improvement.

#### No impact—unemployment helps incumbent Dems

**McManus, 9/22/12** (Doyle, “What the presidential polls show” Los Angeles Times, <http://www.latimes.com/news/opinion/commentary/la-oe-mcmanus-poll-election-swing-voters-20120923,0,6224480.column>)

One other intriguing factor may be helping Obama: When unemployment is high, Democratic candidates often do better, even when they are the incumbents. That's the finding of John R. Wright, a political scientist at Ohio State University who studied two decades of election data and determined that voters generally trust Democrats more when the top issue is jobs. "Democrats benefit from unemployment even when they are in control," Wright wrote.

#### Obama will win despite the economy – latest polling

**Brownstein, 9/21/12** - a two-time finalist for the Pulitzer Prize for his coverage of presidential campaigns, is National Journal Group's Editorial Director, in charge of long-term editorial strategy.(Ronald, National Journal, “Heartland Monitor Poll: Obama Leads 50 Percent to 43 Percent” <http://www.nationaljournal.com/2012-presidential-campaign/heartland-monitor-poll-obama-leads-50-percent-to-43-percent-20120921?page=1>)

The survey also shows why it may be difficult for Republicans to center the election on the famous Ronald Reagan question to voters that the party highlighted at its national convention last month: Are you better off than you were four years ago?

That question divides likely voters almost exactly in thirds: in the poll, 31 percent say they are better off than four years ago, while 34 percent say they are worse off and 34 percent say they are about the same. Romney, predictably, wins more than four-fifths of voters who say they are worse off; the president, equally unsurprisingly, attracts almost nine in 10 of those who consider themselves better off.

Crucially, though, Obama holds a commanding 57 percent to 34 percent advantage among those who say their finances are unchanged. One reason for that critical tilt in his direction: Voters who say their finances are unchanged also say, by a resounding 53 percent to 33 percent margin, that they believe the country has been better off over these past four years because Obama, rather than another candidate, won in 2008.

Overall, 48 percent say they believe the country is better off because Obama won in 2008, while 41 percent say the nation would be in a stronger position today if another candidate had won.

In a related finding, 47 percent of likely voters said they believed Obama’s economic policies helped “avoid an even worse economic crisis and are laying the foundation for our eventual economic recovery.” By contrast, 45 percent said that his agenda has “run up a record federal deficit while failing to end the recession or slow the record pace of job losses.” That’s hardly a ringing endorsement and well within the survey’s margin of error — but it represents only the second time since the Heartland Monitor began asking that question in September 2009 that a plurality has attributed positive effects to Obama’s agenda.

Taken together, all of these small movements toward Obama have produced, at least for now, a tangible advantage for the president over Romney as the race hurtles toward its final weeks.

#### The aff obliterates the Obama campaign

**Hadar 2012** ( Leon Hadar, Business Times Singapore “China Bashing par for the course in heat of US elections”, March 2012)

He made it clear that he saw the issue as integral to his election-campaign narrative of rebuilding the American manufacturing base and strengthening US global economic competitiveness vis-a-vis China and other leading economic powers. The **perception that unfair trade practices by the Chinese** were responsible for their success in getting American manufacturers to move their operations to China and in having the upper hand in trade competition with the US is shared by many Americans and has been exploited by the leading Republican presidential contenders. Hence, former Massachusetts governor Mitt Romney has engaged in China-bashing during the election campaign, accusing Mr [Obama](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15586470953&returnToId=20_T15586471920&csi=11432&A=0.055485772867036376&sourceCSI=9369&indexTerm=%23PE000A0BO%23&searchTerm=Obama%20&indexType=P) of failing to stand up to China in the global economic arena and pledging that, if elected as president, he would retaliate against Chinese trade practices by imposing economic sanctions against Beijing. At the same time, both Republican and Democratic lawmakers have urged the White House to take punitive action against China in response to Beijing's continuing effort to undervalue the yuan to improve the ability of Chinese exporters to out-compete American manufacturers. In fact, the notion that China was posing a threat to US economic interests is also very popular among members of the trade unions, a powerful political force in the Democratic Party as well as among blue-collar workers. The unemployment rate remains very high among blue-collar workers, who tend to be concentrated in critical electoral 'swing' states such as Ohio and Pennsylvania. The recent New York Times/CBS News opinion poll suggests that the support for Mr [Obama](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15586470953&returnToId=20_T15586471920&csi=11432&A=0.055485772867036376&sourceCSI=9369&indexTerm=%23PE000A0BO%23&searchTerm=Obama%20&indexType=P) among these voters has slipped to an all-time low, and could continue to fall as oil prices continue to rise. The results of the same poll also point to rising dissatisfaction among all voters with his management of the economy. During his State of the Union Address in January, he announced the formation of a new trade task force that would investigate China's trade practices while calling on the Chinese to remove market restrictions to American exporters and respect international business standards. He reiterated these positions during his meetings with Chinese Vice-President Xi Jinping last month. Demonstrating that he would continue to protect the interests of American business and workers by standing firm vis-a-vis China makes a lot of political sense for Mr [Obama.](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/search/XMLCrossLinkSearch.do?bct=A&risb=21_T15586470953&returnToId=20_T15586471920&csi=11432&A=0.055485772867036376&sourceCSI=9369&indexTerm=%23PE000A0BO%23&searchTerm=Obama.%20&indexType=P) So does Chinese politicians' resistance to this American pressure in a year when the Chinese Communist Party chooses its new leadership.

#### Tough on China through CFIUS is a key election issue

**Barron, 12** -Mint Press's New York Correspondent. She has worked for leading news organizations, including Time, Inc., CNN, CNBC and CBS News, in Europe, Asia, Africa, South America and the Middle East as well as in the United States (Lisa, “Republicans, Democrats Come Together To Oppose Chinese Oil Deal” Mint Press News, 7/30, http://www.mintpress.net/chinese-oil-deal-becoming-political-football-in-u-s/)

2012 elections

CFIUS lawyers have said they believe the deal will not face regulatory obstacles, but it’s not clear whether the transaction could become a political issue in a tight election year.

One of the main driving forces behind the company’s problem with Unocal in 2005 was the fact that it was competing against Chevron, a U.S. oil major with strong allegiances on Capitol Hill.

CNOOC does not have a U.S. rival in the Nexen deal. And in May, it hired Hill & Knowlton Strategies to lobby Congress on issues relating to the environment and natural gas.

It is clearly going to remain a divisive issue. Both sides may want to seize the opportunity to look tough on China, but foreign investment overall helps the economy and investment in the oil and gas sector in particular helps the U.S. become less dependent on oil from overseas.

#### The link turns case—public uproar about the aff would disrupt FDI

**Merrill, 11** - \* B.A. Tufts University; J.D. Columbia Law School (Margaret, “Overcoming CFIUS Jitters: A Practical Guide for Understanding the Committee on Foreign Investment in the United States”, 30 Quinnipiac L. Rev. 1, lexis)

The second measure relates to the public's perception of the proposed covered transaction. Considering the highly politicized nature of the CFIUS process, creating a positive public image is crucial for any deal. As discussed above, the negative publicity surrounding past FDI misfires has often played a key role in a transaction's collapse. Time and time again, generating negative media coverage in regards to potential FDI transactions has been a potent tool for private interests looking to gain from the transaction's undoing. This type of maneuvering, however, can also be employed by those who would like to see the transaction consummated. Given the prominent and widespread trepidation over the future strength of economic stability in this country, FDI transactions are likely to be viewed more favorably than they have been in a long time. n232 Proactively reaching out to suitable media outlets with information regarding the benefits of any proposed FDI transaction allows the foreign investor to shape the conversation rather than being on the defensive. The resulting public support for the transaction will make it that much more resistant to political attack.

#### The public would think we are letting China steal our firms

**Drezner, 8** – associate professor of international politics at The Fletcher School, Tufts University (Daniel, The American (Washington, DC), 5/1, “The sovereigns are coming!”, lexis

Over the past 30 years, the United States has experienced periodic waves of investor protectionism. In the 1980s, the specter of Japan Inc. gobbling up prestigious pieces of property led to such absurdities as members of Congress holding a press conference to bash Toshiba products. In 2006, public hysteria helped to block United Arab Emirates-owned DP World's acquisition of six port facilities in the United States. Congressional resistance thwarted China National Offshore OilCorporation's attempt to acquire Unocal. Public opinion polling shows unremitting hostility among a majority of Americans toward the prospect of foreign "ownership" of American firms (they're more receptive to "investment"). SWFs exacerbate these suspicions. If Americans reacted negatively to faceless Japanese salarymen, imagine the reaction when the foreign purchasers are Arab governments or the Chinese Communist Party.

#### This is a campaign focal point and determines swing states

Hill, 9/10/12 (Steven writer for China Daily, “outcome of election unclear”, http://www.chinadaily.com.cn/opinion/2012-09/10/content\_15746131.htm)

China bashing will still be the card candidates of both parties play to win over voters in swing states for final victory

The US presidential race is heating up as President Barack Obama and his Republican rival Mitt Romney hurtle toward their date with destiny on Nov 6, 2012. This election will decide many crucial issues such as the economic policy and social safety net in, and even the foreign policy of, the United States.

At times, China has been a focal point in the presidential campaign. With China also going through a leadership change this fall, the US election could set the tone for US-China relations for years to come.

#### Soft on China stance will shift Ohio to Romney

**Chang, 9/2**/12 – contributor to Forbes, writes primarily on China, Asia, and nuclear proliferation (Gordon, “China Could Deliver Ohio to Romney,” Forbes, <http://www.forbes.com/sites/gordonchang/2012/09/02/china-could-deliver-ohio-to-romney/>)

Enter Peter Navarro. Last month, the famed University of California economist released his highly controversial documentary, Death by China, which makes the case that currency manipulation is one of Beijing’s “weapons of job destruction.”

AFL-CIO President Richard Trumka, filmed with the White House in the background, is featured prominently, as are other labor figures. “Five-and-a-half million manufacturing jobs gone,” he says as he talks about China’s effect on the U.S. economy.

Not everyone would agree with that number—some talk about 2.7 million jobs lost and others think the figure is much lower—but the fact that Trumka talks about the issue is significant. Navarro’s grab-you-by-the-throat documentary has its Ohio premier on the 7th of this month in Youngstown. That’s followed by showings in Cleveland, Akron, Dayton, Portsmouth, Cincinnati, Beavercreek, Columbus, Athens, and Toledo, all bound to attract large blue-collar crowds. The film has openings in other swing states, including Pennsylvania and industrial Michigan.

Beijing, not surprisingly, is helping Navarro by going on the attack against him. That puts the professor, who is not a partisan, in the company of Romney, in the sense that both have become the object of Chinese government displeasure over the same general set of issues.

The risk for President Obama is that Navarro drives home his arguments about currency manipulation in a critical battleground state with the unsolicited help of Beijing’s anti-Romney broadsides and the Republican candidate himself. Navarro, therefore, could **change the national conversation** on a hot topic on which **the President is vulnerable.** After all, his administration has little to show for all its behind-the-scenes efforts to persuade the Chinese to float their currency.

China has been largely absent from the campaign. But that will change soon. The election is all about the economy, and the economy is all about jobs. As China and Romney collide, Beijing’s currency practices are bound take center stage in a state with 18 electoral votes up for grabs in an extremely tight race.

#### Obama is winning Ohio, Florida and Virginia with likely voters

**Salant, 9/21**/12 (Jonathan, “Obama Takes Lead Over Romney in Three More Swing-State Polls” Bloomberg, <http://www.sfgate.com/business/bloomberg/article/Obama-Takes-Lead-Over-Romney-in-Three-More-3883312.php>)

An NBC/Journal poll of likely voters released last week put Obama ahead of Romney 49 percent to 44 percent in Florida and Virginia, and leading with 50 percent to 43 percent in Ohio. No Republican has won the White House without carrying Ohio.

#### Obama is narrowly ahead in all important swing states

**Silver, 9/21**/12 – statistician, editor of the NYT Fivethirtyeight blog (Nate, “Presidential Race Changes, but Swing States Stay the Same” <http://fivethirtyeight.blogs.nytimes.com/2012/09/21/sept-21-presidential-race-changes-but-swing-states-stay-the-same/#more-34851>)

In most of the swing states, Mr. Obama’s forecast has improved by almost exactly that margin. His projected margin of victory in Ohio and Virginia has improved by 1.0 percentage points since that time and by 0.8 percentage points in Florida. His numbers have improved by 1.1 percentage points in Iowa and by 0.6 percent in Pennsylvania.

**Won’t draw in Russia, China, or the U.S.**

**Weitz 6** (Richard, Senior Fellow–Hudson Institute, Washington Quarterly, Summer, Lexis)

Concerns about a renewed great game are thus exaggerated. The contest for influence in the region does not directly challenge the vital national interests of China, Russia, or the United States, the most important extraregional countries in Central Asian security affairs. Unless restrained, however, competitive pressures risk impeding opportunities for beneficial cooperation among these countries. The three external great powers have incentives to compete for local allies, energy resources, and military advantage, but they also share substantial interests, especially in reducing terrorism and drug trafficking. If properly aligned, the major multilateral security organizations active in Central Asia could provide opportunities for cooperative diplomacy in a region where bilateral ties traditionally have predominated.

**No Central Asian escalation—SCO checks**

**Maksutov 2006** - Stockholm International Peace Research Institute (Ruslan, "The Shanghai Cooperation organization: a central asian perspective", http://www.sipri.org/research/security/euroatlantic/sipri\_prod\_material/project\_papers/ruslan\_SCO, WEA)

As a starting point, it is fair to say that all Central Asian countries—as well as China and Russia—are interested in security cooperation within a multilateral framework, such as the SCO provides. For Central Asia this issue ranks in importance with that of economic development, given the explosive environment created locally by a mixture of external and internal threats. Central Asia is encircled by four of the world’s eight known nuclear weapon states (China, India, Russia and Pakistan), of which Pakistan has a poor nuclear non-proliferation profile and Afghanistan is a haven for terrorism and extremism. Socio-economic degradation in Central Asian states adds to the reasons for concern and makes obvious the interdependence between progress in security and in development. Some scholars argue that currently concealed tendencies evolving in various states of Central Asia—such as the wide-ranging social discontent with oppressive regimes in the region, and the growing risks of state collapse and economic decline—all conducive to the quick growth of radical religious movements, could have far-reaching implications for regional stability once they come more into the light. 41 At first sight, the instruments established by the SCO to fulfil its declared security- building objectives seem to match the needs that Central Asian states have defined against this background. While the existence of the SCO further reduces the already remote threat of conventional interstate war in the region, 42 it allows for a major and direct focus on the non-state, non-traditional and transnational threats that now loom so large by comparison.

#### Few transactions are blocked, negotiations check, referral is voluntary, and the president could always block anyway

MICHAELS ’11 (Jon D.; Acting Professor – UCLA School of Law, “The (Willingly) Fettered Executive: Presidential Spinoffs in National Security Domains and Beyond,” 97 Va. L. Rev. 801, l/n)

CFIUS's responsibilities today are substantially the same as they were under Exon-Florio. 90 It is charged with reviewing proposed transactions, 91 a process that begins when CFIUS is notified by the parties to the proposed transaction and that lasts no longer than thirty days. 92 Notification is voluntary. 93 Because foreign acquisitions falling within CFIUS's ambit that are not reviewed in advance by CFIUS "remain subject indefinitely to divestment or other appropriate actions by the President," 94 there has always been a strong incentive for opting in. 95 If that review leads CFIUS to find evidence of a threat to national security, 96 CFIUS is obligated to initiate a more rigorous, formal investigation lasting no more than forty-five days. 97 Actions taken by the President or the Committee are not subject to public scrutiny 98 or judicial review. 99 [825] CFIUS must notify Congress of its recommendations (though not necessarily the terms or tenor of mitigation negotiations), 100 and provide the legislature with an annual, confidential report summarizing the transactions reviewed or investigated in the past year. 101¶ Two elements of CFIUS scrutiny are especially significant. The first is the breadth of the definition of national security. The precise meaning has never been defined in the U.S. Code or via regulation. 102Congress has enumerated factors that CFIUS should consider in determining whether a transaction threatens national security. 103 But the factors are broad and malleable, and could easily be read to include consideration of economic security, too. 104¶ The second is CFIUS's aforementioned authority to negotiate with the parties seeking to consummate the deal. 105 When CFIUS encounters troubling aspects of deals, it negotiates mitigation agreements with the parties to minimize the putative security concerns. 106 [826] One notable mitigation agreement arose out of the French company Alcatel's acquisition of Lucent. CFIUS conditioned its endorsement of the acquisition on Lucent's special research division - Bell Labs, which does extensive classified work for U.S. national-security agencies - remaining largely off-limits to Alcatel personnel. 107 In another, CFIUS required Lenovo, a firm owned in part by the Chinese government and seeking to acquire IBM's PC business, to agree to wall itself off from the identity of U.S. government purchasers of IBM products and from two IBM buildings. 108¶ CFIUS rarely advises the President to block a proposed investment, 109 and the President has been even more selective in actually [827] blocking an investment. 110 Yet of the proposed deals that raise serious national-security concerns (about 1.6% of all cases brought to CFIUS's attention), 111 many are undone not by the President's formal decision to block an acquisition, but rather earlier - through attrition at the review and investigation stages, and in the course of mitigation negotiations. This is where the Committee's subtle but substantial influence is most felt. 112 From 1990 to 2008, "nearly half of the transactions CFIUS investigated were terminated by the firms involved, because the firms decided to withdraw … rather than face a negative determination by CFIUS," 113 or rather than accept mitigation terms imposed by CFIUS that would make the acquisition less economically (or, assuming ulterior motives, less politically 114) [828] desirable. 115 Indeed, the central importance of informal CFIUS negotiation - as opposed to official, formal presidential decisions to approve or block foreign investments - is not unlike that of plea-agreements vis-a-vis courtroom verdicts in the vast majority of criminal matters. 116

#### They have to amend the definition to access any of their broader spillover claims – otherwise politicization is inevitable

**Carroll, 9** - \* Notes & Comments Editor, Emory International Law Review; JD (Jamie, 23 Emory Int'l L. Rev. 167, “BACK TO THE FUTURE: REDEFINING THE FOREIGN INVESTMENT AND NATIONAL SECURITY ACT'S CONCEPTION OF NATIONAL SECURITY” lexis)

Conclusion

Exon-Florio should be amended to more narrowly define national security. The open-ended nature of the current definition has allowed the process to become politicized. Instead, national security should be specifically defined so as to prevent acquisition of industries that are critical to the military aspects of our national defense and that have capacities that are not duplicable by other market entities. The definition should also serve to ensure that export control laws are not circumvented by foreign acquisition of American companies. The following proposed definition would once again focus on preventing foreign governments from gaining unique military capabilities through private transactions that could threaten American national security:

National Security shall be defined so as to consider the following factors in reviewing foreign acquisitions:

A. Potential effect upon assets essential to the military aspects of national defense, specifically those firms whose contributions to the national defense cannot be easily replaced by another domestic corporation;

B. Whether the acquisition poses a substantial risk of espionage or terrorism that can be certified by the relevant United States intelligence agencies;

C. Whether the acquisition would pose a unique risk of weapons proliferation of critical military assets that cannot be otherwise dealt with by United States laws, particularly to countries that are not allies of the United States;

[\*198] D. Economic security, or any other factor not mentioned in this section, shall not be considered by the CFIUS process. n222

Such an interpretation of national security would heavily scrutinize acquisition of, or joint ventures with, Lockheed Martin or any other company that makes a large contribution to the defense industrial base. Certain high-tech companies that produce computer chips that give the U.S. armed forces technological advantages over other countries might also fall under this definition. China should not be allowed to acquire a controlling interest in the present-day equivalent of Fairchild Semiconductor.

This proposed definition of national security would be even more limited than the original Exon-Florio signed by President Reagan, as Exon-Florio was designed to apply mainly to defense-based technological acquisitions. n223 The main difference between this definition of national security and the original Exon-Florio legislation is that this definition would codify national security to explicitly prevent protectionist use of the CFIUS for political ends. Any consideration of economic security or protection of energy assets from foreign acquisition would be excluded from this definition, as inclusion of such economic factors can only encourage protectionism and politicization of the CFIUS process. n224

The narrower definition of national security would eliminate the mandatory reviews of every foreign-government-controlled transaction as required by FINSA. n225 Instead, the CFIUS would be given flexibility to decide which transactions truly threaten national security, without being bound to review every governmental acquisition. Narrowing the definition of national security in this manner would allow the CFIUS to focus its resources on real national security threats, rather than waste resources analyzing nearly every transaction involving a foreign governmental takeover. n226

The CFIUS should certainly consider the prospect of terrorism and take every step possible to safeguard against such a risk. In many cases, safeguards such as extra scans on containers should be put in place to minimize the risk of [\*199] terrorism. These safeguards should be applied regardless of whether the ownership is foreign or domestic. n227 Protectionism cannot replace the Department of Homeland Security when it comes to defending critical infrastructure. n228 Besides, the terrorists who struck on 9/11 did not own substantial property within the United States. Nor would the CFIUS regulations have stopped the subsequent terrorist incidents, such as Richard Reid's attempted shoe bomb or the anthrax shipments. In fact, there is no evidence that any company has been used as a front for a terrorist plot. n229

However, transactions should be blocked by the CFIUS on the basis of homeland security only when there is evidence of a clear and present threat of terrorism, or perhaps of espionage or sabotage. If the term "critical infrastructure" must be kept in FINSA, then members of Congress and the CFIUS must do a better job articulating what exactly constitutes critical infrastructure and what they consider the link between foreign ownership of critical infrastructure and threats to national security. n230 Explicitly laying out such guidelines will illustrate the boundaries to foreign investors and will make CFIUS decisions seem less arbitrary and political. n231 Additionally, screening employees of foreign corporations that purchase critical infrastructure can often identify potential security vulnerabilities without taking the drastic step of vetoing a transaction. n232

Limiting the Exon-Florio definition of national security only to military threats may seem odd and reactionary in the post-9/11 world, where unconventional threats abound. However, counter-terrorism requires appropriate tools, and regulating foreign direct investment simply falls short of being a cost-effective method of ensuring homeland security. n233 Focusing on the nationality of a company's ownership in a globalized world only distracts us from real security threats posed by non-state actors. n234 Many terrorist threats do not exist as a result of primary support from any nation, but rather as tactics in service of an ideology. n235 As Jose Padilla, John Walker Lindh, and [\*200] many others have illustrated, no one ethnic group has a monopoly on Al-Qaeda membership or support. Instead of penalizing investments from various Arab states simply because terrorists draw support from that region, homeland security policy should focus on thwarting the terrorists themselves. The CFIUS must return to a focus on state military capabilities because the terrorist threats are from non-state actors, and restricting economic investment from certain nations does not, per se, deal with the threat of terrorism. Just because terrorism is a serious threat does not mean that the CFIUS is the best tool to protect critical infrastructure.

In conclusion, 9/11 did radically change the world, and Exon-Florio should change to fit the new realities of homeland security. However, the most effective reform of Exon-Florio is not expansion of the definition of national security to include economic protectionism, but rather a narrowing of the definition to guard against real threats to American security while encouraging beneficial foreign investment. The security challenges of the twenty-first century cannot be met by protectionism. Only by embracing globalization and cooperation can the United States truly achieve national security.

#### Dubai Ports World was a much bigger deal than the plan

**Carroll, 9** - \* Notes & Comments Editor, Emory International Law Review; JD (Jamie, 23 Emory Int'l L. Rev. 167, “BACK TO THE FUTURE: REDEFINING THE FOREIGN INVESTMENT AND NATIONAL SECURITY ACT'S CONCEPTION OF NATIONAL SECURITY” lexis)

On December 15, 2005, Dubai Ports World, a U.A.E. ports company, filed formal notice with the CFIUS of a deal to purchase Peninsular and Oriental Steam Navigation Company (P&O), a British firm, which controlled the major operations of six American ports. n108 After 30 days, the CFIUS had not objected to the filing, and the transaction moved ahead uneventfully. n109

On February 11, 2006, the Associated Press ran a story on the proposed acquisition, which noted that several of the 9/11 hijackers were from the U.A.E. and that U.S. ports were vulnerable to terrorism. n110 The news of the potential takeover of six U.S. ports by an Arab company prompted a political firestorm. n111 President Bush reversed course from the quiet stance he had taken during the Unocal deal and actively defended the CFIUS approval of the Dubai deal. n112 He threatened to veto any congressional action blocking the Dubai purchase, while admitting that he should have consulted with Congress prior to the CFIUS review process. n113 Still, the political pressure against allowing an Arab country to acquire managerial control of U.S. ports was so potent that one Republican congresswoman wrote a one-line letter to President Bush: "Dear Mr. President: In regards to selling American ports to the United Arab Emirates, not just NO but HELL NO!" n114 Critics voiced concerns that Dubai Ports World could be influenced by members of Al-Qaeda into [\*183] weakening the security of the ports, despite the fact that port security would remain in the hands of the same unionized workers after the purchase. n115 Congress also raised the argument that since Dubai Ports World was owned by the U.A.E., the Byrd Amendment's lower standard of review for purchases by entities controlled by foreign governments should have mandated a 45-day investigation and a report to Congress. n116 In response, the Bush administration insisted that the Dubai Ports controversy posed "no risk to national security." n117

After three weeks of controversy, Dubai Ports World decided to drop its bid in the face of negative publicity, n118 just as CNOOC had done. This time, Congress was not satisfied with merely expanding the interpretation of national security. After the CFIUS review approved the Dubai acquisition without a 45-day investigation, n119 Congress apparently felt the CFIUS process itself was insufficient and began to prepare an amendment to Exon-Florio that would become the first successful legislative attempt to broaden the interpretation of national security.

#### The wind suit sends a powerful signal to all Chinese companies

**Gao, 9/21**/12 (Eliot, “Chinese windmill CFIUS suit signals ‘the courtroom is open’ for challenges,” Financial Times, <http://www.ft.com/intl/cms/s/2/440b3bda-03f4-11e2-9322-00144feabdc0.html#axzz27CiZ5eNg>)

A rare court challenge to the authority of the Committee on Foreign Investment in the United States (CFIUS) is changing the conversation for Chinese companies looking to invest in the US.

CFIUS asked President Obama to intervene in a Chinese-sponsored windmill project in Oregon late last week, saying the investment posts a national security threat, according to newly available court documents.

CFIUS’ recommendation to the President regarding Ralls Corp., which is owned by two executives of China’s Sany Group, came only after Ralls filed a lawsuit on 12 September in the US District Court of the District of Columbia, challenging CFIUS’ order and amended order on 25 July and 2 August, to stop all construction or transferring of assets at the Oregon site.

The amended interim order issued by CFIUS will expire on 28 September, unless Obama exercises his statutory authority in the matter, according to CFIUS’ response to Ralls’s complaint.

Obama is widely expected to issue an order before that 28 September expiration date in order to make the CFIUS interim orders permanent, CFIUS attorneys told PaRR.

A White House spokesperson was not immediately available for comment.

Ralls v. CFIUS drew immediate attention from the CFIUS bar, which said such a lawsuit against CFIUS is extremely rare, if not unprecedented, and could have important ramifications on future reviews.

At the very least, the fact that the court has not thrown out the case on jurisdiction or sovereign immunity grounds means “the courtroom is open” for CFIUS challenges, one CFIUS attorney told PaRR.

Still, the chance for Ralls to win the temporary restraining order against CFIUS, or otherwise overturn CFIUS’ decision, is very slim, attorneys agreed.

But for Chinese companies, the case also serves an important lesson.

Yeland Group (000616.SH), a Chinese real estate developer, had planned to buy the Oregon wind projects from Ralls after the development was completed but backed out of the purchase agreement in late August because of US regulatory uncertainty.

“The [CFIUS] approval problems with the US government that happened to Sany has really taught us a big lesson, not only for us, but for all Chinese companies, that we should be more careful and consider more thoroughly in planning and investigating mergers and acquisitions in the US, especially regarding regulatory approvals,” an investor relations representative for Yeland told PaRR.

#### The EU alt cause outweighs their internal link and decades of disputes disprove their impact

**Reuters, 7/26/12** [China's solar companies warn of trade war with EU, <http://www.reuters.com/article/2012/07/26/us-china-solar-eu-idUSBRE86P14220120726>]

(Reuters) - China's solar firms warned of a trade war on Thursday, calling on the Chinese government to strike back against an anti-dumping complaint filed by rivals in Europe, but the Europeans said they would not be put off by retaliation threats.¶ Companies led by Germany's SolarWorld ([SWVG.DE](http://www.reuters.com/finance/stocks/overview?symbol=SWVG.DE)) have asked the European Union to investigate claims that Chinese rivals had been selling their products below market value in Europe.¶ The European Commission, which has declined to comment on the issue, has 45 days to decide if it will start an investigation.¶ SolarWorld confirmed on Thursday the submission by the so-called EU ProSun group, which comprises 25 members in [Germany](http://www.reuters.com/places/germany), Spain, Italy and other EU countries. German solar module maker Sovello is also part of the initiative.¶ A similar initiative was spearheaded by SolarWorld in the United States, leading the world's largest economy to impose in May duties of about 31 percent on solar panel imports from [China](http://www.reuters.com/places/china).¶ "If the EU were to follow the precedent of the U.S. and launch an anti-dumping investigation on Chinese solar products, the Chinese solar industry would suffer a fatal blow," Yingli Solar's ([YGE.N](http://www.reuters.com/finance/stocks/overview?symbol=YGE.N)) chief strategy officer, Wang Yiyu, said.¶ "The investigation would also trigger a wholescale trade war between China and the EU, which would cause huge losses to both parties," he said at a briefing by leading Chinese solar companies Yingli, SunTech ([STP.N](http://www.reuters.com/finance/stocks/overview?symbol=STP.N)), Trina ([TSL.N](http://www.reuters.com/finance/stocks/overview?symbol=TSL.N)) and Canadian Solar ([CSIQ.O](http://www.reuters.com/finance/stocks/overview?symbol=CSIQ.O)).¶ "We call on the Chinese government to take all necessary and resolute measures to protect the legitimate interests of the Chinese solar industry."¶ Western solar companies have been at odds with their Chinese counterparts for years, alleging that they receive lavish credit lines to offer modules at cheaper prices, while European players struggle to refinance.¶ German solar company Q-Cells QCEG.UL became the most prominent victim of an increasingly competitive market, filing for insolvency for April. At least three other German solar companies have filed for insolvency in recent months.¶ EU ProSun, in a visit to meet lawyers handling their case in Brussels, said it would not be deterred by Chinese threats.¶ "A lot of companies who joined our initiative want to stay anonymous because they fear retaliation, but that is not a reason not to act," said Milan Nitzschke, SolarWorld's vice president who is leading the EU ProSun group.¶ "It is a reason to act and defend against those threats," he told Reuters.¶ DIVISION IN EUROPE¶ But not all European solar companies back the complaint and many say Europe should welcome Chinese imports because they make solar power more affordable.¶ Close to 60 percent of China's solar exports, worth $35.8 billion, were shipped to the EU in 2011, the four Chinese companies said. Europe accounted for 74 percent of global solar installations in 2011, according to industry association EPIA.¶ Europeans against SolarWorld's move say the EU ProSun group only represents a fraction of the solar industry.¶ "The majority of the industry would be the losers of an initiative driven by only a few sector representatives," said Till Richter, managing partner at Germany's Richter Solar.¶ "The backbone of the solar industry, small and middle-sized local installers, developers, retailers, engineers and maintenance technicians, would be at stake in case of anti-dumping measures being imposed by the EU," Richter said in a statement released by the Alliance for Affordable Solar Energy.¶ Nitzschke said EU ProSun did not claim to represent the entire European solar industry, but rather those companies willing to go ahead with a complaint.

#### Disputes are inevitable, but they don’t escalate

Bacchus, 10 [James Bacchus is a former member of Congress and a former chairman of the appellate body of the World Trade Organization. He chairs the global practice of the Greenberg Traurig law firm.Bacchus delivered a version of this piece as testimony to the U.S.-China Economic and Security Review Commission on June 9, 2010 in Washington, D.C. ¶ Diverting A U.S.-China Trade War, Diverting A U.S.-China Trade War¶ ames Bacchus, 06.28.10, 12:10 AM EDT Disputes are inevitable, but conflict is not, <http://www.forbes.com/2010/06/28/china-united-states-exports-law-wto-markets-economy-trade_2.html>]

Chinese exports are surging. American politicians are complaining. This is not an easy time for trade relations between the United States and China. The Great Recession has created great pressures in both countries. The temptation in both is to yield to these pressures, and to retreat from previous commitments into the politically appealing refuge of protectionism and economic nationalism.¶ For both the United States and China, this would be a mistake. For both countries, by far the best way forward from recession to a lasting recovery is to sustain and strengthen their mutually beneficial economic relationship. Crucial to this relationship will be a continuing commitment in both countries to more open trade, and a continuing commitment in both countries to compliance with WTO rules for trade.¶ During its first decade of membership, China has increasingly become a leader within the WTO. This is as it should be. As a large trading country, China should, like the United States, help lead the WTO, and China should be expected, like the United States, to have many trade disputes with other WTO Members. Like all other WTO Members, China is bound by the WTO treaty to take all of its treaty-related disputes with other Members to WTO dispute settlement. In compliance with WTO rules, China is doing so.¶ China has profited enormously from the benefit of WTO trade concessions, and from the shelter of the WTO's fundamental rules of nondiscrimination. China has a considerable stake in the continued success of the multilateral trading system. The United States has gained, too, from China's entry into the WTO. Understandably, there is a tendency to focus on where China may have fallen short, so far, in reshaping Chinese ways to a full consistency with WTO obligations. This is especially so during this time of economic distress and continuing economic tension. But a focus on how far China still has to go should not blind us to how far China has already come, and in such a short time.¶ Violations of WTO rules by China should not be excused or overlooked. Nor should any WTO violations by the United States. Such violations are rightly the subject of WTO dispute settlement. But as someone who has negotiated, legislated and adjudicated on international trade, my view remains what it has always been: Every effort should always be made to resolve trade disputes by negotiation before resorting to litigation. This is my strong view with respect to trade relations between the United States and China.¶ Obviously, there is considerable concern in the United States, and elsewhere in the world, with how Chinese currency practices affect the terms of trade. Whatever the prospects for a legal case, this is one issue best resolved by negotiation, and not litigation.¶ Counterfeiting, piracy and intellectual property violations of all kinds remain pervasive in China. The Chinese have a clear WTO obligation to enforce IP rights. Negotiation has accomplished all too little where IP rights are concerned. More--and more ambitious--litigation may be needed.¶ There is understandable concern that China's proposed rules for "indigenous innovation" will discriminate against American goods and services in Chinese government procurement. On this issue the position of the United States is weakened considerably by its own domestic actions. How can the United States criticize China for imposing a requirement to "Buy Chinese" when the U.S. Congress is busy enacting "Buy American" laws?¶ The United States and China should both refrain from discriminatory procurement practices, and should work together to make the WTO's Government Procurement Agreement a truly global agreement. China must comply fully with its national treatment and other WTO obligations in trade in services. A key negotiating aim of the United States should be to encourage China to add to its services obligations.¶ A rapidly emerging area of concern is export restrictions on natural resources. Chinese restrictions on exports have already led to one WTO dispute, on raw materials, and may lead to another, on rare earth elements. No one country can be self-sufficient in everything. The United States and China share an interest in making certain that WTO rules ensure a free flow of trade and investment in natural resources.¶ Barriers to trade with China are increasingly taking forms other than tariffs. Sanitary and phytosanitary measures, technical standards and other technical regulations can sometimes be pretexts for protectionism, imposing restrictions on trade beyond those necessary to achieve legitimate domestic purposes. WTO rules provide remedies that can be effective when used against such nontariff barriers to trade.¶ China is increasingly relying on trade remedies to restrict imports. It has every right to do so under WTO rules. China must comply fully with WTO rules when applying safeguards, antidumping duties and countervailing duties to subsidies. So, too, must the United States.¶ Overall, there continues to be a compelling need for China to enhance transparency and to uphold the rule of law. These are trade obligations, and also essential ingredients of any truly enduring economic success for China. ¶ Certainly the United States and China both have much to gain, in their two-way trade and otherwise, from a successful conclusion of the Doha Development Round of multilateral trade negotiations. Beyond that, new understandings, and perhaps new rules, are needed in such areas as investment and climate change and electronic commerce.¶ The United States and China can work together to address not only their bilateral concerns, but also any number of urgent global concerns. None of our global concerns can be addressed effectively without the engagement and the cooperation of both the United States and China.¶ I worry when I hear other Americans describe China as a "threat" to the United States. Thucydides cautioned us, in his history of the Peloponnesian War, that a belief in the inevitability of conflict can become one of the main causes of conflict.¶ Trade disputes between the United States and China are inevitable. Conflict is not.

#### Specific issues don’t collapse overall commitment to international trade norms

**Holwill, 08** [\*No Date cited, but most recent internally referenced date is 2008, US China Trade War? Probably Not, Vice President, Public Policy, Alticor Inc

Richard Holwill is the Vice President of Public Policy at Alticor, located in Washington, DC, where he is in charge of worldwide government affairs efforts for Alticor, the parent company of Amway Corporation. He chairs a trade advisory committee for the U.S. Trade Representative..., <https://www.hightable.com/government/insight/us-china-trade-war-probably-not-10897>]

Trade War – There has been some speculation that U.S. Government (USG) actions to sanction China on specific trade issues will prompt a trade war between the two countries.  Based on conversations at China’s Ministry of Commerce (MOFCOM), I believe such fears are unfounded.  During talks in Beijing, it was clear that working-level MOFCOM officials fully understand the issues involved both in the tariffs placed on paper products and the demand for consultations at the WTO on Intellectual Property Rights (IPR) protection.  They appear ready and willing to work within the rules-based international trade system to resolve outstanding disputes.

#### Cooperation is paralyzed now – domestic politics, overconsumption and Chinese view of inevitability

**Czarnezki**, **11** [Jason J. Professor of Law in the Environmental Law Center and Faculty Director of the U.S.-China¶ Partnership for Environmental Law at Vermont Law School; A.B., J.D, “CLIMATE POLICY &¶ U.S.-CHINA RELATIONs”, Published After April 4th 2011. <http://www.vermontlaw.edu/Documents/Jason%20Czarnezki%20Climate%20Policy%20and%20China.pdf>]

United States climate policy is paralyzed by domestic politics and a¶ culture of over-consumption. China, despite scientific evidence that its¶ emissions alone could lead to catastrophic climate events, employs a¶ climate policy arguably based on a cold (though perhaps correct) reality in¶ which the climate crisis is inevitable and only the economically strong will¶ survive. Thus, this Essay has a simple thesis: to date, both the United States¶ and Chinese governments have failed to show leadership in responding to¶ the climate crisis, and without such leadership the countries’ continued¶ paths will make the potential crisis a reality.¶ During the 2009-2010 academic year, I was a J. William Fulbright¶ Scholar, teaching at Sun Yat-sen University (also known as Zhongshan¶ University) in Guangzhou, China. Guangzhou sits as the capital of¶ Guangdong province in south China, a global manufacturing power in the¶ Pearl River Delta, near the boomtown of Shenzhen, and two hours north of¶ Hong Kong by train. While there, I taught courses on the U.S. legal system was fortunate enough to give numerous lectures, participate in roundtables¶ with Chinese faculty and officials, have discussions with American¶ academics in China, and build relationships with U.S. government officials.¶ Nearly all these experiences involved, some exclusively, discussion of¶ climate change and the political roles and responsibilities of the United¶ States and China, the two largest emitters of greenhouses gases in the¶ world.¶ While I was in China, this quote appeared in the China Daily, China’s¶ English language newspaper: “China ‘could not and should not’ set an¶ upper limit on greenhouse gas emissions at the current phase, said Su Wei,¶ the chief negotiator of China for climate change talks . . . .”1 Similar views¶ were expressed by Chinese academics and policy-makers participating in a¶ “China-U.S. Relations Roundtable” held by the Center for Asia-Pacific¶ Studies at Sun Yat-sen University in May 2010. The question is whether¶ China’s policy is irresponsible given the scope and pace of Chinese¶ development and energy consumption (a view held by the Europeans at the¶ Copenhagen Climate Conference in 2009).¶ The reasons behind China’s public stance, and unwillingness to curb overall emissions, are well-known: China deserves its turn to develop;¶ China is only a developing country; China wants to be seen as the leader of¶ the developing world (i.e., the king of the BASIC countries, Brazil, South¶ Africa, India, and China), not a member of the fully developed world;¶ China’s per capita carbon emissions pale in comparison to the United¶ States’; China remains a poor country; China’s foreign policy is noninterventionist¶ and does not tell other countries what to do, and China¶ expects the same autonomy in return; economic stability is key to social¶ stability and nationalism; absent a strong economy there will be civil unrest¶ and Communist Party leaders may lose power; and the list goes on.¶ The Chinese stance, that no cap on carbon emissions will ever exist no¶ matter how high, may be a product of China’s belief in a cold and hard, and¶ potentially true, reality—that global economic power is paramount and will¶ provide the only avenue to adapt to an inevitable climate crisis, as well as¶ achieve the milestones of superpower status, many of which they have¶ already achieved (e.g., Olympic Games, World Expo, United Nations¶ Security Council). While China’s policy remains problematic, as is United¶ States’ failure to lead in the international community on the issue of climate¶ change, China’s actions, while globally irresponsible, may be very reasonable if solely defined by Chinese domestic interests. The question is¶ whether China’s dramatic economic rise comes with more responsibility,¶ and what is the responsibility of the United States in light of its existing and¶ historical economic prowess and level of energy consumption.

#### And, our domestic politics arguments outweigh and block solvency

**Lieberthal, 09** [U.S. CHINA CLEAN ENERGY COOPERATION:¶ THE ROAD AHEAD, Kenneth G, Kenneth Lieberthal is director of the John L. Thornton China Center and senior fellow in Foreign Policy and Global Economy and Development at Brookings. Lieberthal was a professor at the University of Michigan for 1983-2009, <http://www.brookings.edu/~/media/research/files/papers/2009/9/us%20china%20energy%20cooperation%20lieberthal/09_us_china_energy_cooperation_lieberthal>]

In view of the above complications, it is difficult¶ to be very optimistic about making adequate¶ progress on climate change during the remainder¶ of 2009. U.S.-China bilateral cooperation should¶ be the easier task. The number of players is small,¶ both sides see potentially welcome side benefits in¶ terms of strengthening their overall relationship,¶ and it should be possible to focus in particular on¶ those activities that clearly are beneficial to both¶ sides. The global talks enjoy none of these advantages¶ and are in addition weighed down by larger political considerations that revolve around both¶ the negotiating history and the relationship between¶ developed and developing countries.¶ As indicated above, astute U.S.-China cooperation¶ can make expectations about Copenhagen¶ more realistic and the meeting itself more likely¶ to lay the groundwork for an eventual full agreement.¶ But it will take astute leadership at the¶ highest levels in both Washington and Beijing—¶ and effective management of domestic politics in¶ both countries—to achieve these results. The issue¶ could not be more important; unfortunately,¶ the chances of success are at this point quite uncertain.

### 1nr

**There are no threats – regional actors can prevent war**

**Bandow 11** – senior fellow at the Cato Institute. A former special assistant to Ronald Reagan, he is the author of Foreign Follies: America's New Global Empire (Xulon) [1-31-2011, Doug Bandow, “Solving the Debt Crisis: A Military Budget for a Republic”, January 31st, <http://www.cato.org/pub_display.php?pub_id=12746>]

More than two decades after the Cold War dramatically ended, the U.S. maintains a Cold War military. America has a couple score allies, dozens of security commitments, hundreds of overseas bases, and hundreds of thousands of troops overseas. Yet international hegemonic communism has disappeared, the Soviet Union has collapsed, Maoist China has been transformed, and pro-communist Third World dictatorships have been discarded in history's dustbin.

The European Union has a larger economy and population than America does. Japan spent decades with the world's second largest economy. South Korea has 40 times the GDP and twice the population of North Korea. As Colin Powell exclaimed in 1991, "I'm running out of demons. I'm running out of enemies. I'm down to Castro and Kim Il-sung."

Yet America accounts for roughly half of the globe's military outlays. In real terms the U.S. government spends more on the military today than at any time during the Cold War, Korean War, or Vietnam War. It is difficult for even a paranoid to concoct a traditional threat to the American homeland.

Terrorism is no replacement for the threat of nuclear holocaust. Commentator Philip Klein worries about "gutting" the military and argued that military cuts at the end of the Cold War "came back to haunt us when Sept. 11 happened." Yet the reductions, which still left America by far the world's most dominant power, neither allowed the attacks nor prevented Washington from responding with two wars.

And responding with two wars turned out to be a catastrophic mistake. Evil terrorism is a threat, but existential threat it is not. Moreover, the best response is not invasions and occupations — as the U.S. has learned at high cost in both Afghanistan and Iraq. Rather, the most effective tools are improved intelligence, Special Forces, international cooperation, and restrained intervention.

Attempts at nation-building are perhaps even more misguided than subsidizing wealthy industrialized states. America's record isn't pretty. The U.S. wasn't able to anoint its preferred Somali warlord as leader of that fractured nation. Washington's allies in the still unofficial and unstable nation of Kosovo committed grievous crimes against Serb, Roma, and other minorities. Haiti remains a failed state after constant U.S. intervention. The invasion of Iraq unleashed mass violence, destroyed the indigenous Christian community, and empowered Iran; despite elections, a liberal society remains unlikely. After nine years most Afghans dislike and distrust the corrupt government created by the U.S. and sustained only by allied arms.

The last resort of those who want America to do everything everywhere is to claim that the world will collapse into various circles of fiery hell without a ubiquitous and vast U.S. military presence. Yet there is no reason to believe that scores of wars are waiting to break out. And America's prosperous and populous allies are capable of promoting peace and stability in their own regions.

**They have a flawed psychological bias – prefer our evidence**

**Fettweis 10** – Professor of national security affairs @ U.S. Naval War College (Chris, Georgetown University Press, “Dangerous times?: the international politics of great power peace” Google Books) Jacome

Hegemony’s Psychological Appeal

Raison d'etat cannot entirely account for the anathematic status of strategic restraint. Many people simply prefer internationalism and enjoy the prestige it appears to confer. It is human to desire greatness, to want to belong to the best team, political party or state. While all people everywhere take pride in their country or their culture, Americans have long been exceptional in their exceptionalism." The pleasure and pride that the citizens of Rome felt toward their empire is similar to that which Americans hold toward their republic. Like all people, they do not readily accept being second-best in anything, from math scores to basketball to automobile quality. "Americans love a winner," Patton told his troops on the eve of D-Day, "and will not tolerate a loser. Americans play to win, all the time .... The very thought of losing is hateful to an American." Being "number one" has a cachet that will not soon weaken as long as people are competitive by nature. We all like to bask in the reflected glory of national greatness.

Triumphalism extends beyond the masses into the halls of government and ivorytowers of academia. Some of the more strident internationalists clearly feel hostility toward the idea of sharing the stage with other powers not so much because of actual threats such a situation might pose (since they know better than anyone that such threats are minimal), but rather because they recoil from the notion that the United States should relinquish its title as de facto champion of the world without a struggle. Strategic restraint to some people would herald the end ofthe American Century and all the glory and prestige that accompanies it. Schlesinger wistfully implored his restraint-minded countrymen to "recognize, as we return to the womb, that we are surrendering a magnificent dream."" Few people make international affairs their chosen profession in order to recommend that the United States withdraw from most international affairs. Strategists are professionally predisposed to favor internationalism, if for no other reason than that it is more interesting and appealing than restraint. The national honor, after all, is at stake,

**Liberalism is inevitable – hegemony isn’t key**

**Ikenberry, 11** – (May/June issue of Foreign Affairs, G. John, PhD, Albert G. Milbank Professor of Politics and International Affairs at Princeton University in the Department of Politics and the Woodrow Wilson School of Public and International Affairs, “The Future of the Liberal World Order,” http://www.foreignaffairs.com/

articles/67730/g-john-ikenberry/the-future-of-the-liberal-world-order?page=show)

For all these reasons, many observers have concluded that world politics is experiencing not just a changing of the guard but also a transition in the ideas and principles that underlie the global order. The journalist Gideon Rachman, for example, says that a cluster of liberal internationalist ideas -- such as faith in democratization, confidence in free markets, and the acceptability of U.S. military power -- are all being called into question. According to this worldview, the future of international order will be shaped above all by China, which will use its growing power and wealth to push world politics in an illiberal direction. Pointing out that China and other non-Western states have weathered the recent financial crisis better than their Western counterparts, pessimists argue that an authoritarian capitalist alternative to Western neoliberal ideas has already emerged. According to the scholar Stefan Halper, emerging-market states "are learning to combine market economics with traditional autocratic or semiautocratic politics in a process that signals an intellectual rejection of the Western economic model."

Today's international order is not really American or Western--even if it initially appeared that way.

But this panicked narrative misses a deeper reality: although the United States' position in the global system is changing, the liberal international order is alive and well. The struggle over international order today is not about fundamental principles. China and other emerging great powers do not want to contest the basic rules and principles of the liberal international order; they wish to gain more authority and leadership within it. Indeed, today's power transition represents not the defeat of the liberal order but its ultimate ascendance. Brazil, China, and India have all become more prosperous and capable by operating inside the existing international order -- benefiting from its rules, practices, and institutions, including the World Trade Organization (WTO) and the newly organized G-20. Their economic success and growing influence are tied to the liberal internationalist organization of world politics, and they have deep interests in preserving that system.

In the meantime, alternatives to an open and rule-based order have yet to crystallize. Even though the last decade has brought remarkable upheavals in the global system -- the emergence of new powers, bitter disputes among Western allies over the United States' unipolar ambitions, and a global financial crisis and recession -- the liberal international order has no competitors. On the contrary, the rise of non-Western powers and the growth of economic and security interdependence are creating new constituencies for it.

To be sure, as wealth and power become less concentrated in the United States' hands, the country will be less able to shape world politics. But the underlying foundations of the liberal international order will survive and thrive. Indeed, now may be the best time for the United States and its democratic partners to update the liberal order for a new era, ensuring that it continues to provide the benefits of security and prosperity that it has provided since the middle of the twentieth century.

#### Recent conflicts prove there is zero correlation between economic decline and war

Barnett 9 Thomas, Senior Managing Director of Enterra Solutions LLC, Contributing Editor and Online Columnist for Esquire, The New Rules: Security Remains Stable Amid Financial Crisis,Aprodex, Asset Protection Index, <http://www.aprodex.com/the-new-rules--security-remains-stable-amid-financial-crisis-398-bl.aspx>

When the global financial crisis struck roughly a year ago, the blogosphere was ablaze with all sorts of scary predictions of, and commentary regarding, ensuing conflict and wars -- a rerun of the Great Depression leading to world war, as it were. Now, as global economic news brightens and recovery -- surprisingly led by China and emerging markets -- is the talk of the day, it's interesting to look back over the past year and realize how globalization's first truly worldwide recession **has had virtually no impact** whatsoever on the international security landscape. None of the more than three-dozen ongoing conflicts listed by GlobalSecurity.org can be clearly attributed to the global recession. Indeed, the last new entry (civil conflict between Hamas and Fatah in the Palestine) predates the economic crisis by a year, and three quarters of the chronic struggles began in the last century. Ditto for the 15 low-intensity conflicts listed by Wikipedia (where the latest entry is the Mexican "drug war" begun in 2006). Certainly, the Russia-Georgia conflict last August was specifically timed, but by most accounts the opening ceremony of the Beijing Olympics was the most important external trigger (followed by the U.S. presidential campaign) for that sudden spike in an almost two-decade long struggle between Georgia and its two breakaway regions. Looking over the various databases, then, we see a most familiar picture: the usual mix of civil conflicts, insurgencies, and liberation-themed terrorist movements. Besides the recent Russia-Georgia dust-up, the only two potential state-on-state wars (North v. South Korea, Israel v. Iran) are both tied to one side acquiring a nuclear weapon capacity -- a process **wholly unrelated** to global economic trends. And with the United States effectively tied down by its two ongoing major interventions (Iraq and Afghanistan-bleeding-into-Pakistan), our involvement elsewhere around the planet has been quite modest, both leading up to and following the onset of the economic crisis: e.g., the usual counter-drug efforts in Latin America, the usual military exercises with allies across Asia, mixing it up with pirates off Somalia's coast). Everywhere else we find serious instability we pretty much let it burn, occasionally pressing the Chinese -- unsuccessfully -- to do something. Our new Africa Command, for example, hasn't led us to anything beyond advising and training local forces.

#### No resources

**Bennett and Nordstrom 2000** – Department of Political Science at Penn State (Scott and Timothy, Journal of Conflict Resolution, “Foreign Policy Substitutability and Internal Economic Problems in Enduring Rivalries,” February 2000, EBSCO)

Alternative relationships between domestic economic performance and international conflict also have been proposed, perhaps most importantly by Blainey (1973, 74). Blainey offers the alternative hypothesis about economics and war that economically challenged countries are more likely to be the target of aggressive military acts than their initiator (1973, 86). Faced with a poor target in a bad economic situation, who is faced with an unhappy populace and possibly limited resources, potential conflict initiators are likely to see opportunity. The argument also parallels the historical notion that leaders would only go to war when their coffers were full—in bad times, leaders may simply not be able to afford to go to conflict. Blainey’s argument appears to pose a challenge to diversionary conflict theory in its emphasis on what is the most likely direction of conflict. Note, however, that its prediction (weak states become targets) differs from a strategic application of diversionary conflict theory.

#### The portion of the plan that mandates exemption from Exon Florio reviews isn’t topical and has to be a voting issue – Exon Florio reviews aren’t a direct restriction on production – it is an export restriction

Greidinger, 91 [Volume 6 | Issue 2 Article, American University International Law ReviewThe Exon-Florio Amendment: A Solution in Search of a Problem, <http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1553&context=auilr>]

B. EXPORT RESTRICTIONS¶ The Export Administration Act 178 and the Arms Export Control¶ Act 177 require validated licenses to export certain categories of technological¶ information, equipment, arms and munitions abroad. Depending¶ on the sensitivity of the information involved, these restrictions may¶ apply to allies of the United States, as well as to proscribed destinations¶ such as the Soviet Union.1 78¶ An "export" may occur not only when there is a physical transfer of¶ technical data over national frontiers, but also at any time there is a¶ transfer of technical data, equipment, or materials to a foreign national¶ with the intent to export.1 79 Companies must have licenses in order to¶ transfer controlled technology to a foreign parent.180 During the acquisition¶ process, therefore, the statutes may require a company to sequester¶ its technical operations from the foreign parent.¶ These export restrictions, together with the sectoral controls outlined¶ below, are sufficient to inhibit the most damaging transfers of technol-¶ 172. 50 U.S.C. app. § 2170(d)(2) (1988).¶ 173. 15 U.S.C. § 18 (1988).¶ 174. 50 U.S.C. app. § 2170(d)(2) (1988).¶ 175. Id. §§ 2158-70. Some scholars (suggest that use of Exon-Florio in this manner¶ would cause OECD member states and other foreign countries to accuse the United¶ States of maintaining a double standard in antitrust law to prevent¶ foreign investment.).¶ 176. 50 U.S.C. app. §§ 2401-13 (1988).¶ 177. 22 U.S.C. § 2778 (1988). The government enforces this Act pursuant to the¶ International Traffic In Arms Regulations. 22 C.F.R. §§ 120.1-.25 (1989).¶ 178. Id.¶ 179. Id.¶ 180. 50 U.S.C. app. § 2404(e) (1988).¶ [VOL. 6:111¶ EXON-FLORIO AMENDMENT¶ ogy and materials.181 The mere existence of a legal prohibition, however,¶ may be insufficient to prevent acquisitions designed to facilitate¶ diversions of technologies critical to the military. Foreigners' efforts to¶ gain technological intelligence include the establishment of "front"¶ companies in non-communist countries that divert high technology¶ goods to proscribed destinations.1 82 Exon-Florio may provide a useful¶ tool to prevent the use of acquired companies by foreign governments¶ for intelligence purposes, and a means for the United States to gather¶ information about foreign intelligence operations.

## round 3—neg v. louisville vw

### 1nc

#### The resolution indicates affs should advocate topical government change

**Ericson 3** (Jon M., Dean Emeritus of the College of Liberal Arts – California Polytechnic U., et al., The Debater’s Guide, Third Edition, p. 4)

The Proposition of Policy: Urging Future Action In policy propositions, each topic contains certain key elements, although they have slightly different functions from comparable elements of value-oriented propositions. 1. An agent doing the acting ---“The United States” in “The United States should adopt a policy of free trade.” Like the object of evaluation in a proposition of value, the agent is the subject of the sentence. 2. The verb should—the first part of a verb phrase that urges action. 3. An action verb to follow should in the should-verb combination. For example, should adopt here means to put a program or policy into action though governmental means. 4. A specification of directions or a limitation of the action desired. The phrase free trade, for example, gives direction and limits to the topic, which would, for example, eliminate consideration of increasing tariffs, discussing diplomatic recognition, or discussing interstate commerce. Propositions of policy deal with future action. Nothing has yet occurred. The entire debate is about whether something ought to occur. What you agree to do, then, when you accept the affirmative side in such a debate is to offer sufficient and compelling reasons for an audience to perform the future action that you propose.

#### Production refers to primary energy extraction for a specific list of sources

Energici (provides business intelligence and decision support services to companies and investors active in the wind, solar, hydro, geothermal and bioenergy industries. Specializes in providing robust research, analysis and intelligence coverage of trends and developments) February 2012 “PRIMARY ENERGY PRODUCTION (MONTHLY)” http://www.energici.com/energy-profiles/by-country/europe-m-z/sweden/49-countries/north-america/usa/usa-geothermal/449-primary-energy-production

Definition : Primary Energy Production is the amount of energy converted from a primary energy source in its natural state, such as coal, gas, wind etc. that has not been subjected to any conversion or transformation process. The U.S. Energy Information Administration includes the following in U.S. primary energy production: coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; dry natural gas—excluding supplemental gaseous fuels—production; nuclear electricity net generation\*, conventional hydroelectricity\* (not hydro pumped storage), geothermal electricity\*, solar thermal and photovoltaic electricity\*, wind electricity\*, wood and wood-derived fuels consumption; biomass waste consumption and biofuels feedstock.

#### Precisely defining energy production is crucial

Gene Whitney (Section Research Manager at the Congressional Research Service), Carl E. Behrens (Specialist in Energy Policy at the CRS) and Carol Glover (Information Research Specialist at the CRS) November 2010 “U.S. Fossil Fuel Resources:

Terminology, Reporting, and Summary” http://epw.senate.gov/public/index.cfm?FuseAction=Files.view&FileStore\_id=04212e22-c1b3-41f2-b0ba-0da5eaead952

Terminology A search for energy statistics in the literature quickly reveals a large number of terms used to describe amounts of fossil fuels. Most of these terms have precise and legitimate definitions, and even a careful comparison of statistics for diverse forms of fossil fuels can become quite difficult to reconcile or understand. Not only do oil, natural gas, and coal occur in many diverse geologic environments, but each commodity may occur in different modes or in different geologic settings that impose vastly different economics on their recovery and delivery to market. A vocabulary of terms has developed over the decades to capture the nature of deposits in terms of their likelihood of being developed and their stage of development.

#### Specific, limited resolutions ensure mutual ground which is key to sustainable controversy without sacrificing creativity or openness

**Steinberg & Freeley 8** \*Austin J. Freeley is a Boston based attorney who focuses on criminal, personal injury and civil rights law, AND \*\*David L. Steinberg , Lecturer of Communication Studies @ U Miami, Argumentation and Debate: Critical Thinking for Reasoned Decision Making pp45-

Debate is a means of settling differences, so there must be a difference of opinion or a conflict of interest before there can be a debate. If everyone is in agreement on a tact or value or policy, there is no need for debate: the matter can be settled by unanimous consent. Thus, for example, it would be pointless to attempt to debate "Resolved: That two plus two equals four," because there is simply no controversy about this statement. (Controversy is an essential prerequisite of debate. Where there is no clash of ideas, proposals, interests, or expressed positions on issues, there is no debate. In addition, debate cannot produce effective decisions without clear identification of a question or questions to be answered. For example, general argument may occur about the broad topic of illegal immigration. How many illegal immigrants are in the United States? What is the impact of illegal immigration and immigrants on our economy? What is their impact on our communities? Do they commit crimes? Do they take jobs from American workers? Do they pay taxes? Do they require social services? Is it a problem that some do not speak English? Is it the responsibility of employers to discourage illegal immigration by not hiring undocumented workers? Should they have the opportunity- to gain citizenship? Docs illegal immigration pose a security threat to our country? Do illegal immigrants do work that American workers are unwilling to do? Are their rights as workers and as human beings at risk due to their status? Are they abused by employers, law enforcement, housing, and businesses? I low are their families impacted by their status? What is the moral and philosophical obligation of a nation state to maintain its borders? Should we build a wall on the Mexican border, establish a national identification can!, or enforce existing laws against employers? Should we invite immigrants to become U.S. citizens? Surely you can think of many more concerns to be addressed by a conversation about the topic area of illegal immigration. Participation in this "debate" is likely to be emotional and intense. However, it is not likely to be productive or useful without focus on a particular question and identification of a line demarcating sides in the controversy. To be discussed and resolved effectively, controversies must be stated clearly. Vague understanding results in unfocused deliberation and poor decisions, frustration, and emotional distress, as evidenced by the failure of the United States Congress to make progress on the immigration debate during the summer of 2007.

Someone disturbed by the problem of the growing underclass of poorly educated, socially disenfranchised youths might observe, "Public schools are doing a terrible job! They are overcrowded, and many teachers are poorly qualified in their subject areas. Even the best teachers can do little more than struggle to maintain order in their classrooms." That same concerned citizen, facing a complex range of issues, might arrive at an unhelpful decision, such as "We ought to do something about this" or. worse. "It's too complicated a problem to deal with." Groups of concerned citizens worried about the state of public education could join together to express their frustrations, anger, disillusionment, and emotions regarding the schools, but without a focus for their discussions, they could easily agree about the sorry state of education without finding points of clarity or potential solutions. A gripe session would follow. But if a precise question is posed—such as "What can be done to improve public education?"—then a more profitable area of discussion is opened up simply by placing a focus on the search for a concrete solution step. One or more judgments can be phrased in the form of debate propositions, motions for parliamentary debate, or bills for legislative assemblies. The statements "Resolved: That the federal government should implement a program of charter schools in at-risk communities" and "Resolved: That the state of Florida should adopt a school voucher program" more clearly identify specific ways of dealing with educational problems in a manageable form, suitable for debate. They provide specific policies to be investigated and aid discussants in identifying points of difference.

To have a productive debate, which facilitates effective decision making by directing and placing limits on the decision to be made, the basis for argument should be clearly defined. If we merely talk about "homelessness" or "abortion" or "crime'\* or "global warming" we are likely to have an interesting discussion but not to establish profitable basis for argument. For example, the statement "Resolved: That the pen is mightier than the sword" is debatable, yet fails to provide much basis for clear argumentation. If we take this statement to mean that the written word is more effective than physical force for some purposes, we can identify a problem area: the comparative effectiveness of writing or physical force for a specific purpose.

Although we now have a general subject, we have not yet stated a problem. It is still too broad, too loosely worded to promote well-organized argument. What sort of writing are we concerned with—poems, novels, government documents, website development, advertising, or what? What does "effectiveness" mean in this context? What kind of physical force is being compared—fists, dueling swords, bazookas, nuclear weapons, or what? A more specific question might be. "Would a mutual defense treaty or a visit by our fleet be more effective in assuring Liurania of our support in a certain crisis?" The basis for argument could be phrased in a debate proposition such as "Resolved: That the United States should enter into a mutual defense treatv with Laurania." Negative advocates might oppose this proposition by arguing that fleet maneuvers would be a better solution. This is not to say that debates should completely avoid creative interpretation of the controversy by advocates, or that good debates cannot occur over competing interpretations of the controversy; in fact, these sorts of debates may be very engaging. The point is that debate is best facilitated by the guidance provided by focus on a particular point of difference, which will be outlined in the following discussion.

#### Competition mediated through fair play is a dialogical process that encourages argumentative testing and mutual recognition of personhood

**Rawls 58** – a leading figure in moral and political philosophy (John, Justice as Fairness, Philosophical Review, April, JSTOR)

Similarly, the acceptance of the duty of fair play by participants in a common practice is a reflection in each person of the recognition of the aspirations and interests of the others to be realized by their joint activity. Failing a special explanation, their acceptance of it is a necessary part of the criterion for their recognizing one another as persons with similar interests and capacities, as the conception of their relations in the general position supposes them to be. Otherwise they would show no recognition of one another as persons with similar capacities and interests, and indeed, in some cases perhaps hypothetical, they would not recognize one another as persons at all, but as complicated objects involved in a complicated activity. To recognize another as a person one must respond to him and act towards him in certain ways; and these ways are intimately connected with the various prima facie duties. Acknowledging these duties in some degree, and so having the elements of morality, is not a matter of choice, or of intuiting moral qualities, or a matter of the expression of feelings or attitudes (the three interpretations between which philosophical opinion frequently oscillates); it is simply the possession of one of the forms of conduct in which the recognition of others as persons is manifested. These remarks are unhappily obscure. Their main purpose here, however, is to forestall, together with the remarks in Section 4, the misinterpretation that, on the view presented, the acceptance of justice and the acknowledgment of the duty of fair play depends in every day life solely on there being a de facto balance of forces between the parties. It would indeed be foolish to underestimate the importance of such a balance in securing justice; but it is not the only basis thereof. The recognition of one another as persons with similar interests and capacities engaged in a common practice must, failing a special explanation, show itself in the acceptance of the principles of justice and the acknowledgment of the duty of fair play.

#### Topical fairness requirements are key to effective dialogue—strategy and prep imbalance makes the discussion one-sided and subverts any meaningful neg role

**Galloway 7** – professor of communications at Samford University (Ryan, “Dinner And Conversation At The Argumentative Table: Reconceptualizing Debate As An Argumentative Dialogue”, Contemporary Argumentation and Debate, Vol. 28 (2007), ebsco)

Debate as a dialogue sets an argumentative table, where all parties receive a relatively fair opportunity to voice their position. Anything that fails to allow participants to have their position articulated denies one side of the argumentative table a fair hearing. The affirmative side is set by the topic and fairness requirements. While affirmative teams have recently resisted affirming the topic, in fact, the topic selection process is rigorous, taking the relative ground of each topic as its central point of departure.¶ Setting the affirmative reciprocally sets the negative. The negative crafts approaches to the topic consistent with affirmative demands. The negative crafts disadvantages, counter-plans, and critical arguments premised on the arguments that the topic allows for the affirmative team. According to fairness norms, each side sits at a relatively balanced argumentative table.¶ When one side takes more than its share, competitive equity suffers. However, it also undermines the respect due to the other involved in the dialogue. When one side excludes the other, it fundamentally denies the personhood of the other participant (Ehninger, 1970, p. 110). A pedagogy of debate as dialogue takes this respect as a fundamental component. A desire to be fair is a fundamental condition of a dialogue that takes the form of a demand for equality of voice. **Far from** being **a banal request for links** to a disadvantage, fairness is a demand for respect, a demand to be heard, a demand that a voice backed by literally months upon **months of preparation**, research, and critical thinking not be silenced.¶ Affirmative cases that suspend basic fairness norms **operate to exclude** particular negative strategies. Unprepared, one side comes to the argumentative table unable to meaningfully participate in a dialogue. They are unable to “understand what ‘went on…’” and are left to the whims of time and power (Farrell, 1985, p. 114). Hugh Duncan furthers this line of reasoning:¶ Opponents not only tolerate but honor and respect each other because in doing so they enhance their own chances of thinking better and reaching sound decisions. Opposition is necessary because it sharpens thought in action. We assume that argument, discussion, and talk, among free an informed people who subordinate decisions of any kind, because it is only through such discussion that we reach agreement which binds us to a common cause…If we are to be equal…relationships among equals must find expression in many formal and informal institutions (Duncan, 1993, p. 196-197).¶ **Debate compensates for the exigencies of the world by offering a framework that maintains equality for the sake of the conversation** (Farrell, 1985, p. 114).¶ For example, an affirmative case on the 2007-2008 college topic might defend neither state nor international action in the Middle East, and yet claim to be germane to the topic in some way. The case essentially denies the arguments that state action is oppressive or that actions in the international arena are philosophically or pragmatically suspect. Instead of allowing for the dialogue to be modified by the interchange of the affirmative case and the negative response, the affirmative subverts any meaningful role to the negative team, preventing them from offering effective “counter-word” and undermining the value of a meaningful exchange of speech acts. **Germaneness and other substitutes for topical action do not accrue the dialogical benefits** of topical advocacy.

#### Game spaces like debate are distinct from other forms of education and public speaking. There has to be a balance of ground or else one side claims the moral high ground and creates a de facto monologue

**Hanghoj 2008** – PhD, assistant professor, School of Education, University of Aarhus, also affiliated with the Danish Research Centre on Education and Advanced Media Materials, located at the Institute of Literature, Media and Cultural Studies at the University of Southern Denmark (Thorkild, http://static.sdu.dk/mediafiles/Files/Information\_til/Studerende\_ved\_SDU/Din\_uddannelse/phd\_hum/afhandlinger/2009/ThorkilHanghoej.pdf)

Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, debate games differ from textbooks and everyday classroom instruction as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually endless possibilities for researching, preparing, presenting, debating and evaluating a variety of key political issues. Consequently, the actual process of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation requires a balance between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which the teacher never learns anything new from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth instructs someone who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

#### Policy debates require positions that upset ideologies—side switching as a model for deliberation is valuable because it’s distinct from pure discussion

**Gutmann and Thompson 1996** – \*president of Penn, former professor at Princeton, \*\* Alfred North Whitehead Professor of Political Philosophy at Harvard (Amy and Dennis, “Democracy and disagreement”, p. 1)

OF THE CHALLENGES that American democracy faces today, none is more formidable than the problem of moral disagreement. Neither the theory nor the practice of democratic politics has so far found an adequate way to cope with conflicts about fundamental values. We address the challenge of moral disagreement here by developing a conception of democracy that secures a central place for moral discussion in political life.

Along with a growing number of other political theorists, we call this conception deliberative democracy. The core idea is simple: when citizens or their representatives disagree morally, they should continue to reason together to reach mutually acceptable decisions. But the meaning and implications of the idea are complex. Although the idea has a long history, it is still in search of a theory. We do not claim that this book provides a comprehensive theory of deliberative democracy, but we do hope that it contributes toward its future development by showing the kind of delib-eration that is possible and desirable in the face of moral disagreement in democracies.

Some scholars have criticized liberal political theory for neglecting moral deliberation. Others have analyzed the philosophical foundations of deliberative democracy, and still others have begun to explore institutional reforms that would promote deliberation. Yet nearly all of them stop at the point where deliberation itself begins. None has systematically examined the substance of deliberation—the theoretical principles that should guide moral argument and their implications for actual moral disagreements about public policy. That is our subject, and it takes us into the everyday forums of democratic politics, where moral argument regularly appears but where theoretical analysis too rarely goes.

Deliberative democracy involves reasoning about politics, and nothing has been more controversial in political philosophy than the nature of reason in politics. We do not believe that these controversies have to be settled before deliberative principles can guide the practice of democracy. Since on occasion citizens and their representatives already engage in the kind of reasoning that those principles recommend, deliberative democracy simply asks that they do so more consistently and comprehensively. The best way to prove the value of this kind of reasoning is to show its role in arguments about specific principles and policies, and its contribution to actual political debates. That is also ultimately the best justification for our conception of deliberative democracy itself. But to forestall possible misunderstandings of our conception of deliberative democracy, we offer some preliminary remarks about the scope and method of this book.

The aim of the moral reasoning that our deliberative democracy pre-scribes falls between impartiality, which requires something like altruism, and prudence, which demands no more than enlightened self-interest. Its first principle is reciprocity, the subject of Chapter 2, but no less essential are the other principles developed in later chapters. When citizens reason reciprocally, they seek fair terms of social cooperation for their own sake; they try to find mutually acceptable ways of resolving moral disagreements.

The precise content of reciprocity is difficult to determine in theory, but its general countenance is familiar enough in practice. It can be seen in the difference between acting in one's self-interest (say, taking advantage of a legal loophole or a lucky break) and acting fairly (following rules in the spirit that one expects others to adopt). In many of the controversies dis-cussed later in the book, the possibility of any morally acceptable resolution depends on citizens' reasoning beyond their narrow self-interest and considering what can be justified to people who reasonably disagree with them. Even though the quality of deliberation and the conditions under which it is conducted are far from ideal in the controversies we consider, the fact that in each case some citizens and some officials make arguments consistent with reciprocity suggests that a deliberative perspective is not Utopian.

To clarify what reciprocity might demand under non-ideal conditions, we develop a distinction between deliberative and nondeliberative disa-greement. Citizens who reason reciprocally can recognize that a position is worthy of moral respect even when they think it morally wrong. They can believe that a moderate pro-life position on abortion, for example, is morally respectable even though they think it morally mistaken. (The abortion example—to which we often return in the book—is meant to be illustrative. For readers who deny that there is any room for deliberative disagreement on abortion, other political controversies can make the same point.) The presence of deliberative disagreement has important implications for how citizens treat one another and for what policies they should adopt. When a disagreement is not deliberative (for example, about a policy to legalize discrimination against blacks and women), citizens do not have any obligations of mutual respect toward their opponents. In deliberative disagreement (for example, about legalizing abortion), citizens should try to accommodate the moral convictions of their opponents to the greatest extent possible, without compromising their own moral convictions. We call this kind of accommodation an economy of moral disagreement, and believe that, though neglected in theory and practice, it is essential to a morally robust democratic life.

Although both of us have devoted some of our professional life to urging these ideas on public officials and our fellow citizens in forums of practical politics, this book is primarily the product of scholarly rather than political deliberation. Insofar as it reaches beyond the academic community, it is addressed to citizens and officials in their more reflective frame of mind. Given its academic origins, some readers may be inclined to complain that only professors could be so unrealistic as to believe that moral reasoning can help solve political problems. But such a complaint would misrepresent our aims.

To begin with, we do not think that academic discussion (whether in scholarly journals or college classrooms) is a model for moral deliberation in politics. Academic discussion need not aim at justifying a practical decision, as deliberation must. Partly for this reason, academic discussion is likely to be insensitive to the contexts of ordinary politics: the pressures of power, the problems of inequality, the demands of diversity, the exigencies of persuasion. Some critics of deliberative democracy show a similar insensitivity when they judge actual political deliberations by the standards of ideal philosophical reflection. Actual deliberation is inevitably defective, but so is philosophical reflection practiced in politics. The appropriate comparison is between the ideals of democratic deliberation and philosophical reflection, or between the application of each in the non-ideal circumstances of politics.

We do not assume that politics should be a realm where the logical syllogism rules. Nor do we expect even the more appropriate standard of mutual respect always to prevail in politics. A deliberative perspective sometimes justifies bargaining, negotiation, force, and even violence. It is partly because moral argument has so much unrealized potential in dem-ocratic politics that we believe it deserves more attention. Because its place in politics is so precarious, the need to find it a more secure home and to nourish its development is all the more pressing. Yet because it is also already part of our common experience, we have reason to hope that it can survive and even prosper if philosophers along with citizens and public officials better appreciate its value in politics.

Some readers may still wonder why deliberation should have such a prominent place in democracy. Surely, they may say, citizens should care more about the justice of public policies than the process by which they are adopted, at least so long as the process is basically fair and at least minimally democratic. One of our main aims in this book is to cast doubt on the dichotomy between policies and process that this concern assumes. Having good reason as individuals to believe that a policy is just does not mean that collectively as citizens we have sufficient justification to legislate on the basis of those reasons. The moral authority of collective judgments about policy depends in part on the moral quality of the process by which citizens collectively reach those judgments. Deliberation is the most appropriate way for citizens collectively to resolve their moral disagreements not only about policies but also about the process by which policies should be adopted. Deliberation is not only a means to an end, but also a means for deciding what means are morally required to pursue our common ends.

#### The impact outweighs—deliberative debate models impart skills vital to respond to existential threats

Christian O. **Lundberg 10** Professor of Communications @ University of North Carolina, Chapel Hill, “Tradition of Debate in North Carolina” in Navigating Opportunity: Policy Debate in the 21st Century By Allan D. Louden, p. 311

The second major problem with the critique that identifies a naivety in articulating debate and democracy is that it presumes that the primary pedagogical outcome of debate is speech capacities. But the democratic capacities built by debate are not limited to speech—as indicated earlier, debate builds capacity for critical thinking, analysis of public claims, informed decision making, and better public judgment. If the picture of modem political life that underwrites this critique of debate is a pessimistic view of increasingly labyrinthine and bureaucratic administrative politics, rapid scientific and technological change outpacing the capacities of the citizenry to comprehend them, and ever-expanding insular special-interest- and money-driven politics, it is a puzzling solution, at best, to argue that these conditions warrant giving up on debate. If democracy is open to rearticulation, it is open to rearticulation precisely because as the challenges of modern political life proliferate, the citizenry's capacities can change, which is one of the primary reasons that theorists of democracy such as Ocwey in The Public awl Its Problems place such a high premium on education (Dewey 1988,63, 154). Debate provides an indispensible form of education in the modem articulation of democracy because it builds precisely the skills that allow the citizenry to research and be informed about policy decisions that impact them, to son rhroueh and evaluate the evidence for and relative merits of arguments for and against a policy in an increasingly infonnation-rich environment, and to prioritize their time and political energies toward policies that matter the most to them.

The merits of debate as a tool for building democratic capacity-building take on a special significance in the context of information literacy. John Larkin (2005, HO) argues that one of the primary failings of modern colleges and universities is that they have not changed curriculum to match with the challenges of a new information environment. This is a problem for the course of academic study in our current context, but perhaps more important, argues Larkin, for the future of a citizenry that will need to make evaluative choices against an increasingly complex and multimediatcd information environment (ibid-). Larkin's study tested the benefits of debate participation on information-literacy skills and concluded that in-class debate participants reported significantly higher self-efficacy ratings of their ability to navigate academic search databases and to effectively search and use other Web resources:

To analyze the self-report ratings of the instructional and control group students, we first conducted a multivariate analysis of variance on all of the ratings, looking jointly at the effect of instmction/no instruction and debate topic . . . that it did not matter which topic students had been assigned . . . students in the Instnictional [debate) group were significantly more confident in their ability to access information and less likely to feel that they needed help to do so----These findings clearly indicate greater self-efficacy for online searching among students who participated in (debate).... These results constitute strong support for the effectiveness of the project on students' self-efficacy for online searching in the academic databases. There was an unintended effect, however: After doing ... the project, instructional group students also felt more confident than the other students in their ability to get good information from Yahoo and Google. It may be that the library research experience increased self-efficacy for any searching, not just in academic databases. (Larkin 2005, 144)

Larkin's study substantiates Thomas Worthcn and Gaylcn Pack's (1992, 3) claim that debate in the college classroom plays a critical role in fostering the kind of problem-solving skills demanded by the increasingly rich media and information environment of modernity. Though their essay was written in 1992 on the cusp of the eventual explosion of the Internet as a medium, Worthcn and Pack's framing of the issue was prescient: the primary question facing today's student has changed from how to best research a topic to the crucial question of learning how to best evaluate which arguments to cite and rely upon from an easily accessible and veritable cornucopia of materials.

There are, without a doubt, a number of important criticisms of employing debate as a model for democratic deliberation. But cumulatively, the evidence presented here warrants strong support for expanding debate practice in the classroom as a technology for enhancing democratic deliberative capacities. The unique combination of critical thinking skills, research and information processing skills, oral communication skills, and capacities for listening and thoughtful, open engagement with hotly contested issues argues for debate as a crucial component of a rich and vital democratic life. In-class debate practice both aids students in achieving the best goals of college and university education, and serves as an unmatched practice for creating thoughtful, engaged, open-minded and self-critical students who are open to the possibilities of meaningful political engagement and new articulations of democratic life.

Expanding this practice is crucial, if only because the more we produce citizens that can actively and effectively engage the political process, the more likely we are to produce revisions of democratic life that are necessary if democracy is not only to survive, but to thrive. Democracy faces a myriad of challenges, including: domestic and international issues of class, gender, and racial justice; wholesale environmental destruction and the potential for rapid climate change; emerging threats to international stability in the form of terrorism, intervention and new possibilities for great power conflict; and increasing challenges of rapid globalization including an increasingly volatile global economic structure. More than any specific policy or proposal, an informed and active citizenry that deliberates with greater skill and sensitivity provides one of the best hopes for responsive and effective democratic governance, and by extension, one of the last best hopes for dealing with the existential challenges to democracy [in an] increasingly complex world.

#### Deliberation is the best alternative to activism because it requires continual testing that bolsters advocacy and inclusion—refusal of side switching leads to group polarization and isolation

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

Nonetheless, the deliberativist conception of reasonableness differs from the activist’s in at least one crucial respect. On the deliberativist view, a necessary condition for reasonableness is the willingness not only to offer justifications for one’s own views and actions, but also to listen to criticisms, objections, and the justificatory reasons that can be given in favor of alternative proposals.

In light of this further stipulation, we may say that, on the deliberative democrat’s view, reasonable citizens are responsive to reasons, their views are ‘reason tracking’. Reasonableness, then, entails an acknowledgement on the part of the citizen that her current views are possibly mistaken, incomplete, and in need of revision. Reasonableness is hence a two-way street: the reasonable citizen is able and willing to offer justifications for her views and actions, but is also prepared to consider alternate views, respond to criticism, answer objections, and, if necessary, revise or abandon her views. In short, reasonable citizens do not only believe and act for reasons, they aspire to believe and act according to the best reasons; consequently, they recognize their own fallibility in weighing reasons and hence engage in public deliberation in part for the sake of improving their views.15 ‘Reasonableness’ as the deliberative democrat understands it is constituted by a willingness to participate in an ongoing public discussion that inevitably involves processes of self-examination by which one at various moments rethinks and revises one’s views in light of encounters with new arguments and new considerations offered by one’s fellow deliberators. Hence Gutmann and Thompson write:

Citizens who owe one another justifications for the laws that they seek to impose must take seriously the reasons their opponents give. Taking seriously the reasons one’s opponents give means that, at least for a certain range of views that one opposes, one must acknowledge the possibility that an opposing view may be shown to be correct in the future. This acknowledgement has implications not only for the way they regard their own views. It imposes an obligation to continue to test their own views, seeking forums in which the views can be challenged, and keeping open the possibility of their revision or even rejection.16 (2000: 172)

That Young’s activist is not reasonable in this sense is clear from the ways in which he characterizes his activism. He claims that ‘Activities of protest, boycott, and disruption are more appropriate means for getting citizens to think seriously about what until then they have found normal and acceptable’ (106); activist tactics are employed for the sake of ‘bringing attention’ to injustice and making ‘a wider public aware of institutional wrongs’ (107). These characterizations suggest the presumption that questions of justice are essentially settled; the activist takes himself to know what justice is and what its implementation requires. He also believes he knows that those who oppose him are either the power-hungry beneficiaries of the unjust status quo or the inattentive and unaware masses who do not ‘think seriously’ about the injustice of the institutions that govern their lives and so unwittingly accept them. Hence his political activity is aimed exclusively at enlisting other citizens in support of the cause to which he is tenaciously committed.

The activist implicitly holds that there could be no reasoned objection to his views concerning justice, and no good reason to endorse those institutions he deems unjust. The activist presumes to know that no deliberative encounter could lead him to reconsider his position or adopt a different method of social action; he ‘declines’ to ‘engage persons he disagrees with’ (107) in discourse because he has judged on a priori grounds that all opponents are either pathetically benighted or balefully corrupt. When one holds one’s view as the only responsible or just option, there is no need for reasoning with those who disagree, and hence no need to be reasonable.

According to the deliberativist, this is the respect in which the activist is unreasonable. The deliberativist recognizes that questions of justice are difficult and complex. This is the case not only because justice is a notoriously tricky philosophical concept, but also because, even supposing we had a philosophically sound theory of justice, questions of implementation are especially thorny. Accordingly, political philosophers, social scientists, economists, and legal theorists continue to work on these questions. In light of much of this literature, it is difficult to maintain the level of epistemic confidence in one’s own views that the activist seems to muster; thus the deliberativist sees the activist’s confidence as evidence of a lack of honest engagement with the issues. A possible outcome of the kind of encounter the activist ‘declines’ (107) is the realization that the activist’s image of himself as a ‘David to the Goliath of power wielded by the state and corporate actors’ (106) is naïve. That is, the deliberativist comes to see, through processes of public deliberation, that there are often good arguments to be found on all sides of an important social issue; reasonableness hence demands that one must especially engage the reasons of those with whom one most vehemently disagrees and be ready to revise one’s own views if necessary. Insofar as the activist holds a view of justice that he is unwilling to put to the test of public criticism, he is unreasonable. Furthermore, insofar as the activist’s conception commits him to the view that there could be no rational opposition to his views, he is literally unable to be reasonable. Hence the deliberative democrat concludes that activism, as presented by Young’s activist, is an unreasonable model of political engagement.

The dialogical conception of reasonableness adopted by the deliberativist also provides a response to the activist’s reply to the charge that he is engaged in interest group or adversarial politics. Recall that the activist denied this charge on the grounds that activism is aimed not at private or individual interests, but at the universal good of justice. But this reply also misses the force of the posed objection. On the deliberativist view, the problem with interest-based politics does not derive simply from the source (self or group), scope (particular or universal), or quality (admirable or deplorable) of the interest, but with the concept of interests as such. Not unlike ‘preferences’, ‘interests’ typically function in democratic theory as fixed dispositions that are non-cognitive and hence unresponsive to reasons. Insofar as the activist sees his view of justice as ‘given’ and not open to rational scrutiny, he is engaged in the kind of adversarial politics the deliberativist rejects.

The argument thus far might appear to turn exclusively upon different conceptions of what reasonableness entails. The deliberativist view I have sketched holds that reasonableness involves some degree of what we may call epistemic modesty. On this view, the reasonable citizen seeks to have her beliefs reflect the best available reasons, and so she enters into public discourse as a way of testing her views against the objections and questions of those who disagree; hence she implicitly holds that her present view is open to reasonable critique and that others who hold opposing views may be able to offer justifications for their views that are at least as strong as her reasons for her own. Thus any mode of politics that presumes that discourse is extraneous to questions of justice and justification is unreasonable. The activist sees no reason to accept this. Reasonableness for the activist consists in the ability to act on reasons that upon due reflection seem adequate to underwrite action; discussion with those who disagree need not be involved. According to the activist, there are certain cases in which he does in fact know the truth about what justice requires and in which there is no room for reasoned objection. Under such conditions, the deliberativist’s demand for discussion can only obstruct justice; it is therefore irrational.

It may seem that we have reached an impasse. However, there is a further line of criticism that the activist must face. To the activist’s view that at least in certain situations he may reasonably decline to engage with persons he disagrees with (107), the deliberative democrat can raise the phenomenon that Cass Sunstein has called ‘group polarization’ (Sunstein, 2003; 2001a: ch. 3; 2001b: ch. 1). To explain: consider that political activists cannot eschew deliberation altogether; they often engage in rallies, demonstrations, teach-ins, workshops, and other activities in which they are called to make public the case for their views. Activists also must engage in deliberation among themselves when deciding strategy. Political movements must be organized, hence those involved must decide upon targets, methods, and tactics; they must also decide upon the content of their pamphlets and the precise messages they most wish to convey to the press. Often the audience in both of these deliberative contexts will be a self-selected and sympathetic group of like-minded activists.

Group polarization is a well-documented phenomenon that has ‘been found all over the world and in many diverse tasks’; it means that ‘members of a deliberating group predictably move towards a more extreme point in the direction indicated by the members’ predeliberation tendencies’ (Sunstein, 2003: 81–2). Importantly, in groups that ‘engage in repeated discussions’ over time, the polarization is even more pronounced (2003: 86). Hence discussion in a small but devoted activist enclave that meets regularly to strategize and protest ‘should produce a situation in which individuals hold positions more extreme than those of any individual member before the series of deliberations began’ (ibid.).17

The fact of group polarization is relevant to our discussion because the activist has proposed that he may reasonably decline to engage in discussion with those with whom he disagrees in cases in which the requirements of justice are so clear that he can be confident that he has the truth. Group polarization suggests that deliberatively confronting those with whom we disagree is essential even when we have the truth. For even if we have the truth, if we do not engage opposing views, but instead deliberate only with those with whom we agree, our view will shift progressively to a more extreme point, and thus we lose the truth. In order to avoid polarization, deliberation must take place within heterogeneous ‘argument pools’ (Sunstein, 2003: 93). This of course does not mean that there should be no groups devoted to the achievement of some common political goal; it rather suggests that engagement with those with whom one disagrees is essential to the proper pursuit of justice. Insofar as the activist denies this, he is unreasonable.

#### Their critiques of debate miss the mark—defending a topic that involves the state for the sake of deliberation is distinct from accepting it, and limiting out some arguments for the sake of that deliberation is a more productive discourse that solves the aff better

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

These two serious activist challenges may be summarized as follows. First, the activist has claimed that political discussion must always take place within the context of existing institutions that due to structural inequality grant to certain individuals the power to set discussion agendas and constrain the kinds of options open for consideration prior to any actual encounter with their deliberative opponents; the deliberative process is in this sense rigged from the start to favor the status quo and disadvantage the agents of change. Second, the activist has argued that political discussion must always take place by means of antecedent ‘discourses’ or vocabularies which establish the conceptual boundaries of the deliberation and hence may themselves be hegemonic or systematically distorting; the deliberative process is hence subject to the distorting influence of ideology at the most fundamental level, and deliberative democrats do not have the resources by which such distortions can be addressed. As they aim to establish that the deliberativist’s program is inconsistent with her own democratic objectives, this pair of charges is, as Young claims, serious (118). However, I contend that the deliberativist has adequate replies to them both.

Part of the response to the first challenge is offered by Young herself. The deliberative democrat does not advocate public political discussion only at the level of state policy, and so does not advocate a program that must accept as given existing institutional settings and contexts for public discussion. Rather, the deliberativist promotes an ideal of democratic politics according to which deliberation occurs at all levels of social association, including households, neighborhoods, local organizations, city boards, and the various institutions of civil society. The longrun aim of the deliberative democrat is to cultivate a more deliberative polity, and the deliberativist claims that this task must begin at more local levels and apart from the state and its policies. We may say that deliberativism promotes a ‘decentered’ (Habermas, 1996: 298) view of public deliberation and a ‘pluralistic’ (Benhabib, 2002: 138) model of the public sphere; in other words, the deliberative democrat envisions a ‘multiple, anonymous, heterogeneous network of many publics and public conversations’ (Benhabib, 1996b: 87). The deliberativist is therefore committed to the creation of ‘an inclusive deliberative setting in which basic social and economic structures can be examined’; these settings ‘for the most part must be outside ongoing settings of official policy discussion’ (115).

Although Young characterizes this decentered view of political discourse as requiring that deliberative democrats ‘withdraw’ (115) from ‘existing structural circumstances’ (118), it is unclear that this follows. There certainly is no reason why the deliberativist must choose between engaging arguments within existing deliberative sites and creating new ones that are removed from established institutions. There is no need to accept Young’s dichotomy; the deliberativist holds that work must be done both within existing structures and within new contexts. As Bohman argues,

Deliberative politics has no single domain; it includes such diverse activities as formulating and achieving collective goals, making policy decisions and means and ends, resolving conflicts of interest and principle, and solving problems as they emerge in ongoing social life. Public deliberation therefore has to take many forms. (1996: 53)

The second challenge requires a detailed response, so let us begin with a closer look at the proposed argument. The activist has moved quickly from the claim that discourses can be systematically distorting to the claim that all political discourse operative in our current contexts is systematically distorting. The conclusion is that properly democratic objectives cannot be pursued by deliberative means. The first thing to note is that, as it stands, the conclusion does not follow from the premises; the argument is enthymematic. What is required is the additional premise that the distorting features of discussion cannot be corrected by further discussion. That discussion cannot rehabilitate itself is a crucial principle in the activist’s case, but is nowhere argued.

Moreover, the activist has given no arguments to support the claim that present modes of discussion are distorting, and has offered no analysis of how one might detect such distortions and discern their nature.20 Rather than providing a detailed analysis of the phenomenon of systematic distortion, Young provides (in her own voice) two examples of discourses that she claims are hegemonic. First she considers discussions of poverty that presume the adequacy of labor market analyses; second she cites discussions of pollution that presume that modern economies must be based on the burning of fossil-fuels. In neither case does she make explicit what constitutes the distortion. At most, her examples show that some debates are framed in ways that render certain types of proposals ‘out of bounds’. But surely this is the case in any discussion, and it is not clear that it is in itself always a bad thing or even ‘distorting’. Not all discursive exclusions are distortions because the term ‘distortion’ implies that something is being excluded that should be included.

Clearly, then, there are some dialectical exclusions that are entirely appropriate. For example, it is a good thing that current discussions of poverty are often cast in terms that render white supremacist ‘solutions’ out of bounds; it is also good that pollution discourses tend to exclude fringe-religious appeals to the cleansing power of mass prayer. This is not to say that opponents of market analyses of poverty are on par with white supremacists or that Greens are comparable to fringe-religious fanatics; it is rather to press for a deeper analysis of the discursive hegemony that the activist claims undermines deliberative democracy. It is not clear that the requested analysis, were it provided, would support the claim that systematic distortions cannot be addressed and remedied within the processes of continuing discourse. There are good reasons to think that continued discussion among persons who are aware of the potentially hegemonic features of discourse can correct the distorting factors that exist and block the generation of new distortions.

As Young notes (116), James Bohman (1996: ch. 3) has proposed a model of deliberation that incorporates concerns about distorted communication and other forms of deliberative inequality within a general theory of deliberative democracy; the recent work of Seyla Benhabib (2002) and Robert Goodin (2003: chs 9–11) aims for similar goals. Hence I conclude that, as it stands, the activist’s second argument is incomplete, and as such the force of the difficulty it raises for deliberative democracy is not yet clear. If the objection is to stick, the activist must first provide a more detailed examination of the hegemonic and distorting properties of discourse; he must then show both that prominent modes of discussion operative in our democracy are distorting in important ways and that further discourse cannot remedy these distortions.

#### Deliberation works best in competitive, agonistic spaces where ideology is shaken by testing and revaluation—this is key to make competition productive

**Roberts-Miller 2003** – associate professor of rhetoric at the University of Texas (Patricia, JAC 22.2, “Fighting Without Hatred: Hannah Arendt's Agonistic Rhetoric”, http://www.jaconlinejournal.com/archives/vol22.3/miller-fighting.pdf)

Totalitarianism and the Competitive Space of Agonism

Arendt is probably most famous for her analysis of totalitarianism (especially her The Origins of Totalitarianism and Eichmann in Jerusalem), but the recent attention has been on her criticism of mass culture (The Human Condition). Arendt's main criticism of the current human condition is that the common world of deliberate and joint action is fragmented into solipsistic and unreflective behavior. In an especially lovely passage, she says that in mass society people are all **imprisoned in the subjectivity of their own singular experience**, which does not cease to be singular if the same experience is multiplied innumerable times. The end of the common world has come when it is seen only under one aspect and is permitted to present itself in only one perspective. (Human 58)

What Arendt so beautifully describes is that isolation and individualism are not corollaries, and may even be antithetical because obsession with one's own self and the particularities of one's life prevents one from engaging in conscious, deliberate, collective action. Individuality, unlike isolation, depends upon a collective with whom one argues in order to direct the common life. Self-obsession, even (especially?) when coupled with isolation from one' s community is far from apolitical; it has political consequences. Perhaps a better way to put it is that it is political precisely because it aspires to be apolitical. This fragmented world in which many people live simultaneously and even similarly but not exactly together is what Arendt calls the "social."

Arendt does not mean that group behavior is impossible in the realm of the social, but that social behavior consists "in some way of isolated individuals, incapable of solidarity or mutuality, who abdicate their human capacities and responsibilities to a projected 'they' or 'it,' with disastrous consequences, both for other people and eventually for themselves" (Pitkin 79). One can behave, but not act. For someone like Arendt, a German-assimilated Jew, one of the most frightening aspects of the Holocaust was the ease with which a people who had not been extraordinarily anti-Semitic could be put to work industriously and efficiently on the genocide of the Jews. And what was striking about the perpetrators of the genocide, ranging from minor functionaries who facilitated the murder transports up to major figures on trial at Nuremberg, was their constant and apparently sincere insistence that they were not responsible. For Arendt, this was not a peculiarity of the German people, but of the current human and heavily bureaucratic condition of twentieth-century culture: we do not consciously choose to engage in life's activities; we drift into them, or we do them out of a desire to conform. Even while we do them, we do not acknowledge an active, willed choice to do them; instead, we attribute our behavior to necessity, and we perceive ourselves as determined—determined by circumstance, by accident, by what "they" tell us to do. We do something from within the anonymity of a mob that we would never do as an individual; we do things for which we will not take responsibility. Yet, whether or not people acknowledge responsibility for the consequences of their actions, those consequences exist. Refusing to accept responsibility can even make those consequences worse, in that the people who enact the actions in question, because they do not admit their own agency, cannot be persuaded to stop those actions. They are simply doing their jobs. In a totalitarian system, however, everyone is simply doing his or her job; there never seems to be anyone who can explain, defend, and change the policies. Thus, it is, as Arendt says, rule by nobody.

It is illustrative to contrast Arendt's attitude toward discourse to Habermas'. While both are critical of modern bureaucratic and totalitarian systems, Arendt's solution is the playful and **competitive space** of agonism; it is not the rational-critical public sphere. The "actual content of political life" is "the joy and the gratification that arise out of being in company with our peers, out of acting together and appearing in public, out of inserting ourselves into the world by word and deed, thus acquiring and sustaining our personal identity and beginning something entirely new" ("Truth" 263). According to Seyla Benhabib, Arendt's public realm emphasizes the assumption of competition, and it "represents that space of appearances in which moral and political greatness, heroism, and preeminence are revealed, displayed, shared with others. This is a competitive space in which one competes for recognition, precedence, and acclaim" (78). These qualities are displayed, but not entirely for purposes of acclamation; they are not displays of one's self, but of ideas and arguments, of one's thought. When Arendt discusses Socrates' thinking in public, she emphasizes his performance: "He performed in the marketplace the way the flute-player performed at a banquet. It is sheer performance, sheer activity"; nevertheless, it was thinking: "What he actually did was to make public, in discourse, the thinking process" {Lectures 37). Pitkin summarizes this point: "Arendt says that the heroism associated with politics is not the mythical machismo of ancient Greece but something more like the existential leap into action and public exposure" (175-76). Just as it is not machismo, although it does have considerable ego involved, so it is not instrumental rationality; Arendt's discussion of the kinds of discourse involved in public action include myths, stories, and personal narratives.

Furthermore, the competition is not ruthless; it does not imply a willingness to triumph at all costs. Instead, it involves something like having such a passion forideas and politics that one is willing to take risks. One tries to articulate the best argument, propose the best policy, design the best laws, make the best response. This is a risk in that one might lose; advancing an argument means that one must be **open to the criticisms** others will make of it. The situation is agonistic not because the participants manufacture or seek conflict, but because **conflict is a necessary consequence of difference**. This attitude is reminiscent of Kenneth Burke, who did not try to find a language free of domination but who instead theorized a way that the very tendency toward hierarchy in language might be used against itself (for more on this argument, see Kastely). Similarly, Arendt does **not** propose **a** public **realm of neutral**, rational **beings** who escape differences to live in the discourse of universals; she envisions one of different people who argue with passion, vehemence, and integrity.

Continued…

Eichmann perfectly exemplified what Arendt famously called the "banality of evil" but that might be better thought of as the bureaucratization of evil (or, as a friend once aptly put it, the evil of banality). That is, he was able to engage in mass murder because he was able not to think about it, especially not from the perspective of the victims, and he was able to exempt himself from personal responsibility by telling himself (and anyone else who would listen) that he was just following orders. It was the bureaucratic system that enabled him to do both. He was not exactly passive; he was, on the contrary, very aggressive in trying to do his duty. He behaved with the "ruthless, competitive exploitation" and "inauthen-tic, self-disparaging conformism" that characterizes those who people totalitarian systems(Pitkin 87).

Arendt's theorizing of totalitarianism has been justly noted as one of her strongest contributions to philosophy. She saw that a situation like Nazi Germany is different from the conventional understanding of a tyranny. Pitkin writes,

Totalitarianism cannot be understood, like earlier forms of domination, as the ruthless exploitation of some people by others, whether the motive be selfish calculation, irrational passion, or devotion to some cause. Understanding totalitarianism's essential nature requires solving the central mystery of the holocaust—the objectively useless and indeed dysfunctional, fanatical pursuit of a purely ideological policy, a pointless process to which the people enacting it have fallen captive. (87)

Totalitarianism is closely connected to bureaucracy; it is oppression by rules, rather than by people who have willfully chosen to establish certain rules. It is the triumph of the social.

Critics (both friendly and hostile) have paid considerable attention to Arendt's category of the "social," largely because, despite spending so much time on the notion, Arendt remains vague on certain aspects of it. Pitkin appropriately compares Arendt's concept of the social to the Blob, the type of monster that figured in so many post-war horror movies. That Blob was "an evil monster from outer space, entirely external to and separate from us [that] had fallen upon us intent on debilitating, absorbing, and ultimately destroying us, gobbling up our distinct individuality and turning us into robots that mechanically serve its purposes" (4).

Pitkin is critical of this version of the "social" and suggests that Arendt meant (or perhaps should have meant) something much more complicated. The simplistic version of the social-as-Blob can itself be an instance of Blob thinking; Pitkin's criticism is that Arendt talks at times as though the social comes from outside of us and has fallen upon us, turning us into robots. Yet, Arendt's major criticism of the social is that it involves seeing ourselves as victimized by something that comes from outside our own behavior. I agree with Pitkin that Arendt's most powerful descriptions of the social (and the other concepts similar to it, such as her discussion of totalitarianism, imperialism, Eichmann, and parvenus) emphasize that these processes are not entirely out of our control but that they happen to us when, and because, we keep refusing to make active choices. We create the social through negligence. It is not the sort of force in a Sorcerer's Apprentice, which once let loose cannot be stopped; on the contrary, it continues to exist because we structure our world to reward social behavior. Pitkin writes, "From childhood on, in virtually all our institutions, we reward euphemism, salesmanship, slogans, and we punish and suppress truth-telling, originality, thoughtful-ness. So we continually cultivate ways of (not) thinking that induce the social" (274). I want to emphasize this point, as it is important for thinking about criticisms of some forms of the social construction of knowledge: denying our own agency is what enables the social to thrive. To put it another way, theories of powerlessness are self-fulfilling prophecies.

Arendt grants that there are people who willed the Holocaust, but she insists that totalitarian systems result not so much from the Hitlers or Stalins as from the bureaucrats who may or may not agree with the established ideology but who enforce the rules for no stronger motive than a desire to avoid trouble with their superiors (see Eichmann and Life). They do not think about what they do. One might prevent such occurrences—or, at least, resist the modern tendency toward totalitarianism—by thought: "critical thought is in principle anti-authoritarian" (Lectures 38).

By "thought" Arendt does not mean eremitic contemplation; in fact, she has great contempt for what she calls "professional thinkers," refusing herself to become a philosopher or to call her work philosophy. Young-Bruehl, Benhabib, and Pitkin have each said that Heidegger represented just such a professional thinker for Arendt, and his embrace of Nazism epitomized the genuine dangers such "thinking" can pose (see Arendt's "Heidegger"). "Thinking" is not typified by the isolated contemplation of philosophers; it requires the **arguments of others** and close attention to the truth. It is easy to overstate either part of that harmony. One must consider carefully the arguments and viewpoints of others:

Political thought is representative. I form an opinion by considering a given issue from different viewpoints, by making present to my mind the standpoints of those who are absent; that is, I represent them. This process of representation does not blindly adopt the actual views of those who stand somewhere else, and hence look upon the world from a different perspective; this is a question neither of empathy, as though I tried to be or to feel like somebody else, nor of counting noses and joining a majority but of being and thinking in my own identity where actually I am not. The more people's standpoints I have present in my mind while I am pondering a given issue, and the better I can imagine how I would feel and think if I were in their place, the stronger will be my capacity for representative thinking and the more valid my final conclusions, my opinion. ("Truth" 241)

There are two points to emphasize in this wonderful passage. First, one does not get these standpoints in one's mind through imagining them, but through listening to them; thus, good thinking requires that one hear the arguments of other people. Hence, as Arendt says, "critical thinking, while still a solitary business, does not cut itself off from' all others.'" Thinking is, in this view, necessarily public discourse: critical thinking is possible "only where the standpoints of all others are open to inspection" (Lectures 43). Yet, it is not a discourse in which one simply announces one's stance; participants are interlocutors and not just speakers; they must listen. Unlike many current versions of public discourse, this view presumes that speech matters. It is not asymmetric manipulation of others, nor merely an economic exchange; it must be a world into which one enters and by which one might be changed.

Second, passages like the above make some readers think that Arendt puts too much faith in discourse and too little in truth (see Habermas). But Arendt is no crude relativist; she believes in truth, and she believes that there are facts that can be more or less distorted. She does not believe that reality is constructed by discourse, or that truth is indistinguishable from falsehood. She insists that the truth has a different pull on us and, consequently, that it has a difficult place in the world of the political. Facts are different from falsehood because, while they can be distorted or denied, especially when they are inconvenient for the powerful, they also have a certain positive force that falsehood lacks: "Truth, though powerless and always defeated in a head-on clash with the powers that be, possesses a strength of its own: whatever those in power may contrive, they are unable to discover or invent a viable substitute for it. Persuasion and violence can destroy truth, but they cannot replace it" ("Truth" 259).

Facts have a strangely resilient quality partially because a lie "tears, as it were, a hole in the fabric of factuality. As every historian knows, one can spot a lie by noticing incongruities, holes, or the junctures of patched-up places" ("Truth" 253). While she is sometimes discouraging about our ability to see the tears in the fabric, citing the capacity of totalitarian governments to create the whole cloth (see "Truth" 252-54), she is also sometimes optimistic. In Eichmann in Jerusalem, she repeats the story of Anton Schmidt—a man who saved the lives of Jews—and concludes that such stories cannot be silenced (230-32). For facts to exert power in the common world, however, these stories must be told. Rational truth (such as principles of mathematics) might be perceptible and demonstrable through individual contemplation, but "factual truth, on the contrary, is always related to other people: it concerns events and circumstances in which many are involved; it is established by witnesses and depends upon testimony; it exists only to the extent that it is spoken about, even if it occurs in the domain of privacy. It is political by nature" (23 8). Arendt is neither a positivist who posits an autonomous individual who can correctly perceive truth, nor a relativist who positively asserts the inherent relativism of all perception. Her description of how truth functions does not fall anywhere in the three-part expeditio so prevalent in bothrhetoric and philosophy: it is not expressivist, positivist, or social constructivist. Good thinking depends upon good public argument, and good public argument depends upon access to facts: "Freedom of opinion is a farce unless factual information is guaranteed" (238).

The sort of thinking that Arendt propounds takes the form of action only when it is public argument, and, as such, it is particularly precious: "For if no other test but the experience of being active, no other measure but the extent of sheer activity were to be applied to the various activities within the vita activa, it might well be that thinking as such would surpass them all" (Human 325). Arendt insists that it is "the same general rule— Do not contradict yourself (not your self but your thinking ego)—that determines both thinking and acting" (Lectures 3 7). In place of the mildly resentful conformism that fuels totalitarianism, Arendt proposes what Pitkin calls "a tough-minded, open-eyed readiness to perceive and judge reality for oneself, in terms of concrete experience and independent, critical theorizing" (274). The paradoxical nature of agonism (that it must involve both individuality and commonality) makes it difficult to maintain, as the temptation is great either to think one's own thoughts without reference to anyone else or to let others do one's thinking.

Arendt's Polemical Agonism

As I said, agonism does have its advocates within rhetoric—Burke, Ong, Sloane, Gage, and Jarratt, for instance—but while each of these theorists proposes a form of conflictual argument, not one of these is as adversarial as Arendt's. Agonism can emphasize persuasion, as does John Gage's textbook The Shape of Reason or William Brandt et al.'s The Craft of Writing. That is, the goal of the argument is to identify the disagreement and then construct a text that gains the assent of the audience. This is not the same as what Gage (citing Thomas Conley) calls "asymmetrical theories of rhetoric": theories that "presuppose an active speaker and a passive audience, a speaker whose rhetorical task is therefore to do something to that audience" ("Reasoned" 6). Asymmetric rhetoric is not and cannot be agonistic. Persuasive agonism still values conflict, disagreement, and equality among interlocutors, but it has the goal of reaching agreement, as when Gage says that the process of argument should enable one's reasons to be "understood and believed" by others (Shape 5; emphasis added).

Arendt's version is what one might call polemical agonism: it puts less emphasis on gaining assent, and it is exemplified both in Arendt's own writing and in Donald Lazere's "Ground Rules for Polemicists" and "Teaching the Political Conflicts." Both forms of agonism (persuasive and polemical) require substantive debate at two points in a long and recursive process. First, one engages in debate in order to invent one's argument; even silent thinking is a "dialogue of myself with myself (Lectures 40). The difference between the two approaches to agonism is clearest when one presents an argument to an audience assumed to be an opposition. In persuasive agonism, one plays down conflict and moves through reasons to try to persuade one's audience. In polemical agonism, however, one's intention is not necessarily to prove one's case, but to make public one' s thought in order to test it. In this way, communicability serves the same function in philosophy that replicability serves in the sciences; it is how one tests the validity of one's thought. In persuasive agonism, success is achieved through persuasion; in polemical agonism, success may be marked through the quality of subsequent controversy.

Arendt quotes from a letter Kant wrote on this point:

You know that I do not approach reasonable objections with the intention merely of refuting them, but that in thinking them over I always weave them into my judgments, and afford them the opportunity of overturning all my most cherished beliefs. I entertain the hope that by thus viewing my judgments impartially from the standpoint of others some third view that will improve upon my previous insight may be obtainable. {Lectures 42)

Kant's use of "impartial" here is interesting: he is not describing a stance that is free of all perspective; it is impartial only in the sense that it is not his own view. This is the same way that Arendt uses the term; she does not advocate any kind of positivistic rationality, but instead a "universal interdependence" ("Truth" 242). She does not place the origin of the "disinterested pursuit of truth" in science, but at "the moment when Homer chose to sing the deeds of the Trojans no less than those of the Achaeans, and to praise the glory of Hector, the foe and the defeated man, no less than the glory of Achilles, the hero of his kinfolk" ("Truth" 26263). It is useful to note that Arendt tends not to use the term "universal," opting more often for "common," by which she means both what is shared and what is ordinary, a usage that evades many of the problems associated with universalism while preserving its virtues (for a brief but provocative application of Arendt's notion of common, see Hauser 100-03).

In polemical agonism, there is a sense in which one' s main goal is not to persuade one's readers; persuading one's readers, if this means that they fail to see errors and flaws in one' s argument, might actually be a sort of failure. It means that one wishes to put forward an argument that makes clear what one's stance is and why one holds it, but with the intention of provoking critique and counterargument. Arendt describes Kant's "hope" for his writings not that the number of people who agree with him would increase but "that the circle of his examiners would gradually be enlarged" {Lectures 39); he wanted interlocutors, not acolytes.

**This is not consensus-based argument**, nor is it what is sometimes called "consociational argument," nor is this argument as mediation or conflict resolution. Arendt (and her commentators) use the term "fight," and they mean it. When Arendt describes the values that are necessary in our world, she says, "They are a sense of honor, desire for fame and glory, the spirit of fighting without hatred and 'without the spirit of revenge,' and indifference to material advantages" {Crises 167). Pitkin summarizes Arendt's argument: "Free citizenship presupposes the ability to fight— openly, seriously, with commitment, and about things that really matter—without fanaticism, without seeking to exterminate one's opponents" (266). My point here is two-fold: first, there is not a simple binary opposition between persuasive discourse and eristic discourse, the conflictual versus the collaborative, or argument as opposed to debate.

Second, while polemical agonism requires diversity among interlocutors, and thus seems an extraordinarily appropriate notion, and while it may be a useful corrective to too much emphasis on persuasion, it seems to me that polemical agonism could easily slide into the kind of wrangling that is simply frustrating. Arendt does not describe just how one is to keep the conflict useful. Although she rejects the notion that politics is "no more than a battlefield of partial, conflicting interests, where nothing countfs] but pleasure and profit, partisanship, and the lust for dominion," she does not say exactly how we are to know when we are engaging in the existential leap of argument versus when we are lusting for dominion ("Truth" 263).

Like other proponents of agonism, Arendt argues that rhetoric does not lead individuals or communities to **ultimate Truth**; it leads to decisions that will necessarily have to be reconsidered. Even Arendt, who tends to express a greater faith than many agonists (such as Burke, Sloane, or Kastely) in the ability of individuals to perceive truth, insists that self-deception is always a danger, so public **discourse is necessary as a form of testing** (see especially Lectures and "Truth"). She remarks that it is difficult to think beyond one's self-interest and that "nothing, indeed, is more common, even among highly sophisticated people, than the blind obstinacy that becomes manifest in lack of imagination and failure to judge" ("Truth" 242).

Agonism demands that one simultaneously trust and **doubt one' s own perceptions**, rely on one's own judgment and consider the judgments of others, think for oneself and imagine how others think. The question remains whether this is a kind of thought in which everyone can engage. Is the agonistic public sphere (whether political, academic, or scientific) only available to the few? Benhabib puts this criticism in the form of a question: "That is, is the 'recovery of the public space' under conditions of modernity necessarily an elitist and antidemocratic project that can hardly be reconciled with the demand for universal political emancipation and the universal extension of citizenship rights that have accompanied modernity since the American and French Revolutions?" (75). This is an especially troubling question not only because Arendt's examples of agonistic rhetoric are from elitist cultures, but also because of comments she makes, such as this one from The Human Condition: "As a living experience, thought has always been assumed, perhaps wrongly, to be known only to the few. It may not be presumptuous to believe that these few have not become fewer in our time" {Human 324).

Yet, there are important positive political consequences of agonism.

Arendt' s own promotion of the agonistic sphere helps to explain how the system could be actively moral. It is not an overstatement to say that a central theme in Arendt's work is the evil of conformity—the fact that the modern bureaucratic state makes possible extraordinary evil carried out by people who do not even have any ill will toward their victims. It does so by "imposing innumerable and various rules, all of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement" (Human 40). It keeps people from thinking, and it keeps them behaving. The agonistic model's celebration of achievement and verbal skill undermines the political force of conformity, so it is a force against the bureaucratizing of evil. If people think for themselves, they will resist dogma; if people think of themselves as one of many, they will empathize; if people can do both, they will resist totalitarianism. And if they talk about what they see, tell their stories, argue about their perceptions, and listen to one another—that is, engage in rhetoric—then they are engaging in antitotalitarian action.

In post-Ramistic rhetoric, it is a convention to have a thesis, and one might well wonder just what mine is—whether I am arguing for or against Arendt's agonism. Arendt does not lay out a pedagogy for us to follow (although one might argue that, if she had, it would lookmuch like the one Lazere describes in "Teaching"), so I am not claiming that greater attention to Arendt would untangle various pedagogical problems that teachers of writing face. Nor am I claiming that applying Arendt's views will resolve theoretical arguments that occupy scholarly journals. I am saying, on the one hand, that Arendt's connection of argument and thinking, as well as her perception that both serve to thwart totalitarianism, suggest that **agonal rhetoric (despite the current preference for collaborative rhetoric) is the best discourse for a diverse and inclusive public sphere**. On the other hand, Arendt's advocacy of agonal rhetoric is troubling (and, given her own admiration for Kant, this may be intentional), especially in regard to its potential elitism, masculinism, failure to describe just how to keep argument from collapsing into wrangling, and apparently cheerful acceptance of hierarchy. Even with these flaws, Arendt describes something we would do well to consider thoughtfully: a fact-based but not positivist, communally grounded but not relativist, adversarial but not violent, independent but not expressivist rhetoric.

#### Agonistic games require provisional rules like topicality—opposing the structures that enable clash is a reactive gesture hostile to struggle and competition

**Acampora 2002** – philosophy professor at Hunter College of the City University of New York (Fall, Christa Davis, International Studies in Philosophy, 34.3, “Of Dangerous Games and Dastardly Deeds”, http://christaacampora.com/uploads/news/id18/Dangerous%20Games.pdf)

**The agonistic game** is organized around the test of a specific quality the persons involved possess. When two runners compete, the quality tested is typically speed or endurance; when artists compete, it is creativity; craftsmen test their skills, etc.. The contest has a specific set of **rules and criteria** for determining (i.e., measuring) which person has excelled above the others in the relevant way. What is tested is a quality the individual competitors themselves possess; and external assistance is not permitted. (This is not to say that agonistic games occur only between individuals and that there can be no cooperative aspects of agonistic engagement. Clearly individuals can assert themselves and strive against other individuals within the context of a team competition, but groups can also work collectively to engage other groups agonistically. In those cases what is tested is the collective might, creativity, endurance, or organizational ability of the participating groups.) Ideally, agonistic endeavors draw out of the competitors the best performance of which they are capable. Although agonistic competition is sometimes viewed as a "zero-sum game," in which the winner takes all, in the cases that Nietzsche highlights as particularly productive agonistic institutions, all who participate are enhanced by their competition. **Winning must be a significant goal** of participation in agonistic contests, but it would seem that winning might be only one, and not necessarily the most important one, **among many reasons to participate** in such a competition. In his later writings, Nietzsche appears to be interested in thinking about how the structures of contests or struggles can facilitate different possibilities for competing well within them. In other words, he questions whether the structure of the game might limit the way in which one might be able to compete. His study of slavish morality illuminates well that concern.

II. Dastardly Deeds

The so-called "Good Eris," described in "Homer's Contest," supposedly allowed the unavoidable urge to strive for preeminence to find expression in perpetual competition in ancient Greek culture. In On the Genealogy of Morals, Nietzsche seeks to critique Christianity for advocating a kind of altruism, or selflessness, that is essentially self-destructive, and for perverting the urge to struggle by transforming it into a desire for annihilation. Read in light of "Homer's Contest," Nietzsche's Genealogy enables us to better grasp his conception of the value of contest as a possible arena for the revaluation of values, and it advances an understanding of the distinctions Nietzsche draws between creative and destructive forms of contest and modes of competing within them.

Nietzsche's On the Genealogy of Morals, a Streitschrift—a polemic, a writing that aims to provoke a certain kind of fighting—portrays a battle between "the two opposing values 'good and bad,' 'good and evil'." Nietzsche depicts slavish morality as that which condemns as evil what perpetuates the agon—namely, self-interest, jealousy, and the desire to legislate values— but rather than killing off the desire to struggle, slavish morality manipulates and redirects it. **Prevention of struggle** **is** considered by Nietzsche to be **hostile to life**: an "order thought of as sovereign and universal, not as a means in the struggle between power-complexes but as a means of preventing all struggle in general—... would be a principle hostile to life, an agent of the dissolution and destruction of man, an attempt to assassinate the future of man, a sign of weariness, a secret path to nothingness" (GM II:11). "The 'evolution' of a thing, a custom, an organ is [...] a succession of [...] more or less mutually independent processes of subduing, plus the resistances they encounter, the attempts at transformation for the purpose of defense and reaction, and the results of successful counteractions"(GM II:12). For Nietzsche, human beings, like nations, acquire their identity in their histories of struggles, accomplishments, and moments of resistance. The complete cessation of strife, for Nietzsche, robs a being of its activity, of its life.

In the second essay of the Genealogy, Nietzsche identifies the notion of conscience, which demands a kind of self-mortification, as an example of the kind of contest slavish morality seeks: "Hostility, cruelty, joy in persecuting, in attacking, in change, in destruction—all this turned against the possessors of such instinct: that is the origin of the 'bad conscience'" (GM II:16). Denied all enemies and resistances, finding nothing and no one with whom to struggle except himself, the man of bad conscience:

impatiently lacerated, persecuted, gnawed at, assaulted, and maltreated himself; this animal that rubbed itself raw against the bars of its cage as one tried to 'tame' it; this deprived creature... had to turn himself into an adventure, a torture chamber, an uncertain and dangerous wilderness — this fool, this yearning and desperate prisoner became the inventor of the 'bad conscience.' But thus began the gravest and uncanniest illness... a declaration of war against the old instincts upon which his strength, joy, and terribleness had reached hitherto (GM II:16).

Bad conscience functions in slavish morality as a means of self-flagellation, as a way to vent the desire to hurt others once external expressions of opposition are inhibited and forbidden. "Guilt before God: this thought becomes an instrument of torture to him" (GM II:22). In that case, self-worth depends upon the ability to injure and harm oneself, to apply the payment of selfmaltreatment to one's irreconcilable account with God. It is the effort expended in one's attempt to make the impossible repayment that determines one's worth. xi The genuine struggle, that which truly determines value for the ascetic ideal is one in which one destructively opposes oneself—one's value increases as one succeeds in annihilating oneself. Slavish morality is still driven by contest, but the mode of this contest is destructive. It mistakes self-inflicted suffering as a sign of strength. The ascetic ideal celebrates cruelty and torture—it revels in and sanctifies its own pain. It is a discord that wants to be discordant, that enjoys itself in this suffering and even grows more self-confident and triumphant the more its own presupposition, its physiological capacity for life decreases. 'Triumph in the ultimate agony': the ascetic ideal has always fought under this hyperbolic sign; in this enigma of seduction, in this image of torment and delight, it recognized its brightest light, its salvation, its ultimate victory (GM III:28).

Slavish morality, particularly in the form of Pauline Christianity, redirects the competitive drive and whips into submission all outward expressions of strife by cultivating the desire to be "good" xii in which case being good amounts abandoning, as Nietzsche portrays it, both the structure of the contests he admired in "Homer's Contest" and the productive ways of competing within them. It does not merely redirect the goal of the contest (e.g., struggling for the glory of Christ rather than competing for the glory of Athens), rather **how one competes well is** also **transformed** (e.g., the "good fight" is conceived as tapping divine power to destroy worldly strongholds xiii rather than excelling them). In other words, the ethos of contest, the ethos of the agon is transformed in slavish morality. xiv

III. Dangerous Games

Moralities effect contests in two ways: 1) they articulate a structure through which the meaning of human being (e.g., excellence, goodness, etc.) can be created and meted out, and 2) they simultaneously cultivate a commitment to a certain way of competing within those structures. By cultivating not only a desire to win but a desire to compete well (which includes respect for one's competitor and the institutions that sets forth the terms of the engagement), xv we can establish a culture capable of deriving our standards of excellence internally and of renewing and revaluing those standards according to changes in needs and interests of our communities. This is the legacy that Nietzsche strives to articulate in his "Homer's Contest," one that he intends his so-called "new nobility" to claim. If the life of slavish morality is characterized by actions of annihilation and cruelty, Nietzsche's alternative form of valuation is marked by its activity of surmounting what opposes, of overcoming opposition by rising above (erheben) what resists, of striving continually to rise above the form of life it has lived. As a form of spiritualized striving, self-overcoming, must, like Christian agony, be selfdirected; its aim is primarily resistance to and within oneself, but the agony—that is, the structure of that kind of painful struggle—differs both in how it orients its opposition and in how it pursues its goals . Self-overcoming does not aim at self-destruction but rather at selfexhaustion and self-surpassing. It strives not for annihilation but for transformation, and the method of doing so is the one most productive in the external contests of the ancient Greeks: the act of rising above. Self-overcoming asks us to seek hostility and enmity as effective means for summoning our powers of development. Others who pose as resistances, who challenge and test our strength, are to be earnestly sought and revered. That kind of reverence, Nietzsche claims, is what makes possible genuine relationships that enhance our lives. Such admiration and cultivation of opposition serve as "a bridge to love" (GM I:10) because they present a person with the opportunity to actively distinguish himself, to experience the joy and satisfaction that comes with what Nietzsche describes as "becoming what one is." xvi

This, Nietzsche suggests, is what makes life worth living—it is what permits us to realize a certain human freedom to be active participants in shaping our own lives. xvii

Agonists, in the sense that Nietzsche has in mind, do not strive to win at all costs. Were that their chief or even highly prominent goal we would expect to see even the best contestants hiding from their serious challengers to their superiority or much more frequently resorting to cheating in order to win. Rather, agonists strive to claim maximal meaning for their actions. (That's the good of winning.) They want to perform in a superior manner, one that they certainly hope will excel that of their opponent. In other words, the best contestants have a foremost commitment to excellence, a disposition that includes being mindful of the structure through which their action might have any meaning at all—the rules of the contest or game. xviii

What makes this contest dangerous?xix

To be engaged in the process of overcoming, as Nietzsche describes it, is to be willing to risk oneself, to be willing to risk what one has been— the meaning of what one is—in the process of creating and realizing a possible future. The outcome is not guaranteed, that a satisfactory or "better" set of meanings and values will result is not certain. And when the contest is one in which rights to authority are in play, even the Nietzschean contest always runs the risk of supporting tyranny—of supplying the means by which the tyrannical takes its hold. Nietzsche is, of course, mindful of this danger, which is why in his account of the Greek agon he finds it important to discuss the alleged origin of ostracism as the mechanism for preserving the openness of contest. xx

Nietzsche claims agonistic institutions contribute to the health of individuals and the culture in which these institutions are organized because agon provides the means for attaining personal distinction and for creating shared goals and interests. Pursuit of this activity, Nietzsche claims, is meaningful freedom. Late in his career, Nietzsche writes, "How is freedom measured in individuals and peoples? According to the resistance which must be overcome, according to the exertion required, to remain to top. The highest type of free men should be sought where the highest resistance is constantly overcome: five steps from tyranny, close to the threshold of the danger of servitude" (TI, "Skirmishes," 38). Nietzsche believes that it is **only when our strength is tested** that it will develop. Later in the passage just cited, Nietzsche continues, "Danger alone acquaints us with our own resources, our virtues, our armor and weapons, our spirit, and forces us to be strong. First principle: one must need to strong—otherwise one will never become strong" (TI, "Skirmishes," 38). Nietzsche takes upon himself, in his own writing, the task of 11 making these kinds of challenges for his readers. Nietzsche's critiques of liberal institutions, democracy, feminism, and socialism should be read in the context of his conception of human freedom and the goal he takes for himself as a kind of liberator. Read thus, we could very well come to see the relevance of agonistic engagement as a means of pursuing a kind of democracy viewed **not as** a **static preservation of some artificial** and stultifying sense of **equality**, but as a process of pursuing meaningful liberty, mutual striving together in pursuit of freedom conceived not as freedom from the claims of each other but as the freedom of engagement in the process of creating ourselves. xxi

IV. A Nietzschean ethos of agonism

In a recent essay, Dana R. Villa examines the general thrust of arguments of those advocating agonistic politics. These "contemporary agonists," xxii he claims, largely look to Nietzsche and Foucault (cast as Nietzsche's heir, at least with regard to his conception of power and contest) for inspiration as they make their "battle cry of 'incessant contestation'," which is supposed to create the space a radical democratic politics. These theorists, remind us that the public sphere is as much a stage for conflict and expression as it is a set of procedures or institutions designed to preserve peace, promote fairness, or achieve consensus. They also (contra Rawls) insist that politics and culture form a continuum, where ultimate values are always already in play; where the content of basic rights and the purposes of political association are not the objects of a frictionless 'overlapping consensus' but are contested every day in a dizzying array of venues. xxiii

Villa would commend them for this reminder, but he claims that "recent formulations of an agonistic politics […] have tended to celebrate conflict, and individual and group expression, a bit too unselectively". xxiv

He argues that "Nietzsche-inspired" agonists would do better to look to Arendt's conception of the agon and its place in political life for pursuing democratic aims, because she stipulates "that action and contestation must be informed by both judgment and a sense of the public if they are to be praiseworthy. The mere expression of energy in the form of 12 political commitment fails to impress her." "'Incessant contestation,' like Foucauldian 'resistance,' is essentially reactive." What such a politics boils down to is "merely fighting"; so conceived, "politics is simply conflict". xxv

Placing the expression of energies of the individual, multiplicities of selves, or groups at the center of an agonistic politics that lacks some aim beyond just fighting does not advance the aims of democracy. Without specifying an agonistic ethos that crafts a sense of "care for the world—a care for the public realm," politics as the socalled "contemporary agonists" conceive it cannot be liberatory. Arendt, Villa argues, supplies such an ethos in a way that Nietzsche does not. My goal here has been to argue that Nietzsche does supply us with an agonistic ethos, that despite the fact that the advocates of "incessant contestation" might fail to distinguish agonistic conflict from "mere fighting" or "simply conflict" Nietzsche does. My aim is more than mere point-scoring. I am not interested in supporting a case that Nietzsche's views are better than Arendt's. I do think Nietzsche's work offers conceptual resources useful for amplifying and clarifying agonistic theories that are pervasive in numerous fields, including political science, moral psychology, and literary criticism. If we are attentive to how Nietzsche distinguishes different kinds of contests and ways of striving within them we can construct an ethos of agonism that is potentially valuable not only for the cultivation of a few great men but which also contributes to the development of a vibrant culture. By way of concluding, I shall draw on the distinctions developed in Nietzsche's conception of agon and sketch the outlines of a productive ethos of agonism.

Some competitions bring with them entitlements and rewards that are reserved for the sole winner. Nearly all of these can be described as zero-sum games: in order for someone to win, others must lose. Further, if I choose to help you to prepare your dossier for your promotion application for the only available post, I risk reducing my own chances for success. Let's call these kinds of competitions antagonistic ones, in which the competitors are pitted against each other in an environment hostile to cooperation.

We can also imagine competitions that are not zero-sum games, in which there is not a limited number of resources. Such contests would allow us to enact some of the original meanings at the root of our words for competition and struggle. The Latin root of compete means "to meet," "to be fitting," and "to strive together toward." The Greek word for struggle, which also applied to games and competitions, is agon, which in its original use meant "gathering together." xxvi

Practicing an agonistic model of competition could provide results of shared satisfaction and might enable us to transform competitions for fame and status that inform so much of our lives into competitions for meeting cooperatively and provisionally defined standards of aesthetic and intellectual excellence. xxvii

If we can revive the sense of agon as a gathering together that vivifies the sense of **competition** that initiates a striving together toward, we can better appreciate the unique relational possibilities of competition. Recalling the definitions of agon and competition provided above, from which I tried to indicate a sense of competition that could facilitate a process of gathering to strive together toward, consider another example. When two runners compete in order to bring out the best performances in each, their own performances become inextricably linked. When I run with you, I push you to pull me, I leap ahead and call you to join me. When you run faster, I respond to your advance not by wishing you would run slower or that you might fall so that I could surge ahead. I do not view your success as a personal affront, rather I respond to it as a call to join you in the pursuit. When in the course of running with me, you draw from me the best of which I am capable, our performances serve as the measure of the strength in both of us. Neither achievement finds its meaning outside of the context in which we created it. When two (or more) compete in order to inspire each other, to strive together toward, the gathering they create, their agon, creates a space in which the meaning of their achievements are gathered. When your excellent performance draws mine out of me, together we potentially unlock the possibilities in each. For this we can certainly be deeply indebted to each other. At the same time, we come to understand and appreciate ourselves and our own possibilities in a new way. Furthermore, this way of coming to understand and appreciate our difference(s), and 14 of recognizing perhaps their interdependence, might be preferable, to other ways in which differences might be determined. Although surely not appropriate in all circumstances, agonistic endeavors can provide an arena for devising a more flexible and creative way of measuring excellence than by comparison with some rigid and externally-imposed rule. xxviii

Agonism is not the only productive way of relating to each other, and we can certainly play in ways that are not agonistic, but I do think such an ethos of agonism is compatible with recognition of both the vulnerability of the other and one's dependence upon others for one's own identity. It incorporates aggression, instructive resistance, as well as cooperation, and it is compatible with the practice of generosity. It cultivates senses of yearning and desire that do not necessarily have destructive ends. It requires us to conceive of liberation as something more than freedom from the constraints of others and the community, but as a kind of freedom— buttressed with active support—to be a participant in the definition and perpetual recreation of the values, beliefs, and practices of the communities of which one is a part. That participation might entail **provisional restraints**, limitations, and norms **that mark** out the **arenas in which such recreations occur**.

At his best, I think Nietzsche envisions a similar form for the agonistic life. Competitive "striving together toward" can be a difficult condition to create and a fragile one to maintain. It requires the **creation of a common ground** from which participants can interact. It needs a **clearly defined** goal that is appropriately demanding of those who participate. It requires that the goal and the acceptable means of achieving it are cooperatively defined and clearly articulated, and yet it must allow for **creativity within those rules**. It demands systematic support to cultivate future participants. And it must have some kind of mechanism for keeping the competition open so that **future play can be anticipated**. When any one of the required elements is disrupted, the competition can deteriorate into alternative and non-productive modes of competition and destructive forms of striving. But when agonistic contest is realized, it creates enormous opportunities for creative self-expression, for the formation of individual and communal identity, for acquiring self-esteem and mutual admiration, and for achieving individual as well as 15 corporate goals. It is one of the possibilities that lie not only beyond good and evil but also beyond the cowardly and barbarous.

### 2nc

#### The ballot makes debate a goal-oriented conversation—local experience has to be directed toward a topical stance or else it lapses into incontestability and the tyranny of structurelessness which becomes ineffective and stagnant

**Tonn 2005** – Professor of Communications at the University of Maryland (Fall, Mari Boor, Rhetoric & Public Affairs, 8.3, “Taking Conversation, Dialogue, and Therapy Public”)

In certain ways, Schudson’s initial reluctance to dismiss public conversation echoes my own early reservations, given the ideals of egalitarianism, empowerment, and mutual respect conversational advocates champion. Still, in the spirit of the dialectic ostensibly underlying dialogic premises, this essay argues that various negative consequences can result from transporting conversational and therapeutic paradigms into public problem solving. In what follows, I extend Schudson’s critique of a conversational model for democracy in two ways: First, whereas Schudson primarily offers a theoretical analysis, I interrogate public conversation as a praxis in a variety of venues, illustrating how public “conversation” and “dialogue” have been coopted to silence rather than empower marginalized or dissenting voices. In practice, public conversation easily can emulate what feminist political scientist Jo Freeman termed “the **tyranny of structurelessness**” in her classic 1970 critique of consciousness raising groups in the women’s liberation movement,15 as well as the key traits Irving L. Janis ascribes to “groupthink.”16 Thus, contrary to its promotion as a means to neutralize hierarchy and exclusion in the public sphere, public conversation can and has accomplished the reverse. When such moves are rendered transparent, public conversation and dialogue, I contend, risk increasing rather than diminishing political cynicism and alienation. Second, whereas Schudson focuses largely on ways a conversational model for democracy may mute an individual’s voice in crafting a resolution on a given question at a given time, I draw upon insights of Dana L. Cloud and others to consider ways in which a therapeutic, conversational approach to public problems can stymie productive, collective action in two respects.17 First, because conversation has no clearly defined goal, a public conversation may engender inertia as participants become **mired in repeated airings of personal experiences without a mechanism** to lend such expressions direction and closure. As Freeman aptly notes, although “[u]nstructured groups may be very effective in getting [people] to talk about their lives[,] they aren’t very good for getting things done. Unless their mode of operation changes, groups flounder at the point where people tire of ‘just talking.’”18 Second, because the therapeutic bent of much public conversation locates social ills and remedies within individuals or dynamics of interpersonal relationships, public conversations and dialogues risk becoming substitutes for policy formation necessary to correct structural dimensions of social problems. In mimicking the emphasis on the individual in therapy, Cloud warns, the therapeutic rhetoric of “healing, consolation, and adaptation or adjustment” tends to “encourage citizens to perceive political issues, conflicts, and inequities as personal failures subject to personal amelioration.”19

#### Authenticity tests shut down debate—turns case and proves they turn dialogue into lecture

**Subotnik 1998** – professor of law, Touro College, Jacob D. Fuchsberg Law Center (7 Cornell J. L. & Pub. Pol'y 681)

Having traced a major strand in the development of CRT, we turn now to the strands' effect on the relationships of CRATs with each other and with outsiders. As the foregoing material suggests, the central CRT message is not simply that minorities are being treated unfairly, or even that individuals out there are in pain - assertions for which there are data to serve as grist for the academic mill - but that **the minority scholar** himself or herself hurts and hurts badly.

An important problem that concerns the very definition of the scholarly enterprise now comes into focus. What can an academic trained to [\*694] question and to doubt n72 possibly say to Patricia Williams when effectively she announces, "I hurt bad"? n73 "No, you don't hurt"? "You shouldn't hurt"? "Other people hurt too"? Or, most dangerously - and perhaps most tellingly - "What do you expect when you keep shooting yourself in the foot?" If the majority were perceived as having the well- being of minority groups in mind, these responses might be acceptable, even welcomed. And they might lead to real conversation. But, writes Williams, the failure by those "cushioned within the invisible privileges of race and power... to incorporate a sense of precarious connection as a part of our lives is... ultimately obliterating." n74

"Precarious." "Obliterating." These words will clearly invite responses only from fools and sociopaths; they will, by **effectively precluding objection**, disconcert and disunite others. "I hurt," in academic discourse, has three broad though interrelated effects. First, it demands priority from the reader's conscience. It is for this reason that law review editors, waiving usual standards, have privileged a long trail of undisciplined - even silly n75 - destructive and, above all, self-destructive arti [\*695] cles. n76 Second, by emphasizing the emotional bond between those who hurt in a similar way, "I hurt" discourages fellow sufferers from abstracting themselves from their pain in order to gain perspective on their condition. n77

[\*696] Last, as we have seen, it precludes the possibility of **open and structured conversation** with others. n78

[\*697] It is because of this conversation-stopping effect of what they insensitively call "first-person agony stories" that Farber and Sherry deplore their use. "The norms of academic civility hamper readers from challenging the accuracy of the researcher's account; it would be rather difficult, for example, to criticize a law review article by questioning the author's emotional stability or veracity." n79 Perhaps, a better practice would be to put the scholar's experience on the table, along with other relevant material, but to subject that experience to the same level of scrutiny.

If through the foregoing rhetorical strategies CRATs succeeded in limiting academic debate, why do they not have greater influence on public policy? Discouraging white legal scholars from entering the national conversation about race, n80 I suggest, has generated a kind of cynicism in white audiences which, in turn, has had precisely the reverse effect of that ostensibly desired by CRATs. It drives the American public to the right and ensures that anything CRT offers is reflexively rejected.

In the absence of scholarly work by white males in the area of race, of course, it is difficult to be sure what reasons they would give for not having rallied behind CRT. Two things, however, are certain. First, the kinds of issues raised by Williams are too important in their implications  [\*698]  for American life to be confined to communities of color. If the lives of minorities are heavily constrained, if not fully defined, by the thoughts and actions of the majority elements in society, it would seem to be of great importance that white thinkers and doers participate in open discourse to bring about change. Second, given the lack of engagement of CRT by the community of legal scholars as a whole, the discourse that should be taking place at the highest scholarly levels has, by default, been displaced to faculty offices and, more generally, the streets and the airwaves.

#### Metaphor risks oversimplification and miscommunication, even if the metaphor itself is correct

**Hart 6** (Hart, Geoff, September 2006, “Editorial: Overextending metaphors”, Scientific Communication, Vol. 13 No. 1, http://www.stcsig.org/sc/newsletter/html/2006-3.htm)FS

One problem with metaphors is that they can be carried too far: because a metaphor is only a simulation of reality, it does not precisely or fully match that reality, and each mismatch can potentially lead to misunderstanding. Consider, for example, the trash can used to delete files in most graphical user interfaces. The Macintosh interface designers who chose this metaphor to describe how users discard files chose an obvious and effective metaphor because just about everyone understands how a trash can works. But unfortunately, a great many users took that metaphor places its designers never intended. When this interface choice was first made, many Macintosh owners used their computer at home or in a small graphics studio rather than in a large corporate workplace, and thus used their experience with trash cans to make the following assumption: "When I throw something in the trash, it's going to stay there forever, or at least until I can persuade someone to take out the trash." Unfortunately, the first implementation of the Macintosh trash can automatically emptied the trash when you shut down your computer. That was clearly a problem for anyone who expected the discarded files to still be there waiting for them the next day when they turned on their computer. So many people complained about losing precious files (never mind that these files should never have been in the trash in the first place) that Apple changed the interface. Version two of the trash can accounted for this problem by leaving deleted files in the trash until someone specifically told the computer to empty the trash. That's a great idea, except by then, the world had moved on and more Macintosh users were using their computer in the workplace, where a janitor could be relied on to empty the trash each night after the workers went home. Since that wasn’t the way the software actually worked, the inevitable consequence was that files accumulated in the trash until they took over the entire computer; in other cases, people deleted files that were potentially embarrassing, not realizing the files were still there to be discovered by anyone who went poking around in the trash. Clearly, another small interface failure; unlike a spouse or roommate, the Macintosh operating system doesn't remind you to empty your trash periodically. A future iteration of the interface will presumably strike the right balance between versions one and two by retaining information in the trash until you specifically delete it, but also by periodically providing a gentle reminder to empty the trash. This example illustrates an important rule for successful use of metaphors: you must strive to **understand the consequences of the metaphor** by asking yourself what users will think when they encounter it, and thus, how they can be expected to behave. Where some behaviors will prove damaging, we need to clearly communicate the problem and its solution in our documentation. Better still, we need to report the problem to the designers of a product so they can take appropriate measures to protect users from their own instincts. Another significant problem with metaphors is that they rely on certain assumptions, and those assumptions bias how we think about reality. One of the most famous (some might say infamous) relates to a favorite device of science fiction writers: time travel. Science fiction writer René Barjavel, in pondering the implications of time travel, wondered about what quickly became known as the grandfather paradox: What would happen if you traveled back in time to a date before your parents were born, and killed one of your grandparents? Clearly, this means that one of your parents would never have lived, and thus could not have conceived you; the result, a few years into the future, is that you would never exist to return and kill that grandparent. But because you did not kill the grandparent, your parent would be born, leading to your birth and your subsequent desire to travel back in time and become a murderer. Round and round we go until we give up in frustration and choose a convenient way to avoid the problem—declare that time travel is impossible. Whether or not time travel really is impossible, that would be an unfortunate choice, because paradoxes are crucially important in science: they reveal when we don't understand a process nearly as clearly as we thought we did. If we did understand fully, there would be no paradox. The grandfather paradox presupposes that we understand how the physics of time travel would really work, namely that there is an indestructible connection between the past and the future and that changing the past would inevitably change the future. Should we stop there, no one would ever examine time travel in more detail to see whether other possibilities exist, and that would rob us of a much richer understanding of our world. One consequence might be the elimination of the branch of mathematics that examines the "many worlds" hypothesis, in which a whole new universe is hypothesized to spring into existence as soon as we change the past. In the case of the grandfather paradox, this means that two universes (one in which you are born and one in which you are not) would move forward through time from that point onwards. In writing a story, I once proposed a different metaphor: that time is more like a VHS tape, and that if you go back and change something, this is no different from recording over an old program you've already watched. The future (the part of the tape after the new recording) isn't changed because you haven't overwritten it yet. Both metaphors may be entirely incorrect (as seems likely based on our modern understanding of physics), but their correctness is not the important issue here: what's important is how each metaphor biases the way we think and predetermines the kind of analysis we're prepared to consider. Thus, a second rule of successful use of metaphors is that we must take great pains to understand the constraints they place on our thoughts. If we're aware of those constraints, we can attempt to work around them; if not, we won't make that effort, and that may prevent us from making crucial new discoveries. A third problem arises if we oversimplify our description of reality and thus neglect key issues. Consider, for example, the issue of fighting forest fires. Because mature forests develop over time spans longer than the typical human life, it's natural for us to think of them as eternal. Because we now understand the value of "untouched" nature, the inevitable consequence is that we want to preserve old forests and protect them against fires. This belief is epitomized in the public consciousness by Smokey the Bear and the "only you can prevent forest fires" slogan. Although it's true that human-originated fires are a serious problem, and should often be fought, the often part is neglected. In particular, the limited worldview offered by Smokey the Bear ignores the fact that fires are a crucial part of natural ecosystems and that some forest ecosystems only develop after fires, and will eventually disappear from the landscape if natural fires are not allowed to burn. The more general point is captured by the cliché that "the only constant is change". Ecosystems, including forests, aren't truly stable; instead, they exhibit what is known as metastability, in which what seems stable from the outside is actually changing continuously. In a forest, old trees die, unlucky trees are felled by lightning or windstorms, and new trees sprout to take their place. Rather than perfect stability, a mature forest is in equilibrium: individual components change, but the overall ecosystem stays close to its current state. Yet these equilibrium states also change; if the environment changes, or if disturbances such as fire are prevented, natural processes will lead the ecosystem to change into something new, and a new equilibrium will develop. For example, in the absence of fire, boreal jack pine forests will be replaced by shade-tolerant decidous trees that grow in the limited light beneath the forest canopy. As the older trees die, they are replaced by younger decidous trees, which produce so much shade when mature that the pines can no longer survive. The problem with describing ecosystems as stable is that it conceals the important concept of dynamic equilibrium, and the consequence that any equilibrium will eventually shift to a new type of equilibrium. This means we can never preserve a specific ecosystem in its current state forever, and that we probably should not try. Instead, it is more important to preserve the conditions that allow a given site to evolve naturally from one equilibrium state to another ("succession"), while altering conditions elsewhere to permit the development of the desired ecosystem. Communicating more of the complexity provides the necessary bounds on the metaphor, permits a more complete understanding, and lets us choose wiser management strategies. A third rule for successful use of metaphors is thus that we must identify critical points of failure—places where the metaphor is insufficiently complete that it leads our audience astray—and must provide the missing complexity that will prevent this misunderstanding. We must recognize that the purpose of a metaphor is to facilitate understanding, but once that understanding exists, we must build on it to provide any missing details that explain the true complexity. As scientific communicators, we often resort to metaphors because of their power to facilitate understanding. But to use metaphors successfully, we must be conscious of the problems I've identified in this essay: we must identify mismatches with reality, implicit and explicit assumptions, and places where the metaphor is too simplistic. Understanding these three problems lets us help our audience to understand the mismatches between the metaphor and reality, remind them of the assumptions behind the metaphor so that they can challenge those assumptions and make conceptual breakthroughs, and recognize where we have oversimplified a complex reality. That oversimplification is only acceptable if it provides an initial understanding that we can subsequently build upon to create a deeper, richer understanding

#### All definitions are somewhat arbitrary, but this proves limits are key. The only solution is contesting reasonable interpretations of terms—means T debates solve their offense

**Kemerling 97** (Garth, professor of philosophy at Newberry College, http://www.philosophypages.com/lg/e05.htm)

We've seen that sloppy or misleading use of ordinary language can seriously limit our ability to create and communicate correct reasoning. As philosopher John Locke pointed out three centuries ago, the achievement of human knowledge is often hampered by the use of words without fixed signification. **Needless controversy is** sometimes **produced** and perpetuated **by** an unacknowledged **ambiguity in the application of key terms**. We can distinguish disputes of three sorts: Genuine disputes involve disagreement about whether or not some specific proposition is true. Since the people engaged in a genuine dispute agree on the meaning of the words by means of which they convey their respective positions, each of them can propose and assess logical arguments that might eventually lead to a resolution of their differences. Merely verbal disputes, on the other hand, arise entirely from ambiguities in the language used to express the positions of the disputants. A verbal dispute disappears entirely once the people involved arrive at an agreement on the meaning of their terms, since doing so reveals their underlying agreement in belief. Apparently verbal but really genuine disputes can also occur, of course. In cases of this sort, the resolution of every ambiguity only reveals an underlying genuine dispute. Once that's been discovered, it can be addressed fruitfully by appropriate methods of reasoning. We can save a lot of time, sharpen our reasoning abilities, and communicate with each other more effectively if we watch for disagreements about the meaning of words and try to resolve them whenever we can. Kinds of Definition The most common way of preventing or eliminating differences in the use of languages is by agreeing on the definition of our terms. Since these explicit accounts of the meaning of a word or phrase can be offered in distinct contexts and employed in the service of different goals, it's useful to distinguish definitions of several kinds: A lexical definition simply reports the way in which a term is already used within a language community. The goal here is to inform someone else of the accepted meaning of the term, so the definition is more or less correct depending upon the accuracy with which it captures that usage. In these pages, my definitions of technical terms of logic are lexical because they are intended to inform you about the way in which these terms are actually employed within the discipline of logic. At the other extreme, a stipulative definition freely assigns meaning to a completely new term, creating a usage that had never previously existed. Since the goal in this case is to propose the adoption of shared use of a novel term, there are no existing standards against which to compare it, and the definition is always correct (though it might fail to win acceptance if it turns out to be inapt or useless). If I now decree that we will henceforth refer to Presidential speeches delivered in French as "glorsherfs," I have made a (probably pointless) stipulative definition. Combining these two techniques is often an effective way to reduce the vagueness of a word or phrase. These precising definitions begin with the lexical definition of a term but then propose to **sharpen it by stipulating more narrow limits** on its use. Here, the lexical part must be correct and the stipulative portion should appropriately reduce the troublesome vagueness. If the USPS announces that "proper notification of a change of address" means that an official form containing the relevant information must be received by the local post office no later than four days prior to the effective date of the change, it has offered a (possibly useful) precising definition.

#### Debate has to be a game—education studies concur that incentives for motivation and retention depend on competitive simulation

**Garris 2002** Rosemary Garris Robert Ahlers Naval Air Warfare Center Training Systems Division James E. Driskell Florida Maxima Corporation SIMULATION & GAMING, Vol. 33 No. 4, December 2002 “Games, motivation, and learning: A research and practice model” 441-467 DOI: 10.1177/1046878102238607 <http://sag.sagepub.com/content/33/4/441.abstract> Herm

There are a number of empirical studies that have examined the effects of gamebased instructional programs on learning. For example, both Whitehall and McDonald (1993) and Ricci et al. (1996) found that instruction incorporating game features led to improved learning. The rationale provided for these positive results varied, given the different factors examined in these studies. Whitehall and McDonald argued that incorporating a variable payoff schedule into a simulation game led to increased risk taking among students, which resulted in greater persistence on the task and improved performance. Ricci et al. proposed that instruction that incorporated game features enhanced student motivation, which led to greater attention to training content and greater retention. Although students generally seem to prefer games over other, more traditional, classroom training media, reviews have reported mixed results regarding the training effectiveness of games. Pierfy (1977) evaluated the results of 22 simulation-based training game effectiveness studies to determine patterns in training effectiveness across games. Twenty-one of the studies collected learning data that generally consisted of paper-and-pencil fact-and-principle knowledge tests. Three of the studies reported results favoring the effectiveness of games over conventional teaching; 3 reported results favoring the effectiveness of conventional teaching over games; and the remaining 15 found no significant differences. Eleven studies also tested retention of learning. Eight of these studies indicated that retention was superior for game-based training; the remaining 3 yielded no significant differences. Level of student preference for training games over classroom instruction was assessed in 8 of the studies, and in 7 of those, students reported greater interest in simulation game activities than in conventional teaching methods. In a more recent review, Druckman (1995) concluded that games seem to be effective in enhancing motivation and increasing student interest in subject matter, yet the extent to which this translates into more effective learning is less clear.

#### We impact turn their accusations of sophistry—skills unique to our model like constructing 1ACs, simulating policies, and researching positions we disagree with grounds decisions in dialogical, argumentative heuristics instead of decisionistic formulas or speculation. Takes out aff solvency and impacts

**Mitchell 2010** – associate professor and director of graduate studies in the Department of Communication at the University of Pittsburgh (Gordon, Rhetoric & Public Affairs, 13.1, “SWITCH-SIDE DEBATING MEETS DEMAND-DRIVEN RHETORIC OF SCIENCE”)

The watchwords for the intelligence community’s debating initiative— collaboration, critical thinking, collective awareness—resonate with key terms anchoring the study of deliberative democracy. In a major new text, John Gastil defines deliberation as a process whereby people “carefully examine a problem and arrive at a well-reasoned solution aft er a period of inclusive, respectful consideration of diverse points of view.”40 Gastil and his colleagues in organizations such as the Kettering Foundation and the National Coalition for Dialogue and Deliberation are pursuing a research program that foregrounds the democratic telos of deliberative processes. Work in this area features a blend of concrete interventions and studies of citizen empowerment.41 Notably, a key theme in much of this literature concerns the relationship between deliberation and debate, with the latter term often loaded with pejorative baggage and working as a negative foil to highlight the positive qualities of deliberation.42 “Most political discussions, however, are debates. Stories in the media turn politics into a never-ending series of contests. People get swept into taking sides; their energy goes into figuring out who or what they’re for or against,” says Kettering president David Mathews and coauthor Noelle McAfee. “Deliberation is different. It is neither a partisan argument where opposing sides try to win nor a casual conversation conducted with polite civility. Public deliberation is a means by which citizens make tough choices about basic purposes and directions for their communities and their country. It is a way of reasoning and talking together.”43 Mathews and McAfee’s **distrust of** the **debate** process is almost paradigmatic amongst theorists and practitioners of Kettering-style deliberative democracy. One conceptual mechanism for reinforcing this debate-deliberation opposition is characterization of debate as a process inimical to deliberative aims, with debaters adopting dogmatic and fixed positions that frustrate the deliberative objective of “choice work.” In this register, Emily Robertson observes, “unlike deliberators, debaters are typically not open to the possibility of being shown wrong. . . . Debaters are not trying to find the best solution by keeping an open mind about the opponent’s point of view.”44 Similarly, founding documents from the University of Houston–Downtown’s Center for Public Deliberation state, “Public deliberation is about choice work, which is different from a dialogue or a debate. In dialogue, people oft en look to relate to each other, to understand each other, and to talk about more informal issues. In debate, there are generally two positions and people are generally looking to ‘win’ their side.”45 Debate, cast here as the theoretical scapegoat, provides a convenient, low-water benchmark for explaining how other forms of deliberative interaction better promote cooperative “choice work.” The Kettering-inspired framework receives support from perversions of the debate process such as vapid presidential debates and verbal pyrotechnics found on Crossfire-style television shows.46 In contrast, the intelligence community’s debating initiative stands as a nettlesome anomaly for these theoretical frameworks, with debate serving, rather than frustrating, the ends of deliberation. The presence of such an anomaly would seem to point to the wisdom of fashioning a theoretical orientation that frames the debate-deliberation connection in contingent, rather than static terms, with the relationship between the categories shift ing along with the various contexts in which they manifest in practice.47 Such an approach gestures toward the importance of rhetorically informed critical work on multiple levels. First, the contingency of situated practice invites analysis geared to assess, in particular cases, the extent to which debate practices enable and/ or constrain deliberative objectives. Regarding the intelligence community’s debating initiative, such an analytical perspective highlights, for example, the tight connection between the deliberative goals established by intelligence officials and the cultural technology manifest in the bridge project’s online debating applications such as Hot Grinds. An additional dimension of nuance emerging from this avenue of analysis pertains to the precise nature of the deliberative goals set by bridge. Program descriptions notably eschew Kettering-style references to democratic citizen empowerment, yet feature deliberation prominently as a key ingredient of strong intelligence tradecraft . Th is caveat is especially salient to consider when it comes to the second category of rhetorically informed critical work invited by the contingent aspect of specific debate initiatives. To grasp this layer it is useful to appreciate how the name of the bridge project constitutes an invitation for those outside the intelligence community to participate in the analytic outreach eff ort. According to Doney, bridge “provides an environment for Analytic Outreach—a place where IC analysts can reach out to expertise elsewhere in federal, state, and local government, in academia, and industry. New communities of interest can form quickly in bridge through the ‘web of trust’ access control model—access to minds outside the intelligence community creates an analytic force multiplier.”48 This presents a moment of choice for academic scholars in a position to respond to Doney’s invitation; it is an opportunity to convert scholarly expertise into an “analytic force multiplier.” In reflexively pondering this invitation, it may be valuable for scholars to read Greene and Hicks’s proposition that switch-side debating should be viewed as a cultural technology in light of Langdon Winner’s maxim that “technological artifacts have politics.”49 In the case of bridge, politics are informed by the history of intelligence community policies and practices. Commenter Th omas Lord puts this point in high relief in a post off ered in response to a news story on the topic: “[W]hy should this thing (‘bridge’) be? . . . [Th e intelligence community] on the one hand sometimes provides useful information to the military or to the civilian branches and on the other hand it is a dangerous, out of control, relic that by all external appearances is not the slightest bit reformed, other than superficially, from such excesses as became exposed in the cointelpro and mkultra hearings of the 1970s.”50 A debate scholar need not agree with Lord’s full-throated criticism of the intelligence community (he goes on to observe that it bears an alarming resemblance to organized crime) to understand that participation in the community’s Analytic Outreach program may serve the ends of deliberation, but not necessarily democracy, or even a defensible politics. Demand-driven rhetoric of science necessarily raises questions about what’s driving the demand, questions that scholars with relevant expertise would do well to ponder carefully before embracing invitations to contribute their argumentative expertise to deliberative projects. By the same token, it would be prudent to bear in mind that the technological determinism about switch-side debate endorsed by Greene and Hicks may tend to flatten reflexive assessments regarding the wisdom of supporting a given debate initiative—as the next section illustrates, manifest differences among initiatives warrant context-sensitive judgments regarding the normative political dimensions featured in each case. Public Debates in the EPA Policy Process The preceding analysis of U.S. intelligence community debating initiatives highlighted how analysts are challenged to navigate discursively the heteroglossia of vast amounts of diff erent kinds of data flowing through intelligence streams. Public policy planners are tested in like manner when they attempt to **stitch together** institutional arguments from various and sundry inputs ranging from expert testimony, to historical precedent, to public comment. Just as intelligence managers find that algorithmic, **formal methods** of analysis often don’t work when it comes to the task of interpreting and synthesizing copious amounts of disparate data, public-policy planners encounter similar challenges. In fact, the **argumentative turn** in public-policy planning elaborates an approach to public-policy analysis that foregrounds deliberative interchange and critical thinking as alternatives to “decisionism,” the formulaic application of “objective” decision algorithms to the public policy process. Stating the matter plainly, Majone suggests, “whether in written or oral form, **argument is central in all stages of the policy process**.” Accordingly, he notes, “we miss a great deal **if we** try to **understand policy**-making **solely in terms of power**, influence, and bargaining, to the exclusion of debate and argument.”51 One can see similar rationales driving Goodwin and Davis’s EPA debating project, where debaters are invited to conduct on-site public debates covering resolutions craft ed to reflect key points of stasis in the EPA decision-making process. For example, in the 2008 Water Wars debates held at EPA headquarters in Washington, D.C., resolutions were crafted to focus attention on the topic of water pollution, with one resolution focusing on downstream states’ authority to control upstream states’ discharges and sources of pollutants, and a second resolution exploring the policy merits of bottled water and toilet paper taxes as revenue sources to fund water infrastructure projects. In the first debate on interstate river pollution, the team of Seth Gannon and Seungwon Chung from Wake Forest University argued in favor of downstream state control, with the Michigan State University team of Carly Wunderlich and Garrett Abelkop providing opposition. In the second debate on taxation policy, Kevin Kallmyer and Matthew Struth from University of Mary Washington defended taxes on bottled water and toilet paper, while their opponents from Howard University, Dominique Scott and Jarred McKee, argued against this proposal. Reflecting on the project, Goodwin noted how the intercollegiate Switch-Side Debating Meets Demand-Driven Rhetoric of Science 107 debaters’ ability to act as “honest brokers” in the policy arguments contributed positively to internal EPA deliberation on both issues.52 Davis observed that since the invited debaters “didn’t have a dog in the fight,” they were able to give voice to previously buried arguments that some EPA subject matter experts felt reticent to elucidate because of their institutional affiliations.53 Such findings are consistent with the views of policy analysts advocating the argumentative turn in policy planning. As Majone claims, “**Dialectical confrontation** between generalists and experts often succeeds in bringing out **unstated assumptions**, conflicting interpretations of the facts, and the risks posed by new projects.”54 Frank Fischer goes even further in this context, explicitly appropriating rhetorical scholar Charles Willard’s concept of argumentative “epistemics” to flesh out his vision for policy studies: Uncovering the epistemic dynamics of public controversies would allow for a more enlightened understanding of what is at stake in a particular dispute, making possible a sophisticated evaluation of the various viewpoints and merits of different policy options. In so doing, the differing, oft en tacitly held contextual perspectives and values could be juxtaposed; the viewpoints and demands of experts, special interest groups, and the wider public could be directly compared; and the dynamics among the participants could be scrutizined. This would by no means sideline or even exclude scientific assessment; it would only situate it within the framework of a more comprehensive evaluation.55 As Davis notes, institutional constraints present within the EPA communicative milieu can complicate eff orts to provide a full airing of all relevant arguments pertaining to a given regulatory issue. Thus, **intercollegiate debaters can play key roles** in retrieving and amplifying positions that might otherwise remain sedimented in the policy process. The dynamics entailed in this symbiotic relationship are underscored by deliberative planner John Forester, who observes, “If planners and public administrators are to make democratic political debate and argument possible, they will need strategically located allies to avoid being fully thwarted by the characteristic self-protecting behaviors of the planning organizations and bureaucracies within which they work.”56 Here, an institution’s need for “strategically located allies” to support deliberative practice constitutes the demand for rhetorically informed expertise, setting up what can be considered a demand-driven rhetoric of science. As an instance of rhetoric of science scholarship, this type of “switch-side public 108 Rhetoric & Public Affairs debate” differs both from insular contest tournament debating, where the main focus is on the pedagogical benefit for student participants, and first-generation rhetoric of science scholarship, where critics concentrated on unmasking the rhetoricity of scientific artifacts circulating in what many perceived to be purely technical spheres of knowledge production.58 As a form of demand-driven rhetoric of science, switch-side debating connects directly with the communication field’s performative tradition of **argumentative engagement** in public controversy—a different route of theoretical grounding than rhetorical criticism’s tendency to locate its foundations in the English field’s tradition of literary criticism and textual analysis.59 Given this genealogy, it is not surprising to learn how Davis’s response to the EPA’s institutional need for rhetorical expertise took the form of a public debate proposal, shaped by Davis’s dual background as a practitioner and historian of intercollegiate debate. Davis competed as an undergraduate policy debater for Howard University in the 1970s, and then went on to enjoy substantial success as coach of the Howard team in the new millennium. In an essay reviewing the broad sweep of debating history, Davis notes, “Academic debate began at least 2,400 years ago when the scholar Protagoras of Abdera (481–411 bc), known as the father of debate, conducted debates among his students in Athens.”60 As John Poulakos points out, “older” Sophists such as Protagoras taught Greek students the value of dissoi logoi, or **pulling apart complex questions** by debating two sides of an issue.61 The few surviving fragments of Protagoras’s work suggest that his notion of dissoi logoi stood for the principle that “two accounts [logoi] are present about every ‘thing,’ opposed to each other,” and further, that humans could “measure” the relative soundness of knowledge claims by engaging in give-and-take where parties would make the “weaker argument stronger” to activate the generative aspect of rhetorical practice, a key element of the Sophistical tradition.62 Following in Protagoras’s wake, Isocrates would complement this centrifugal push with the pull of synerchesthe, a centripetal exercise of “coming together” deliberatively to listen, respond, and form common social bonds.63 Isocrates incorporated Protagorean dissoi logoi into synerchesthe, a broader concept that he used flexibly to express interlocking senses of (1) inquiry, as in groups convening to search for answers to common questions through discussion;64 (2) deliberation, with interlocutors gathering in a political setting to deliberate about proposed courses of action;65 and (3) alliance formation, a form of collective action typical at festivals,66 or in the exchange of pledges that deepen social ties.67 Switch-Side Debating Meets Demand-Driven Rhetoric of Science 109 Returning once again to the Kettering-informed sharp distinction between debate and deliberation, one sees in Isocratic synerchesthe, as well as in the EPA debating initiative, a fusion of debate with **deliberative functions**. Echoing a theme raised in this essay’s earlier discussion of intelligence tradecraft , such a fusion troubles categorical attempts to classify debate and deliberation as fundamentally opposed activities. Th e significance of such a finding is amplified by the frequency of attempts in the deliberative democracy literature to insist on the theoretical bifurcation of debate and deliberation as an article of theoretical faith. Tandem analysis of the EPA and intelligence community debating initiatives also brings to light dimensions of contrast at the third level of Isocratic synerchesthe, alliance formation. Th e intelligence community’s Analytic Outreach initiative invites largely one-way communication flowing from outside experts into the black box of classified intelligence analysis. On the contrary, the EPA debating program gestures toward a more expansive project of deliberative alliance building. In this vein, Howard University’s participation in the 2008 EPA Water Wars debates can be seen as the harbinger of a trend by historically black colleges and universities (hbcus) to catalyze their debate programs in a strategy that evinces Davis’s dual-focus vision. On the one hand, Davis aims to recuperate Wiley College’s tradition of competitive excellence in intercollegiate debate, depicted so powerfully in the feature film The Great Debaters, by starting a wave of new debate programs housed in hbcus across the nation.68 On the other hand, Davis sees potential for these new programs to complement their competitive debate programming with participation in the EPA’s public debating initiative. Th is dual-focus vision recalls Douglas Ehninger’s and Wayne Brockriede’s vision of “total” debate programs that blend switch-side intercollegiate tournament debating with forms of public debate designed to contribute to wider communities beyond the tournament setting.69 Whereas the political telos animating Davis’s dual-focus vision certainly embraces background assumptions that Greene and Hicks would find disconcerting—notions of liberal political agency, the idea of debate using “words as weapons”70—there is little doubt that the project of pursuing environmental protection by tapping the creative energy of hbcu-leveraged dissoi logoi differs significantly from the intelligence community’s eff ort to improve its tradecraft through online digital debate programming. Such diff erence is especially evident in light of the EPA’s commitment to extend debates to public realms, with the attendant possible benefits unpacked by Jane Munksgaard and Damien Pfister: 110 Rhetoric & Public Affairs Having a public debater argue **against their convictions**, or confess their indecision on a subject and subsequent embrace of argument as a way to seek clarity, could shake up the prevailing view of debate as a war of words. Public uptake of the possibility of switch-sides debate may help lessen the polarization of issues inherent in prevailing debate formats because students are no longer seen as wedded to their arguments. This could transform public debate from a tussle between advocates, with each public debater trying to convince the audience in a Manichean struggle about the truth of their side, to a more inviting exchange **focused on** the **content** of the other’s argumentation and the process of deliberative exchange.71 Reflection on the EPA debating initiative reveals a striking convergence among (1) the expressed need for dissoi logoi by government agency officials wrestling with the challenges of inverted rhetorical situations, (2) theoretical claims by scholars regarding the centrality of argumentation in the public policy process, and (3) the practical wherewithal of intercollegiate debaters to tailor public switch-side debating performances in specific ways requested by agency collaborators. These points of convergence both underscore previously articulated theoretical assertions regarding the relationship of debate to deliberation, as well as deepen understanding of the political role of deliberation in institutional decision making. But they also suggest how decisions by rhetorical scholars about whether to contribute switch-side debating acumen to meet demand-driven rhetoric of science initiatives ought to involve careful reflection. Such an approach mirrors the way policy planning in the “argumentative turn” is designed to respond to the weaknesses of formal, decisionistic paradigms of policy planning with situated, contingent judgments informed by reflective deliberation. Conclusion Dilip Gaonkar’s criticism of first-generation rhetoric of science scholarship rests on a key claim regarding what he sees as the inherent “thinness” of the ancient Greek rhetorical lexicon.72 That lexicon, by virtue of the fact that it was invented primarily to teach rhetorical performance, is ill equipped in his view to support the kind of nuanced discriminations required for eff ective interpretation and critique of rhetorical texts. Although Gaonkar isolates rhetoric of science as a main target of this critique, his choice of subject matter Switch-Side Debating Meets Demand-Driven Rhetoric of Science 111 positions him to toggle back and forth between specific engagement with rhetoric of science scholarship and discussion of broader themes touching on the metatheoretical controversy over rhetoric’s proper scope as a field of inquiry (the so-called big vs. little rhetoric dispute).73 Gaonkar’s familiar refrain in both contexts is a warning about the dangers of “universalizing” or “globalizing” rhetorical inquiry, especially in attempts that “stretch” the classical Greek rhetorical vocabulary into a hermeneutic metadiscourse, one pressed into service as a master key for interpretation of any and all types of communicative artifacts. In other words, Gaonkar warns against the dangers of rhetoricians pursuing what might be called supply-side epistemology, rhetoric’s project of pushing for greater disciplinary relevance by attempting to extend its reach into far-flung areas of inquiry such as the hard sciences. Yet this essay highlights how rhetorical scholarship’s relevance can be credibly established by outsiders, who seek access to the creative energy flowing from the classical Greek rhetorical lexicon in its native mode, that is, as a tool of invention designed to spur and hone rhetorical performance. Analysis of the intelligence community and EPA debating initiatives shows how this is the case, with government agencies calling for assistance to animate rhetorical processes such as dissoi logoi (debating different sides) and synerchesthe (the performative task of coming together deliberately for the purpose of joint inquiry, collective choice-making, and renewal of communicative bonds).74 Th is demand-driven epistemology is diff erent in kind from the globalization project so roundly criticized by Gaonkar. Rather than rhetoric venturing out from its own academic home to proselytize about its epistemological universality for all knowers, instead here we have actors not formally trained in the rhetorical tradition articulating how their own deliberative objectives call for incorporation of rhetorical practice and even recruitment of “strategically located allies”75 to assist in the process. Since the productivist content in the classical Greek vocabulary serves as a critical resource for joint collaboration in this regard, demand-driven rhetoric of science turns Gaonkar’s original critique on its head. In fairness to Gaonkar, it should be stipulated that his 1993 intervention challenged the way rhetoric of science had been done to date, not the universe of ways rhetoric of science might be done in the future. And to his partial credit, Gaonkar did acknowledge the promise of a performance-oriented rhetoric of science, especially one informed by classical thinkers other than Aristotle.76 In his Ph.D. dissertation on “Aspects of Sophistic Pedagogy,” Gaonkar documents how the ancient sophists were “the greatest champions” 112 Rhetoric & Public Affairs of “socially useful” science,77 and also how the sophists essentially practiced the art of rhetoric in a translational, performative register: Th e sophists could not blithely go about their business of making science useful, while science itself stood still due to lack of communal support and recognition. Besides, sophistic pedagogy was becoming increasingly dependent on the findings of contemporary speculation in philosophy and science. Take for instance, the eminently practical art of rhetoric. As taught by the best of the sophists, it was not simply a handbook of recipes which anyone could mechanically employ to his advantage. On the contrary, the strength and vitality of sophistic rhetoric came from their ability to incorporate the relevant information obtained from the on-going research in other fields.78 Of course, deep trans-historical diff erences make uncritical appropriation of classical Greek rhetoric for contemporary use a fool’s errand. But to gauge from Robert Hariman’s recent reflections on the enduring salience of Isocrates, “timely, suitable, and eloquent appropriations” can help us postmoderns “forge a new political language” suitable for addressing the complex raft of intertwined problems facing global society. Such retrospection is long overdue, says Hariman, as “the history, literature, philosophy, oratory, art, and political thought of Greece and Rome have never been more accessible or less appreciated.”79 Th is essay has explored ways that some of the most venerable elements of the ancient Greek rhetorical tradition—those dealing with and deliberation—can be retrieved and adapted to answer calls in the contemporary milieu for cultural technologies capable of dealing with one of our time’s most daunting challenges. This challenge involves finding meaning in inverted rhetorical situations characterized by an endemic surplus of heterogeneous content.

#### The argument that our framework is systemically bias is a self-serving assertion to sidestep clash—all of their reasons not to defend the topic can be appropriated by actors with opposite goals

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

My call for a more detailed articulation of the second activist challenge may be met with the radical claim that I have begged the question. It may be said that my analysis of the activist’s challenge and my request for a more rigorous argument presume what the activist denies, namely, that arguments and reasons operate independently of ideology. Here the activist might begin to think that he made a mistake in agreeing to engage in a discussion with a deliberativist – his position throughout the debate being that one should decline to engage in argument with one’s opponents! He may say that of course activism seems lacking to a deliberativist, for the deliberativist measures the strength of a view according to her own standards. But the activist rejects those standards, claiming that they are appropriate only for seminar rooms and faculty meetings, not for real-world politics. Consequently the activist may say that by agreeing to enter into a discussion with the deliberativist, he had unwittingly abandoned a crucial element of his position. He may conclude that the **consistent** activist avoids arguing altogether, and communicates **only with** his **comrades**. Here the discussion ends.

However, the deliberativist has a further consideration to raise as his discursive partner departs for the next rally or street demonstration. The foregoing debate had presumed that there is but one kind of activist and but one set of policy objectives that activists may endorse. Yet Young’s activist is opposed not only by deliberative democrats, but also by persons who **also call themselves ‘activists’** and who are committed to a set of policy objectives quite different from those endorsed by this one activist. Once these opponents are introduced into the mix, the stance of Young’s activist becomes more evidently problematic, even by his own standards.

To explain: although Young’s discussion associates the activist always with politically progressive causes, such as the abolition of the World Trade Organization (109), the expansion of healthcare and welfare programs (113), and certain forms of environmentalism (117), not all activists are progressive in this sense. **Activists on the extreme and racist Right claim also to be fighting for justice,** fairness, **and liberation**. They contend that existing processes and institutions are ideologically hegemonic and distorting. Accordingly, **they reject the deliberative ideal on the same grounds** as Young’s activist. They advocate a program of political action that operates outside of prevailing structures, disrupting their operations and challenging their legitimacy. They claim that such action aims to enlighten, inform, provoke, and excite persons they see as complacent, naïve, excluded, and ignorant. Of course, these activists vehemently oppose the policies endorsed by Young’s activist; they argue that justice requires activism that promotes objectives such as national purity, the disenfranchisement of Jews, racial segregation, and white supremacy. More importantly, they see Young’s activist’s **vocabulary of ‘inclusion’, ‘structural inequality’, ‘institutionalized power’, as fully in line** with what they claim is a hegemonic ideology that currently dominates and systematically distorts our political discourses.21

The point here is not to imply that Young’s activist is no better than the racist activist. The point rather is that Young’s activist’s arguments are, in fact, adopted by activists of different stripes and **put in** the **service** of a wide range of policy objectives, each claiming to be just, liberatory, and properly inclusive.22 In light of this, there is a question the activist must confront. How should he deal with those who share his views about the proper means for bringing about a more just society, but promote a set of ends that he opposes?

It seems that Young’s activist has no way to deal with opposing activist programs except to fight them or, if fighting is strategically unsound or otherwise problematic, to accept a Hobbesian truce. This might not seem an unacceptable response in the case of racists; however, the question can be raised in the case of any less extreme but nonetheless opposed activist program, including different styles of politically progressive activism. Hence the deliberativist raises her earlier suspicions that, in practice, activism entails a politics based upon **interestbased power struggles amongst adversarial factions**.

### 1nr

#### “State bad” isn't responsive—there's a debate to be had on every institutional question and foreclosing that with a priori ethical posturing is itself unethical

**Talisse 2005** – philosophy professor at Vanderbilt (Robert, Philosophy & Social Criticism, 31.4, “Deliberativist responses to activist challenges”) \*note: gendered language in this article refers to arguments made by two specific individuals in an article by Iris Young

The first two challenges are focused on the failure of existing political institutions and processes to satisfy the ideals of publicity, accountability, and inclusion (109) that are promoted by the deliberative democrat. First, the activist points to the exclusionary character of existing sites of deliberation, citing the prevalence of structural inequality and power (108). Second, he criticizes recent measures aimed at inclusion for falling ‘far short of providing opportunities for real voice for those less privileged in the social structures’ (112).

Insofar as the activist’s criticisms are aimed at the failure of existing institutions to live up to the deliberative ideal, they implicitly accept that ideal. Thus, as Young points out, the deliberativist can agree with the activist that current conditions fall short of the democratic ideal, and can accept the activist’s specific criticisms of the existing order (112). Again, they differ on the issue of means, not ends: the deliberativist holds that processes of continuing public discourse can reveal and remedy the shortcomings of existing institutions and practices whereas the activist doubts that rational discussion can persuade powerful social agents to adopt a more inclusive and democratic mode of politics (112). The deliberativist may further argue that even if the activist’s suspicions regarding the efficacy of political deliberation are granted, these suspicions are not in themselves sufficient grounds for rejecting deliberative democracy. Though not ideal, deliberation may still be the best option available for democracy.

#### Moral purism about institutional approaches dooms the aff—hierarchy should be deployed tactically for greater overall gains

**Grossberg, 92** [Lawrence, Morris Davis Professor of Communication Studies at the University of North Carolina at Chapel Hill, “We Gotta Get Out of this Place: Popular Conservatism and Postmodern Culture”, page 388-389 //liam ]

﻿The demand for moral and ideological purity often results in the rejection of any hierarchy or organization. The question-can the master's tools be used to tear down the master's house?-ignores both the contingency of the relation between such tools and the master's power and, even more importantly, the fact that there may be no other tools available. Institutionalization is seen as a repressive impurity within the body politic rather than as a strategic and **tactical**, even empowering, necessity. It sometimes seems as if every progressive organization is condemned to recapitulate the same arguments and crisis, often leading to their collapse. 54 For example, Minkowitz has described a crisis in Act Up over the need for efficiency and organization, professionalization and even hierarchy,55 as if these inherently contradicted its commitment to democracy. This is particularly unfortunate since Act Up, whatever its limitations, has proven itself an effective and imaginative political strategist. The problems are obviously magnified with success, as membership, finances and activities grow. This refusal of efficient operation and the moment of organization is intimately connected with the Left's appropriation and privileging of the local (as the site of democracy and resistance). This is yet another reason why structures of alliance are inadequate, since they often assume that an effective movement can be organized and sustained without such structuring. The Left needs to recognize the necessity of institutionalization and of systems of hierarchy, without falling back into its own authoritarianism. It needs to find reasonably democratic structures of institutionalization, even if they are impure and compromised.

#### Refusal of the state empowers its worst aspects. You don’t have to be a technocrat but you should be anti-anti-state

**Barbrook, 97 –** professor at the Hypermedia Research Centre at the University of Westminster (Richard, http://www.nettime.org/Lists-Archives/nettime-l-9706/msg00034.html)

I thought that this position is clear from my remarks about the ultra-left posturing of the 'zero-work' demand. In Europe, we have real social problems of deprivation and poverty which, in part, can only be solved by state action. This does not make me a statist, but rather an anti-anti-statist. By opposing such intervention because they are carried out by the state, anarchists are tacitly lining up with the neo-liberals. Even worse, refusing even to vote for the left, they acquiese to rule by neo-liberal parties. I deeply admire direct action movements. I was a radio pirate and we provide server space for anti-roads and environmental movements. However, this doesn't mean that I support political abstentionism or, even worse, the mystical nonsense produced by Hakim Bey. It is great for artists and others to adopt a marginality as a life style choice, but most of the people who are economically and socially marginalised were never given any choice. They are excluded from society as a result of deliberate policies of deregulation, privatisation and welfare cutbacks carried out by neo-liberal governments. During the '70s, I was a pro-situ punk rocker until Thatcher got elected. Then we learnt the hard way that voting did change things and lots of people suffered if state power was withdrawn from certain areas of our life, such as welfare and employment. Anarchism can be a fun artistic pose. However, human suffering is not.

#### And, their focus on the urban ignores the discussion of precision – our discussion provides portable skills needed to settle all major questions – t debates force clash and ensures effective opportunity cost

**Steinberg & Freeley 8** \*Austin J. Freeley is a Boston based attorney who focuses on criminal, personal injury and civil rights law, AND \*\*David L. Steinberg , Lecturer of Communication Studies @ U Miami, Argumentation and Debate: Critical Thinking for Reasoned Decision Making pp61-63

I. THE IMPORTANCE OF DEFINING TERMS

The definition of terms—the advocate's supported interpretation of the meaning of the words in a proposition—is an essential part of debate. In some instances the opposing advocates will agree right away on the definition of terms, and the debate will move on to other issues. In other cases the locus of the debate may be the definition of a key term or terms, and definitions become the "voting issue" that decides the debate. In all debates, however, a shared understanding of the interpretation of the proposition is necessary to guide argumentation and decision making.

Many intercollegiate debate propositions call for the "federal government" to adopt a certain policy. Often the term is self-evident in the context of the proposition, and no definition is necessary. In debates on the 2001-2002 CEDA proposition. "Resolved: That the United States Federal Government should substantially increase federal control throughout Indian Country in one or more of the following areas: child welfare, criminal justice, employment, environmental protection, gaming, resource management, taxation," the affirmative merely designated the appropriate federal agency (for example. The bureau of Indian Affairs or the Environmental Protection Agency) to cam' out its policy, and the debate moved on to other issues. However, sometimes other terms in the proposition (for instance, Indian Country) become critical issues of the debate. Not infrequently the negative will raise the issue of topicality and argue that the affirmative's plan is not the best definition, or interpretation, of the proposition. In debates on propositions of value, the clash over definitions or criteria may be crucial to the outcome.

In debates outside the educational setting, the same situation prevails. In some debates the definition of terms is easy and obvious—they need only be stated "for the record." and the debate proceeds to other issues. In other debates however, the definition may be all-important. For instance physicians, clerics, and ethicists conduct long, hard-fought debates on the critical issue of when life begins: At conception? When the fetus becomes capable of surviving outside the womb? When the brain begins to function? Or at the moment of birth?

Exactly the opposite problem arose, and continues, in debates over the use of organ transplants. Does death occur when breathing slops? When the heart stops? Or when the brain ceases to function? Some states have debated this Issue and adopted new definitions of death; in other states the debate continues. Similarly, environmentalists seeking protection from development for valued resources debate the definition of wetlands in public hearings; owners of sports franchises work to redefine players' salaries to fit within predetermined salary caps; and customers considering new product purchases study competing definitions of value. In February 2004, President Bush called upon the Congress to "promptly pass and send to the states for ratification, an amendment to our Constitution defining and protecting marriage as a union of a man and a woman as husband and wife." This advocacy by the president was an attempt to define "marriage" in such a way as to limit it to heterosexual couples. A public debate about the meaning of marriage, and its alternative, "civil union," ensued. Definitional debates have political, moral, and personal implications. What is poverty? Obesity? Adulthood? In 2007, the meaning of the term "surge" in reference to the United States military' action in Iraq was hotly contested. Was this an expansion of the war or simply provision of necessary resources to achieve existing objectives? The 2007 immigration reform offered the opportunity for illegal immigrants working in this country to achieve citizenship through a cumbersome and expensive process. The reform legislation failed in part because it was termed "amnesty" by its opponents. Likewise, the definition of "terrorism" creates significant problems in our foreign policy.

#### Equating personalization and radical pedagogy leads to the conflation of individual with group identity and requires ontological policing to assess the authenticity of claims

**Scott, 92** – professor of sociology at Princeton (Joan, “Multiculturalism and the Politics of Identity,” The Identity in Question (Summer, 1992), pp. 12-19, JSTOR)

There is nothing wrong, on the face of it, with teaching individuals about how to behave decently in relation to others and about how to empathize with each other's pain. The problem is that difficult analyses of how history and social standing, privilege, and subordination are involved in personal behavior entirely drop out. Chandra Mohanty puts it this way:

There has been an erosion of the politics of collectivity through the reformulation of race and difference in individualistic terms. The 1960s and '70s slogan "the personal is political" has been recraftedin the 1980s as "the political is personal." In other words, all politics is collapsed into the personal, and questions of individual behaviors, attitudes, and life-styles stand in for political analysis of the social. Individual political struggles are seen as the only relevant and legitimate form of political struggle.5

Paradoxically, individuals then generalize their perceptions and claim to speak for a whole group, but the groups are also conceived as unitary and autonomous. This individualizing, personalizing conception has also been behind some of the recent identity politics of minorities; indeed it gave rise to the intolerant, doctrinaire behavior that was dubbed, initially by its internal critics, "political correctness."

It is particularly in the notion of "experience" that one sees this operating. In much current usage of "experience," references to structure and history are implied but not made explicit; instead, personal testimony of oppression re-places analysis, and this testimony comes to stand for the experience of the whole group. The fact of **belonging to an identity group is taken as authority** enough for one's speech; the direct experience of a group or culture-that is, membership in it-becomes the only test of true knowledge.

The exclusionary implications of this are twofold: all those not of the group are denied even intellectual access to it, and those within the group whose experiences or interpretations do not conform to the established terms of identity must either suppress their views or drop out. An appeal to "experience" of this kind forecloses discussion and criticism and turns politics into a policing operation: the borders of identity are patrolled for signs of nonconformity; the test of membership in a group becomes less one's willingness to endorse certain principles and engage in specific political actions, less one's positioning in specific relationships of power, than one's ability to use the prescribed languages that are taken as signs that one is inherently "of" the group. That all of this isn't recognized as a highly political process that produces identities is troubling indeed, especially because it so closely mimics the politics of the powerful, naturalizing and deeming as discernably objective facts the prerequisites for inclusion in any group.

## round 4—aff v. northwestern km

### 2ac

#### And, the plan accelerates development

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### Counter interp – R&D is topical and the following laundry list – incentive not production

US Energy Information Administration, 1 (Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, “Incentives, Mandates, and Government Programs for Promoting Renewable Energy”, http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels.1 This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and develop- ment (R&D),2, 3 and (2) their effectiveness in promoting renewables. A financial incentive is defined in this report as providing one or more of the following benefits: • A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; • Reducing the cost of production of the good or service; or, • Creating or expanding a market for producers. The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.4 Regulatory mandates include both actions required by legislation and regulatory agencies (Federal or State). Examples of regulatory mandates are: requiring utilities to purchase power from nonutilities and requiring the incorporation of environmental impacts and other social costs in energy planning (full cost pricing). Another example is a requirement for a minimum percentage of generation from renewable energy sources (viz., a “renewable portfolio standard,” or, RPS). Regulatory mandates and financial incentives can produce similar results, but regulatory mandates generally require no expenditures or loss of revenue by the Government.

Batelle (the world’s largest nonprofit research and development organization, specializing in global science and technology) 1980 “An Analysis of Federal Incentives Used to Stimulate Energy Production” p 22 http://www.scribd.com/doc/67538352/Federal-Incentives-for-Energy-Production-1980

Discussing governmental actions in a field that lacks consistent Policy is difficult, since boundaries defining energy actions are unclear. All governmental actions probably have at least some indirect relevance to energy. if a consistent Policy did exist, the discussion could focus on those actions that are part of the planned and consistent program. For this analysis, however, boundaries must be somewhat arbitrarily defined. First, this discussion will include only those actions taken by the Federal Government; relevant actions of state and local governments are not considered. Second, the discussion covers only those Federal Government actions In which major causes include to influence energy or major effects included some Influence on energy. Within those limits, the discussion considers actions related to both production arid consumption, although production receives the most emphasis. It also includes actions relating to both increases and decreases in energy consumption or production. Energy production is defined as the transformation of natural resources into commonly used forms of energy such as heat, light, and electricity. By this definition, the shining of the sun or the running of a river are not examples of energy production, but the installation of solar panels or the construction of a hydroelectric dam are. Energy consumption is defined is the use of one of these common, manufactured forms of energy. Under this definition sunbathing Is not energy consumption, but heating water by means of a solar panel is In both definitions, the crucial ingredient is the application of technology and resources to change a natural resource into a useful energy form.

**Proliferation is a true security concern**

**Harvey 01** (Frank P., a member of a the Canadian International Council, “National Missile Defence Revisited, Again a Reply to David Mutimer,” International Journal, Vol. 56, No. 2 (Spring, 2001), pp. 347-360, Canadian International Council)

**'Before any argument** supporting NMD **can be taken seriously**, there-fore, **we must accept that a "rogue** state **threat" exists'** (p 340). I couldn't agree more. But this is perhaps the most fascinating of all of Mutimer s assertions because he himself acknowledges the 'facts' of the rogue state threat - and I thought only proponents shared the burden of proving the case for NMD. Consider the following quotes: • The rogue state needs, therefore, to be seen for what it was: the creation of the United States military to justify its claim on resources ... The rogue state, however, is a myth. [It] is not mythical in the sense that it is not real, but rather in the sense that it has been vested with a totemic importance by the United States' (p 344) (emphasis added). • 'Rogues are the enemies that make high levels of military spending legitimate. They are not a lie told by knowing capitalists in an instrumental fashion to hoodwink Congress into passing over-inflated budgets (p 345, n 24) (emphasis added). I am not arguing that the United States fabricated evidence, but rather that it produced a particular frame within which to interpret that evidence' (p 345) (emphasis added). • 'The imagined nature of threats does not mean that there is no real danger or that nothing need ever be done about risks' (p 345). • 'The issue, therefore, is not the evidence but rather how the "facts" are "evidence" of a particular form of threat labelled "proliferation" by actors labelled "rogue"' (p 344, n22). • 'There is, therefore, no need for me to engage in a discussion of the evidence of proliferation assembled, for example, in the Rumsfeld Report to bolster the case for NMD. At issue are not "the facts" but the ways in which those facts are assembled and the interpretation that is given to them' (p 344, n 22). Mutimer s honesty is refreshing but not surprising. **Ballistic missile** proliferation is difficult to deny. **It is a 'real' security threat**, driven by technological progress, the spread of scientific knowledge related to these weapons systems, diminishing costs, ongoing regional security threats in the Middle East and Asia, and, most importantly, time.

#### Prolif discourse is key to deterrence

Jasper and Portella 2k9 (Ulla, Clara, “A Common Deterrent for a United Europe? Revisiting European Nuclear Discourse” <http://www.euce.org/eusa2009/papers/portela_02I.pdf>

Yet, British and French similarities are not limited to the domain of doctrine development, but are also traceable in publicly accessible documents. The public discourses on nuclear proliferation in the two countries have also converged. They are nowadays dominated by the recurrent theme of how the “custodians of law” succeed in not only protecting themselves, but also in inducing countries such as North Korea or Iran or non‐state actors to give up their aspirations for nuclear programmes. Underlying these postures are linguistic frames and metaphors of (in‐) security which portray the ʺworld out thereʺ as an inherent danger to ʺbenevolentʺ Europe, hence legitimating the given nuclear order of haves and have‐nots. As Gusterson argues: ʺThe discourse on nuclear proliferation legitimates this system of domination while presenting the interests the established nuclear powers have in maintaining their nuclear monopoly as if they were equally beneficial to all nations of the globe. And, ironically, the discourse on nonproliferation presents the subordinate nations as the principal source of danger in the world.ʺ47 Consequently, by framing the current nuclear order as a dichotomy of (i) the passively deterring “benign” and “rational” Self against (ii) the “evil” and “passionate” Other, the very order is constructed, naturalized and legitimated in the first place. This prevailing frame is used as a justification for a policy of continued nuclear deterrence and of non‐proliferation efforts directed at potential nuclear enemies while ignoring problems arising from the European nuclear status. Some references to the desirability of complete nuclear disarmament notwithstanding, nuclear weapons will continue to be the cornerstone of British and French military postures in the foreseeable future. Their existence is recurrently justified through a certain set of frames, metaphors and tropes which dominate the public nuclear discourse. How is this approach to global security reconciled with the security vision upheld by the EU and by its member states? What does this imply for the further process of European integration and the long‐term goal of a common European defence? In the following section, we revise the current state of the CFSP and attempt to ascertain its degree of “maturity” to host a common European deterrent

Lupovici, 08[Post-Doctoral Fellow Munk Centre for International Studies University of Toronto (Amir, “Why the Cold War Practices of Deterrence are Still Prevalent: Physical Security, Ontological Security and Strategic Discourse,” http://www.cpsa-acsp.ca/papers-2008/Lupovici.pdf]

Since deterrence can become part of the actors’ identity, it is also involved in the actors’ will to achieve ontological security, securing the actors’ identity and routines. As McSweeney explains, ontological security is “the acquisition of confidence in the routines of daily life—the essential predictability of interaction through which we feel confident in knowing what is going on and that we have the practical skill to go on in this context.” These routines become part of the social structure that enables and constrains the actors’ possibilities (McSweeney, 1999: 50-1, 154-5; Wendt, 1999: 131, 229-30). Thus, through the emergence of the deterrence norm and the construction of deterrence identities, the actors create an intersubjective context and intersubjective understandings that in turn affect their interests and routines. In this context, deterrence strategy and deterrence practices are better understood by the actors, and therefore the continuous avoidance of violence is more easily achieved. Furthermore, within such a context of deterrence relations, rationality is (re)defined, clarifying the appropriate practices for a rational actor, and this, in turn, reproduces this context and the actors’ identities. Therefore, the internalization of deterrence ideas helps to explain how actors may create more cooperative practices and break away from the spiral of hostility that is forced and maintained by the identities that are attached to the security dilemma, and which lead to mutual perception of the other as an aggressive enemy. As Wendt for example suggests, in situations where states are restrained from using violence—such as MAD (mutual assured destruction)—states not only avoid violence, but “ironically, may be willing to trust each other enough to take on collective identity”. In such cases if actors believe that others have no desire to engulf them, then it will be easier to trust them and to identify with their own needs (Wendt, 1999: 358-9). In this respect, the norm of deterrence, the trust that is being built between the opponents, and the (mutual) constitution of their role identities may all lead to the creation of long term influences that 20 For example, on the different ways of adopting the idea of minimal deterrence (“deterrence norm”) in different states, see Clark (2004: 281, 291, 296) and Krepon (2001: 83-4) on India and Pakistan, and Cohen (1998: 195-218X) on Israel’s strategy of nuclear ambiguity. 10 preserve the practices of deterrence as well as the avoidance of violence. Since a basic level of trust is needed to attain ontological security,21 the existence of it may further strengthen the practices of deterrence and the actors’ identities of deterrer and deterred actors. In this respect, I argue that for the reasons mentioned earlier, the practices of deterrence should be understood as providing both physical and ontological security, thus refuting that there is necessarily tension between them. Exactly for this reason I argue that Rasmussen’s (2002: 331-2) assertion—according to which MAD was about enhancing ontological over physical security—is only partly correct. Certainly, MAD should be understood as providing ontological security; but it also allowed for physical security, since, compared to previous strategies and doctrines, it was all about *decreasing* the physical threat of nuclear weapons. Furthermore, the ability to increase one dimension of security helped to enhance the other, since it strengthened the actors’ identities and created more stable expectations of avoiding violence. I suggest that the emergence of deterrence norm during the Cold War can be described in the terms of Finnemore and Sikkink’s norms life cycle model.22 According to this model, in the first stage—the “norm emergence”—entrepreneurs attempt to convince policy makers of their ideas. The second stage—the “norm cascade” stage—is characterized by attempts to socialize other state/s to become norm followers. In the last stage—the “norm internalization” stage—the norm becomes institutionalized (Finnemore and Sikkink, 1998: 887-909).23 The study of the emergence and institutionalization of deterrence norm and identity in the next section demonstrates how these concepts help to explain avoidance of violence, and this is followed by a section demonstrating how the identity of deterrence may lead to war.

#### Discussion of technical nuclear strategy is inevitable - their attempts to silence nuclear discourse doesn't solve the problem, it just makes it invisible - this prevents critical response

Chaloupka '92 William Chaloupka, Professor of Political Science at Colorado State University, Knowing Nukes: The Politics and Culture of the Atom, 1992, p. 9-10

Both Derrida’s insight and Schwenger’s anecdote invite the opening of a whole realm of oppositional activity, of which only a few examples now exist. The premise of this genre (“speaking unspeakables”), as Derrida claims, may have been best realized before the nuclear era, in the literary texts of Mallarmé, Kafka, or Joyce. But there have been contemporary attempts that nuclear criticism could address.26 One could imagine a comparison, for example, of two highly publicized television films of the Reagan era, “The Day After” and the right-wing response to it, “Amer¬ika.” The level and ferocity of the response suggest that “The Day After” broke a taboo. “Amerika” charges weakness, appeasement, and even col¬laboration, but these charges so completely miss their target that we search for a better interpretation. Perhaps “The Day After” transgressed in a special way, and the only available way of responding was the arcane code of anticommunism. The actual taboo it broke, it broke by speaking at all. At the same time, the activity of finding new ways to read (literary or cinematic) texts about nukes must relate to the broader project of empowering responses if such activity is to fit within the antinuclear schema I am discussing. Leaping over hypothetical psychological diagnoses to speak politically, such a development is not so hard to imagine. “Speaking the unspeakable” has never been a happy entry into activism. Nuclear opponents have adopted any number of rhetorical strategies for overcoming this obstacle. They argue that this “unspeakability” denotes an importance so huge that we must dissolve the reticence and disgust that is our “first reaction.” Or, alternatively, they dissolve their political position into a therapeutic one, implying that the contemporary citizen would be healthier and less conflicted if she would admit and confront the nuclear demon. In either case, the political use of unspeakability produces a paradoxical stance at odds with the naturalism of the survivalist, species-interest position. This unacknowledged (unacknowledgeable) taste for paradox goes even a step further. Having bound themselves in multiple, endlessly and effortlessly proliferating dilemmas, nuclear opponents then announce that it is their goal to impose the condition of “unspeakability” on nuclear managers. The solution to the paradox of nuclear strategy is to silence strategists, such as Caspar Weinberger, who dare to speak of limited nuclear war. This enforced silence has long since ceased to be uncomfortable for nuclear managers, who now clearly understand that their control will proceed more satisfactorily when it is invisible. Opponents, then, have undertaken the odd project of enforcing unspeakability, on the one hand, while also seeking to make nukes visible, thus making them controversial—a topic of conversation.27 Such strategies have a validity, as I will discuss in a later chapter, but it is not necessarily the validity the opponents promote. Just making the artifacts of nuclearism visible isn’t enough; they don’t speak for themselves. These artifacts—whether warheads or power plants—surely offer little help out of the paradox of unspeakability that both veils and unveils them, and all the while also seems to expect a solution. Finding nukes not only “speakable” but “fabulously textual,” nuclear criticism can respond to this odd political situation in part because many more strategic approaches become possible once we move the response to paradox out of an ‘‘unspeakable discourse’’ and into a textual or literary context.

#### Nuke war outweighs structural violence – prioritizing structural violence makes preventing war impossible

Boulding 78 [Ken, is professor of economics and director, Center for Research on Conflict Resolution, University of Michigan, “Future Directions in Conflict and Peace Studies,” The Journal of Conflict Resolution, Vol. 22, No. 2 (Jun., 1978), pp. 342-354]

Galtung is very legitimately interested in problems of world poverty and the failure of development of the really poor. He tried to amalga- mate this interest with the peace research interest in the more narrow sense. Unfortunately, he did this by downgrading the study of inter- national peace, labeling it "negative peace" (it should really have been labeled "negative war") and then developing the concept of "structural violence," which initially meant all those social structures and histories which produced an expectation of life less than that of the richest and longest-lived societies. He argued by analogy that if people died before the age, say, of 70 from avoidable causes, that this was a death in "war"' which could only be remedied by something called "positive peace." Unfortunately, the concept of structural violence was broadened, in the word of one slightly unfriendly critic, to include anything that Galtung did not like. Another factor in this situation was the feeling, certainly in the 1960s and early 1970s, that nuclear deterrence was actually succeeding as deterrence and that the problem of nuclear war had receded into the background. This it seems to me is a most dangerous illusion and diverted conflict and peace research for ten years or more away from problems of disarmament and stable peace toward a grand, vague study of world developments, for which most of the peace researchers are not particularly well qualified. To my mind, at least, the quality of the research has suffered severely as a result.' The complex nature of the split within the peace research community is reflected in two international peace research organizations. The official one, the International Peace Research Association (IPRA), tends to be dominated by Europeans somewhat to the political left, is rather, hostile to the United States and to the multinational cor- porations, sympathetic to the New International Economic Order and thinks of itself as being interested in justice rather than in peace. The Peace Science Society (International), which used to be called the Peace Research Society (International), is mainly the creation of Walter Isard of the University of Pennsylvania. It conducts meetings all around the world and represents a more peace-oriented, quantitative, science- based enterprise, without much interest in ideology. COPRED, while officially the North American representative of IPRA, has very little active connection with it and contains within itself the same ideological split which, divides the peace research community in general. It has, however, been able to hold together and at least promote a certain amount of interaction between the two points of view. Again representing the "scientific" rather than the "ideological" point of view, we have SIPRI, the Stockholm International Peace Research Institute, very generously (by the usual peace research stand- ards) financed by the Swedish government, which has performed an enormously useful service in the collection and publishing of data on such things as the war industry, technological developments, arma- ments, and the arms trade. The Institute is very largely the creation of Alva Myrdal. In spite of the remarkable work which it has done, how- ever, her last book on disarmament (1976) is almost a cry of despair over the folly and hypocrisy of international policies, the overwhelming power of the military, and the inability of mere information, however good, go change the course of events as we head toward ultimate ca- tastrophe. I do not wholly share her pessimism, but it is hard not to be a little disappointed with the results of this first generation of the peace research movement. Myrdal called attention very dramatically to the appalling danger in which Europe stands, as the major battleground between Europe, the United States, and the Soviet Union if war ever should break out. It may perhaps be a subconscious recognition-and psychological denial-of the sword of Damocles hanging over Europe that has made the European peace research movement retreat from the realities of the international system into what I must unkindly describe as fantasies of justice. But the American peace research community, likewise, has retreated into a somewhat niggling scientism, with sophisticated meth- odologies and not very many new ideas. I must confess that when I first became involved with the peace research enterprise 25 years ago I had hopes that it might produce some- thing like the Keynesian revolution in economics, which was the result of some rather simple ideas that had never really been thought out clearly before (though they had been anticipated by Malthus and others), coupled with a substantial improvement in the information system with the development of national income statistics which rein- forced this new theoretical framework. As a result, we have had in a single generation a very massive change in what might be called the "conventional wisdom" of economic policy, and even though this conventional wisdom is not wholly wise, there is a world of difference between Herbert Hoover and his total failure to deal with the Great Depression, simply because of everybody's ignorance, and the moder- ately skillful handling of the depression which followed the change in oil prices in 1-974, which, compared with the period 1929 to 1932, was little more than a bad cold compared with a galloping pneumonia. In the international system, however, there has been only glacial change in the conventional wisdom. There has been some improvement. Kissinger was an improvement on John Foster Dulles. We have had the beginnings of detente, and at least the possibility on the horizon of stable peace between the United States and the Soviet Union, indeed in the whole temperate zone-even though the tropics still remain uneasy and beset with arms races, wars, and revolutions which we cannot really afford. Nor can we pretend that peace around the temper- ate zone is stable enough so that we do not have to worry about it. The qualitative arms race goes on and could easily take us over the cliff. The record of peace research in the last generation, therefore, is one of very partial success. It has created a discipline and that is something of long-run consequence, most certainly for the good. It has made very little dent on the conventional wisdom of the policy makers anywhere in the world. It has not been able to prevent an arms race, any more, I suppose we might say, than the Keynesian economics has been able to prevent inflation. But whereas inflation is an inconvenience, the arms race may well be another catastrophe. Where, then, do we go from here? Can we see new horizons for peace and conflict research to get it out of the doldrums in which it has been now for almost ten years? The challenge is surely great enough. It still remains true that war, the breakdown of Galtung's "negative peace," remains the greatest clear and present danger to the human race, a danger to human survival far greater than poverty, or injustice, or oppression, desirable and necessary as it is to eliminate these things. Up to the present generation, war has been a cost and an inconven- ience to the human race, but it has rarely been fatal to the process of evolutionary development as a whole. It has probably not absorbed more than 5% of human time, effort, and resources. Even in the twenti- eth century, with its two world wars and innumerable smaller ones, it has probably not acounted for more than 5% of deaths, though of course a larger proportion of premature deaths. Now, however, advancing technology is creating a situation where in the first place we are developing a single world system that does not have the redundancy of the many isolated systems of the past and in which therefore if any- thing goes wrong everything goes wrong. The Mayan civilization could collapse in 900 A.D., and collapse almost irretrievably without Europe or China even being aware of the fact. When we had a number of iso- lated systems, the catastrophe in one was ultimately recoverable by migration from the surviving systems. The one-world system, therefore, which science, transportation, and communication are rapidly giving us, is inherently more precarious than the many-world system of the past. It is all the more important, therefore, to make it internally robust and capable only of recoverable catastrophes. The necessity for stable peace, therefore, increases with every improvement in technology, either of war or of peacex

#### The US won’t give up the crown- we’ll go down fighting triggering all their impacts- hegemony critics agree

David P. Calleo (University Professor at The Johns Hopkins University and Dean Acheson Professor at its Nitze School of Advanced International Studies (SAIS)) 2009 “Follies of Power: America’s Unipolar Fantasy” p. 4-5

It is tempting to believe that America’s recent misadventures will discredit and suppress our hegemonic longings and that, following the presidential election of 2008, a new administration will abandon them. But so long as our identity as a nation is intimately bound up with seeing ourselves as the world’s most powerful country, at the heart of a global system, hegemony is likely to remain the **recurring obsession of our official imagination,** the id´ee fixe of our foreign policy. America’s hegemonic ambitions have, after all, **suffered** severe **setbacks before**. Less than half a century has passed since the “lesson of Vietnam.” But that lesson faded without forcing us to abandon the old fantasies of omnipotence. The fantasies merely went into remission, until the fall of the Soviet Union provided an irresistible occasion for their return. Arguably, in its collapse, the Soviet Union proved to be a greater danger to America’s own equilibrium than in its heyday. Dysfunctional imaginations are scarcely a rarity – among individuals or among nations. “Reality” is never a clear picture that imposes itself from without. Imaginations need to collaborate. They synthesize old and new images, concepts, and ideas and fuse language with emotions – all according to the inner grammar of our minds. These synthetic constructions become our reality, our way of depicting the world in which we live. Inevitably, our imaginations present us with only a partial picture. As Walter Lippmann once put it, our imaginations create a “pseudo-environment between ourselves and the world.”2 Every individual, therefore, has his own particular vision of reality, and every nation tends to arrive at a favored collective view that differs from the favored view of other nations. When powerful and interdependent nations hold visions of the world severely at odds with one another, the world grows dangerous.

#### Our advantage isn’t based on myopic security discourse- multiple independent fields support our hegemony advantage, prefer our advantage because it is interdisciplinary

William Wohlforth (professor of government at Dartmouth College) 2009 “ Unipolarity, Status Competition, and Great Power War”Project Muse

Mainstream theories generally posit that states come to blows over an international status quo only when it has implications for their security or material well-being. The guiding assumption is that a state’s satisfaction [End Page 34] with its place in the existing order is a function of the material costs and benefits implied by that status.24 By that assumption, once a state’s status in an international order ceases to affect its material wellbeing, its relative standing will have no bearing on decisions for war or peace. But the assumption is undermined by cumulative research in disciplines ranging from **neuroscience and evolutionary biology to economics, anthropology, sociology, and psychology** that human beings are powerfully motivated by the desire for favorable social status comparisons. This research suggests that the preference for status is a basic disposition rather than merely a strategy for attaining other goals.25 People often seek tangibles not so much because of the welfare or security they bring but because of the social status they confer. Under certain conditions, the search for status will cause people to behave in ways that directly contradict their material interest in security and/or prosperity.

**Reject non interdisciplinary explanations of IR**

Steve **Smith**, Vice Chancellor of the Univ. of Exeter, BA, MA, PhD IR From Univ. of Southhampton, , Are Dialogue and Synthesis Possible in International Relations? International Studies Review (200**3**) 5,

No research agenda can lead to synthesis, simply because different approaches see different worlds. With regard to dialogue, it is important to make four points: (1) Any research agenda should be empirically (or problem) driven and not determined a priori by the kinds of empirical questions deemed relevant. (2) Such an agenda needs to be open to all interpretations of events and not preclude ex cathedra any particular approach. (3) Such an agenda should also be **interdisciplinary** because the study of international relations **cannot be restricted to any one discipline**. Being interdisciplinary permits us to **open up epistemological and methodological space** while, lessening claims for the exceptionalism of international relations as a field. (4) Such an agenda **would not use methodology and epistemology to police the boundaries** of what can and cannot be talked about and studied. Several other contributors to this forum, namely, Frank Harvey, Joel Cobb, and Andrew Moravcsik, criticize this author’s answers to the questions posed to us. Harvey and Cobb’s basic complaint is that these responses fail to provide the criteria by which to assess work in each approach. The argument here, however, is decidedly not that there are no standards but that the standards for assessing work within any one approach must be the standards of that research tradition. Appealing to any neutral ground for judging work merely reintroduces the epistemological orthodoxy of the mainstream in the disguise of neutral scholarly standards. In this regard, this author sides with Friedrich Kratochwil’s comment that there is no philosopher’s stone on which to build foundational truth claims. This statement does not imply, however, that there are no standards for assessing work. Far from wishing to protect any theory from fatal criticism, the point is to ensure that no one theory gets protected by epistemological gatekeeping. (143)

#### Your security K is just a bunch of non-falsifiable conspiracy theories – they cherry-pick examples – this turns their methodology arguments

Marijke Breuning (professor of political science at the University of North Texas) December 2009 “Thinking Critically About Security Studies” International Studies Review Volume 11, Issue 4, Pages 792-794

In their zeal to critique conspicuous consumption and the American love affair with the SUV, Simon Dalby and Matthew Paterson resort to the familiar argument that the Dutch consume less oil because they choose "to walk, ride bicycles, or take the train" (p. 184). They forget to mention that this is an easy choice in a very densely populated country with public transportation plentiful in most locations, whereas gas is pricey and parking expensive (and difficult to find)—just as public transportation is preferred by many in New York City but generally not an option for residents of the many small towns of the American Midwest. These examples are typical of the interpretations offered in the volume's chapters. Greater reflection on initial judgments might have enabled the authors to arrive at deeper insights. Finally, there is the issue of assumptions. The contributors share a conviction that their perceptions are on target. There is no serious consideration of alternative explanations. Moreover, the explanations tend to attribute a unity of purpose to decisions **made by disparate entities** (e.g., government, business, and media) and occasionally resemble **conspiracy theories**. For instance, Marie Thorsten implies that TV shows such as 24 are designed to facilitate citizens' acceptance of the Bush administration's position that torture was both effective and acceptable. She does not consider the possibility that such shows may also turn people against such tactics or that they simply may have little impact because viewers understand them to be fictional entertainment. She also does not consider that the appearance of this show may have been a lucky happenstance for its creator, not something done by design and collusion. Ultimately, critical security studies as presented in this volume is remarkably uncritical. Careful investigation and considered judgment is replaced with the **affirmation of foregone conclusions**. More is required to successfully address contemporary security challenges.

#### Heg is key to decease excess American interventionalism

**Kagan and Kristol, 2k** (Robert and William, “Present Dangers”, Kagan is a Senior Associate at the Carnegie Endowment for International Peace, and Kristol is the editor of The Weekly Standard, and a political analyst and commentator, page 13-14 )

http://www2.uhv.edu/fairlambh/asian/present\_dangers.htm

It is worth pointing out, though, that a foreign policy premised on American hegemony, and on the blending of principle with material interest, may in fact mean fewer, not more, overseas interventions than under the "vital interest" standard. (13). The question, then, is not whether the US should intervene everywhere or nowhere. The decision Americans need to make is whether the US should generally lean forward, as it were, or sit back. A strategy aimed at preserving American hegemony should embrace the former stance, being more rather than less inclined to weigh in when crises erupt, and preferably before they erupt. This is the standard of a global superpower that intends to shape the international environment to its own advantage. By contrast, the vital interest standard is that of a "normal" power that awaits a dramatic challenge before it rouses itself into action.

#### Prefer util

Cummiskey 90 – Professor of Philosophy, Bates (David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor, AG)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. **Persons** may **have "dignity**, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), **but**, as rational beings, persons **also** have **a fundamental equality which dictates that some must** sometimes **give way for the sake of others.** The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

#### Empiricism is still good even if reality is socially constructed

**Sil 2k**—pol sci, U Penn (Rudra, Beyond Boundaries, ed Sil and Doherty, 148-9,)

The differences among the ontologies of various positivists at one end, and the different degrees of subjectivism among various interpretive theorists at the other end, both suggest that moving a little further away from each extreme might get us closer to a "middle ground" on the issue of an objective/subjective ontology of social reality. This "middle ground" may be best exemplified in Max Weber's position on the problem of subjectivity. Although there are contending perspectives on where the "real" Weber came down on this question, 13 Weber is clear that his empirical analysis is not intended to support analytic laws or even provide exhaustive causal explanations of all aspects of a social phenomenon. In his famous essay, "'Objectivity' in Social Science and Social Policy," in addition to placing quotation marks around the word ''objectivity," he states that "as far back as we may go into the gray mist of the far-off past, the reality to which the laws apply always remains equally individual, equally undeducible from laws." Weber goes on to note that his method of classification through "ideal-types" are designed not to objectively capture general laws, but only to generate a better understanding of an "infinitely complex" reality through the "analytic accentuation" of certain aspects on the basis of the investigator's own interests.14 In another essay on "Basic Sociological Terms," Weber argues that **subjectivity** **does not rule out the possibility of a systematic investigation** into certain aspects of a phenomena because " 'recapturing an experience' is . . . not an absolute precondition for its interpretation."15 It is easy to interpret these statements as indicative that Weber was ambivalent in addressing the problem of subjectivity, and yet the ambivalence itself might be indicative of a pragmatic intermediate position that is no less compelling than the more definitive positions staked out by positivists and relativists. Clearly, Weber is hardly being a radical subjectivist or relativist when he argues that interpretation does not presuppose "recapturing" an experience or when he constructs "ideal types" to categorize social phenomena; at the same time, he is cautious about inferring too much from social patterns or regularities given that these regularities are abstracted from a complex reality by individual social scientists primarily on the basis of what is of interest to them. Taking the lead from this interpretation of Weber's ontology, we can identify an approximate "center" on the problem of objective/subjective reality in social analysis reflected in the following proposition: While social reality is subjectively experienced and socially constructed, it is sufficiently "intersubjective" to permit the investigator opportunities to extract a generalizable "interpretive understanding" of the meanings that individuals attach to actions and subjective experiences in different historical and cultural contexts. Such an "intersubjective" ontology, while hardly unique to Weberians, leaves the door open to a wider variety of social analysis and enables all but the most extreme objectivists and subjectivists to communicate with one another in attempting to better grasp aspects of social reality.

#### Don’t be an academic—their framework dooms the alt

**Gitlin 5** (Todd Gitlin formerly served as professor of sociology and director of the mass communications program at the University of California, Berkeley, and then a professor of culture, journalism and sociology at New York University. He is now a professor of journalism and sociology and chair of the Ph.D. program in Communications at Columbia University.  “The Intellectuals and the Flag”, <http://www.ciaonet.org.proxy2.cl.msu.edu/book/git01/git01_04.pdf>

Yet the audacious adepts of “theory” constitute themselves the equivalent of a vanguard party—laying out propositions to be admired for their audacity rather than their truth, defending themselves when necessary as victims of stodgy and parochial old-think, priding themselves on their cosmopolitan majesty. “Theory” dresses critical thought in a language that, for all its impenetrability, certifies that intellectuals are central and indispensable to the ideological and political future. The far right might be firmly in charge of Washington, but Foucault (and his rivals) rules the seminars. At a time of political rollback, intellectual flights feel like righteous and thrilling consolations. Masters of “theory,” left to themselves, could choose among three ways of understanding their political role. They could choose the more-or-less Leninist route, flattering themselves that they are in the process of reaching correct formulations and hence (eventually) bringing true consciousness to benighted souls who suffer from its absence. They could choose the populist path, getting themselves off the political hook in the here and now by theorizing that potent forces will **some day,** willy-nilly, gather to upend the system. Or they could reconcile themselves to Frankfurt-style futilitarianism, conceding that history has run into a cul-de-sac and making do nevertheless. In any event, practitioners of “theory” could carry on with their lives, practicing politics by publishing without perishing, indeed, without having to set foot outside the precincts of the academy. As the revolutionary tide has gone out, a vanguard marooned without a rearguard has made the university into an asylum. As many founders and masters of “theory” pass from the scene, the genre has calcified, lost much of its verve, but in the academy verve is no prerequisite for institutional weight, and so the preoccupation and the style go on and on.

#### Don’t prefer any ontology --- accept all because there is no warrant to prefer one over another.

Patrick Thaddeus Jackson, 2010. Associate Professor of International Relations in the School of International Service at the American University in Washington, DC. “The Conduct of Inquiry in International Relations: Philosophy of Science and its Implications for the Study of World Politics,” p 27-8.

However, I do not think that putting ontology first in the panacea that many seem to think it is. For one thing, if one puts ontology first then one is, at least provisionally, committed to a particular (if revisable) account of what the world is made up of: co-constituted agents and structures, states interacting under conditions of anarchy, global class relations, or what have you. **This is a rather large leap to make on anyone’s authority**, let alone that of a philosopher of science. Along these lines, **it is unclear what if any *warrant* we could provide for most ontological claims if ontology in this sense were to always “come first**.” If someone makes an ontological claim about something existing in the world, then we are faced with an intriguing epistemological problem of how possibly to know whether that claim is true, and the equally intriguing problem of selecting the proper methods to use in evaluating that claim (Chernoff 2009b, 391). But if epistemology and method are supposed to be fitted to ontology, then we are stuck with techniques and standards designed to respond to the specificity of the object under investigation. This problem is roughly akin to using state-centric measurements of cross-border transactions to determine whether globalization is eroding state borders, because the very object under investigation—“state borders”—is presupposed by the procedures of data collection, meaning that the answer will always, and necessarily, assert the persistence of the state.

#### Environmental management is inevitable – concrete action key

Levy 99- PhD @ Centre for Critical Theory at Monash

Neil, “Discourses of the Environment,” ed: Eric Darier, p. 215

If the ‘technological fix’ is unlikely to be more successful than strategies of limitation of our use of resources, we are, nevertheless unable simply to leave the environment as it is. There is a real and pressing need for space, and more accurate, technical and scientific information about the non-human world. For we are faced with a situation in which the processes we have already set in train will continue to impact upon that world, and therefore us for centuries. It is therefore necessary, not only to stop cutting down the rain forests, but to develop real, concrete proposals for action, to reverse or at least limit the effects of our previous interventions. Moreover, there is another reason why our behavior towards the non-human cannot simply be a matter of leaving it as it is, at least in so far as our goals are not only environmental but also involve social justice. For if we simply preserve what remains to us of wilderness, of the countryside and of park land, we also preserve patterns of very **unequal access to their resources and their consolations** (Soper 1995: 207).in fact, we risk exacerbating these inequalities. It is not us, **but the poor** of Brazil, **who will bear the brunt** of the misery which would result from a strictly enforced policy of leaving the Amazonian rain forest untouched, in the absence of alternative means of providing for their livelihood. It is the development of policies to provide such ecologically sustainable alternatives which we require, as well as the development of technical means for replacing our current greenhouse gas-emitting sources of energy. Such policies and proposals for concrete action must be formulated by ecologists, environmentalists, people with expertise concerning the functioning of ecosystems and the impact which our actions have upon them. Such proposals are, therefore, very much the province of Foucault’s specific intellectual, the one who works ‘within specific sectors, at the precise points where their own conditions of life or work situate them’ (Foucault 1980g: 126). For who could be more fittingly described as ‘the strategists of life and death’ than these environmentalists? After the end of the Cold War, it is in this sphere, more than any other, that man’s ‘politics places his existence as a living being in question’ (Foucault 1976: 143). For it is in facing the consequences of our intervention in the non-human world that the hate of our species, and of those with whom we share this planet, will be decided?

#### No root cause– prefer proximate causes

Moore, 04 [John Norton, Professor of Law at the University of Virginia He formerly served as the first Chairman of the Board of the United States Institute of Peace and as the Counselor on International Law to the Department of State, Winter, “Beyond the Democratic Peace: Solving the War Puzzle”, 44 Va. J. Int'l L. 341, Lexis Law]

If major interstate war is predominantly a product of a synergy between a potential nondemocratic aggressor and an absence of effective deterrence, what is the role of the many traditional "causes" of war? Past, and many contemporary, theories of war have focused on the role of specific disputes between nations, ethnic and religious differences, arms races, poverty and social injustice, competition for resources, incidents and accidents, greed, fear, perceptions of "honor," and many other factors. Such factors may well play a role in motivating aggression or generating fear and manipulating public opinion. The reality, however, is that while some of these factors may have more potential to contribute to war than others, there may well be an **infinite set of motivating factors**, or human wants, motivating aggression. It is not the independent existence of such motivating factors for war but rather the circumstances permitting or encouraging high-risk decisions leading to war that is the key to more effectively controlling armed conflict. And the same may also be true of democide. The early focus in the Rwanda slaughter on "ethnic conflict," as though Hutus and Tutsis had begun to slaughter each other through spontaneous combustion, distracted our attention from the reality that a nondemocratic Hutu regime had carefully planned and orchestrated a genocide against Rwandan Tutsis as well as its Hutu opponents. [n158](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1329520437445&returnToKey=20_T13973620735&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.647208.6119287203#n158) Certainly if we were able to press a button and end poverty, racism, religious intolerance, injustice, and endless disputes, we would want to do so. Indeed, democratic governments must remain committed to policies that will produce a better world by all measures of human progress. The broader achievement of democracy and the rule of law will itself assist in this progress. No one, however, has yet been able to demonstrate the kind of robust correlation with any of these "traditional" causes of war that is reflected in the "democratic peace." Further, given the difficulties in overcoming many of these social problems, an approach to war exclusively dependent on their solution may **doom us to war for generations** to come.

#### Managing nature does not devalue anyone—we should respond because nature will kill us off otherwise

DE MAGALHÃES 2008(João Pedro, Lecturer in the School of Biological Sciences at the University of Liverpool in England [equivalent to an assistant professor in the US system], “>H: The Sky Is the Limit,” http://jp.senescence.info/thoughts/transhumanism.html)

**Humans are not a finished product**; we are evolving organisms, waiting for the right conditions to blossom. **We can and we must evolve beyond natural and biological limits**. It is our destiny. Contra naturam, **the defiance of Nature, has lead us to increase our quality of life and longevity.** In fact, **Nature has committed countless crimes against humanity: plagues and diseases, earthquakes and floods, pests, poisonous plants, and aging; Nature created us to suffer and die**. In fact, if it wasn't for Dr. Fleming's penicillin, I would be naturally dead because I had pneumonia when I was a child. It went against Nature and I'm happy for it. **We have been and will continue to fight and adapt Nature using our technology and intelligence**. (By "fighting Nature," **I don't mean destroying the rainforest**. I actually support conservation efforts and I think we can learn much from other species. What **I mean** is that **the human condition should supplant**, like it does to some degree, **what Nature intended** for us humans.) **When we win the battle against Nature we will not be humans anymore, we will be better than humans**. At present, **our top priority must be to fight aging, but** if we can achieve such lofty goal, **we will have a world of opportunities to upgrade ourselves using genetics, cybernetics, and nanotechnology**.

**Managerialism is good – we need to have a technological approach in order to prevent extinction**

**Heaberlin, 4** – nuclear engineer, led the Nuclear Safety and Technology Applications Product Line at the Pacific Northwest National Laboratory (Scott, A Case for Nuclear-Generated Electricity, p. 31-40)

Well, then let's not do that, huh? Well, no, not hardly, because without that use of fertilizers we couldn't produce the food to feed the population. We just couldn't do it. Here are some comparisons."

If you used no fertilizers or pesticides you could get 500 kilograms of grain from a hectare in a dry climate and as much as 1000 kilograms in a humid cli­mate. If you got organic and used animal manure as fertilizer, assuming you could find enough, you might get as much as 2000 kilograms per hectare. For a sense of scale, the average in the United States, where recall we only get half the food value to hectare as the intensively farmed Chinese crop land, we get about 4500 kilograms per hectare on the average. In serious cornfields with fertilizer, irrigation, and pesticides, the value is 7000 kilograms per hectare.

Modern mechanized, chemically supported agriculture produces 7 to 14 times the food that you would get without those advantages. Even the best organic farming would produce only 30 to 45% of the food value you would get from the same sized chemically fertilized farm, and that is assuming you could get the manure you needed to make it work.

In very stark terms, without the chemically enhanced farming we would have probably something like one-fifth the food supply we have now. That means four-fifths the population would not be fed, at least as we are organized now. So, no, just giving up on fertilizers is not in the deal.

However, we could get the hydrogen and energy from sources other than natural gas. Nuclear energy could be used to provide electricity to extract hydrogen from water and produce the process heat required to combine the hydrogen and nitrogen from the air. That is just a thought to stick in your mind. While we are looking at energy use in agriculture, here are a few more numbers for you.10 If you look at the energy input into agriculture and the energy you get out, you see some interesting facts. By combining the energy used to make fertilizers and pesticides, power irrigation, and run the farm machinery in the United States, we use about 0.7 kcal of fossil fuel energy for each 1 kcal of food we make. This doesn't include the energy needed to process and transport the food. In Europe where they farm more intensely, the amount of energy out is just about the same as energy in. In Germany and Italy the numbers are 1.4 and 1.7 kcal energy input to each 1 kcal output respectively. The point is you need energy to feed people, well at least a lot of people.

Which gets us back to Cohen and his question. One of the studies he examined looked at a "self-sustaining solar energy system." For the United States, this would replace all fossil energy and provide one-fifth to one-half the current energy use. The conclusion of the study was that this would either produce" a significant reduction in our standard of living ... even if all the energy conservation measures known today were adopted" or if set at the current standard of living, "then the ideal U.S. population should be targeted at 40-100 million people." The authors of that study then cheerfully go on to point out that we do have enough fossil fuel to last a least a century, as long as we can work out the pesky environmental problems. So, you can go to a "self-sustaining" energy economy as long as you are willing to shoot between 2 out of 3 and 6 out of 7 of your neighbors.

And this is a real question. The massive use of fossil fuel driven agriculture to provide the fertilizers and pesticides, and power the farm equipment, is a) vitally important to feed everyone, and b) something we just can't keep up in a business-as-usual fashion. Sustainable means you can keep doing it. Fossil energy supplies are finite; you will run out some time. Massive use of fossil energy and the greenhouse gases they produce also may very well tip the planet into one of those extinction events in which a lot of very bad things happen to a lot of the life on the earth.

O.K. to Cohen's big question, how many people can the earth support? What it comes down to is that the "Well, it depends" answer depends on

• what quality of life you will accept,

• what level of technology you will use, and

• what level of social integration you will accept.

We have seen some of the numbers regarding quality of life. Clearly if you are willing to accept the Bangladesh diet, you can feed 1.8 times more people than if you chose the United States diet.

If you choose the back-to-nature, live like our hearty forefathers, level of technology, you can feed perhaps one-fifth as many people as you can with modern chemical fertilized agriculture. The rest have to go.

And here is the tough one. You can do a lot better, get a lot more people on the planet, if you just force a few things. Like, no more land wasted in growing grapes for wine or grains for whiskey and beer. No cropland used for tobacco. No more grain wasted on animals for meat, just grain for people. No more rich diets for the rich countries, share equally for everyone. No more trade barriers; too bad for the farmers in Japan and France, those countries would just have to accept their dependence on other countries for their food. It is easy to see that at least some of those might actually be a pretty good thing; however, the kicker is how do you get them to happen? After all, Mussolinill did make the trains run on time. How could you force these things without a totalitarian state? Are you willing to give up your ability to choose for yourself for the common good? It is not pretty, is it?

Cohen looked at all the various population estimates and concluded that most fell into the range of 4 to 16 billion. Taking the highest value when researchers offered a range, Cohen calculated a high median of 12 billion and taking the lower part of the range a low median of 7.7 billion. The good news in this is 12 billion is twice as many people as we have now. The bad news is that the projections for world population for 2050 are between 7.8 and 12.5 billion. That means we have got no more than 50 years before we exceed the nominal carrying capacity of the earth. Cohen also offers a qualifying observation by stating the "First Law of Information," which asserts that 97.6% of all statistics are made up. This helps us appreciate that application of these numbers to real life is subject to a lot of assumptions and insufficiencies in our understanding of the processes and data.

However, we can draw some insights from all of this. What it comes down to is that if you choose the fully sustainable, non-fossil fuel long-term options with only limited social integration, the various estimates Cohen looked at give you a number like 1 billion or less people that the earth can support. That means 5 out of 6 of us have got to go, plus no new babies without an offsetting death.

On the other hand, if you let technology continue to do its thing and perhaps get even better, the picture need not be so bleak. We haven't made all our farmland as productive as it can be. Remember, the Chinese get twice the food value per hectare as we do in the United States. There is also a lot of land that would become arable if we could get water to it. And, of course, in case you need to go back and check the title of this book, there are alternatives to fossil fuels to provide the energy to power that technology.

So given a positive and perhaps optimistic view of technology, we can look to some of the high technology assumption based studies from Cohen's review. From the semi-credible set of these, we can find estimates from 19 to 157 billion as the number of people the earth could support with a rough average coming in about 60 billion. This is a good time to be reminded of the First Law of Information. The middle to lower end of this range, however, might be done without wholesale social reprogramming. Hopefully we would see the improvement in the quality of life in the developing countries as they industrialize and increase their use of energy. Hopefully, also this would lead to a matching of the reduction in fertility rates that has been observed in the developed countries, which in turn would lead to an eventual balancing of the human population.

The point to all this is the near-term future of the human race depends on technology. If we turn away from technology, a very large fraction of the current and future human race will starve. If we just keep on as we are, with our current level of technology and dependence on fossil fuel resources, in the near term it will be a race between fertility decrease and our ability to feed ourselves, with, frankly, disaster the slight odds-on bet. In a slightly longer term, dependence on fossil fuels has got to lead to either social chaos or environmental disaster. There are no other end points to that road. It doesn't go anywhere else.

However, if we accept that it is technology that makes us human, that technology uniquely identifies us as the only animal that can choose its future, we can choose to live, choose to make it a better world for everyone and all life. This means more and better technology. It means more efficient technology that is kinder to the planet but also allows humans to support large numbers in a high quality of life. That road is not easy and has a number of ways to screw up. However, it is a road that can lead to a happier place, a better place.

Two Concluding Thoughts on the Case for Technology

Two more points and I will end my defense of technology. First, I want to bring you back from all the historical tour and all the numbers about population to something more directly personal. Let me ask you two questions.

What do you do for a living?

What did you have for breakfast?

Don't see any connection between these questions or of their connection to·the subject of technology? Don't worry, the point will come out shortly. I am just trying to bring the idea of technology back from this grand vision to its impact on your daily life.

Just as a wild guess, your answer to the first question was something that, say 500 years ago, didn't even exist. If we look 20,000 years ago, the only job was" get food." Even if you have a really directly socially valuable job like a medical doctor, 20,000 years ago you would have been extraneous. That is, the tribe couldn't afford you. What, no way! A doctor could save lives, surely a tribe would value such a skill. Well, sure, but the tribe could not afford taking one of their members out of the productive */I* getting the food" job for 20 years while that individual learned all those doctor skills.

If you examine the "what you do for a living" just a bit I think you will see a grand interconnectedness of all things. I personally find it pretty remarkable that we have a society that values nuclear engineers enough that I can make a living at it. Think about it. Somehow what I have done has been of enough value that, through various taxpayer and utility ratepayers, society has given me enough money for food and shelter. The tribe 20,000 years ago wouldn't have put up with me for a day.

You see, that is why we as humans are successful, wildly successful in fact. We work together. "Yeah, sure we do," you reply, " read a newspaper lately?" Well, *O.K.,* we fuss and fight a good deal and some of us do some pretty stupid and pretty mean things. But the degree of cooperation is amazing if you just step back a bit.

O.K., what did you have for breakfast: orange juice, coffee, toast, maybe some cereal and milk? Where do these things come from? Orange juice came from Florida or California. Coffee came from South America. Bread for the toast came perhaps from Kansas; cereal, from the Mid-West somewhere. The jam on the toast may have come from Oregon, or maybe Chile. Milk is probably the only thing that came from within a hundred miles of your breakfast table. Think about it. There were hundreds of people involved in your breakfast. Farmers, food-processing workers, packaging manufacturers, transportation people, energy producers, wholesale and retail people. Perhaps each one only spent a second on their personal contribution to your personal breakfast, but they touch thousands of other people's breakfasts as well. In turn, you buying the various components of your breakfast supported, in your part, all those people. They in turn, in some way or another, bought whatever you provide to society that allowed you to buy breakfast. Pretty amazing, don't you think?

Now when you look at all that, think about what ties all the planetwide interconnection, Yep, you guessed it: technology. Without technology, you get what is available within your personal reach, and what you produce is available only to those who are near enough that you can personally carry it to them on your own two feet. Technology makes our world work. It gives you personally a productive and socially valuable way to make both a living and to provide your contribution to the rest of us**.**

I want you to stop a minute and really think about that. What would your life be like without technology? Could you do what you currently do? Would anyone be able to use what you do? Would anyone pay you for that? "But I am a school teacher," you say, "of course, they would pay me!" Are you sure? Why do you need schools if there is no technology? All I need is to teach the kid how to farm and how to hunt. Sons and daughters can learn that by working in the fields along with their parents. See what I mean?

Now, I have hopefully reset your brain. Sure, you are still going to be hit with daily "technology is bad" messages. Hopefully, you are a bit more shielded against that din, and you have been given some perspective to balance that message and are prepared to see the true critical value of technology to human existence. The point is that technology is what makes us human. Without it, we are just slightly smarter monkeys.

You may feel that 6 billion of us are too many, and that may very well be. I personally don't know how to make that value decision. Which particular person does one select as being one of the excess ones?

However, the fact is that there are 6 billion of us, and it looks like we are headed for 10 to 12 billion in the next 50 years, Without not only the technology we have, but significantly better and more environmentally friendly technology, the world is going to get ugly as we approach these numbers,

On the other hand, with the right technologies we can not only support those numbers, we can do it while we close the gap between the haves and have-nots. We can make it a better place for everyone. It takes technology and the energy to drive it. Choosing technology is what we have to do to secure the evolutionary selection of us as a successful species, Remember, some pages back in discussing the unlikely evolutionary path to us, I said we are not the chosen, unless. Unless we choose us. This is what I meant. We are totally unique in all of evolutionary history. We humans have the unique ability and opportunity to choose either our evolutionary success or failure. A choice of technology gives us a chance. A choice rejecting technology dooms us as a species and gives the cockroaches the chance in our place. Nature doesn't care what survives, algae seas, dinosaurs, humans, cockroaches, or whatever is successful. If we care, we have to choose correctly.

As an aside, let me address a point of philosophy here. If any of this offends your personal theology, I offer this for your consideration. Genesis tells us God gave all the Earth to humanity and charged us with the stewardship thereof. So it is ours to use as well as we can. That insightful social philosopher Niccolo Machiavelli put it this way in 1501:

"What remains to be done must be done by you; since in order not to deprive us of our free will and such share of glory as belongs to us, God will not do everything Himself."

*O.K.,* you are saying, "I give." You have beaten the socks off me. Technology is good; technology is the identifying human trait and our only hope. But what is this stuff about choosing technology or not? Technology just happens doesn't it? I mean, technology always advances, it always has, so why the big deal?

Well, that is my last point on technology. It doesn't always just happen, and people have chosen to turn away from technology. In what might have seemed at the time to be a practical social decision, huge future implications were imposed on many generations to come. It has happened. Let me take you on one more trip through history. I think you will find it enlightening. In *Guns, Germs, and Steel,* Jared Diamond explores the question of why the European societies came to be dominate over all the other human cultures on earth. It is a fascinating story and provides a lot of insight into how modern societies evolved. In moving through history, he comes across a very odd discontinuity. He observes that if you came to earth from space in the year 1400 A.D., looked around, and went home to write your research paper on the probable future of the earth, you would clearly conclude the Chinese would run the entire planet shortly. Furthermore, you could conclude they would do it pretty darn well. If those same extraterrestrial researchers were to pop into their time machine and come back to earth in any year from say 1800 to now, they would be totally amazed to see China as a large, but relatively backward, country, struggling to catch up with their European and American peers.

To understand the significance of this, you have to go on that research trip with the extraterrestrials and look at China before 1400. In *The Lever af Riches,* Joel Mokyr dedicates one chapter looking at the comparisons of technology development in China to that in Europe. He lists the following as technology advantages China had in the centuries before 1400:

• Extensive water control projects, alternately draining and irrigating

land, significantly boosting agricultural production

• Sophisticated iron plow introduced sixth century B.C.

• Seed drills and other farm tools, introduced around 1000 *A.D.*

• Chemical and organic fertilizers and pesticides used

• Blast furnaces and casting of iron as early as 200 B.C., not known in Europe until fourteenth century

• Advanced use of power sources in textile production, not seen in Europe until the Industrial Revolution

• Invention of compass around 960 A.D.

• Major advances in maritime technology (more in a bit on this)

• Invention of paper around 100 A.D. (application as toilet paper by *590 A.D.).*

In the year 1400 AD., China was a world power, perhaps the only true world power. Their technology in agriculture, textiles, metallurgy, and maritime transportation were far in advance of any other country. They had a strong central government and a very healthy economy.

Their naval strength provides a real insight into the degree of this dominance. Dr. Diamond sends us to an extremely readable book *When China Ruled the Seas-The Treasure Fleet of the Dragon Throne 1405-1433* by Dr. Louise Levathes. Dr. Levathes takes us on an inside tour of the Chinese empire during these years. She focuses on the great treasure fleets that China set forth in these early years of the fifteenth century. In her book she has a wonderful graphic that overlays a Chinese vessel of the treasure fleet (-1410) with Columbus's *St. Maria* (1492). At 85 feet in length and three masts, the *St. Maria* is dwarfed by the nine-masted, 400-foot-long Chinese vessel.

The Chinese sailed fleets of these magnificent vessels throughout oceans of South Asia, to India, and even as far as the eastern coast of Africa. With this naval domination China claimed tribute from Japan, Korea, the nations of the Malay Archipelago, and various states within what is now India. Through both trade and the occasional application of military force, China provided an enlightened and progressive direction for all the nations within this sphere of influence. If two princes in India were fighting over a throne, it was the recognition, or lack thereof, from the Chinese emperor that decided who would rule. Setting a policy of religious inclusion and tolerance, the Chinese engaged the Arabian traders and calmed religious disputes within Asia.

With applications of power sources in textiles and advanced metallurgy, the Chinese were in the same position in 1400 as the British were in 1750, ready to launch into the Industrial Revolution. They traded with nations thousands of miles from home with vast, sophisticated shipping fleets. They were poised to extend this trade all the way to Europe and perhaps find the New World by going east instead of the European's going west in search of the rich Chinese markets.

But if we pop into that extraterrestrial time machine and drop into China in 1800, we find a technologically backward nation, humbled by a relatively small force of Europeans with "modern" military technology who wantonly imposed their will on the Chinese. The Chinese have been struggling to catch up with European and American technology ever since and so far not quite being able to do that. The domination of China by the Japanese during World War II shows how complete the turnaround was. In 1400 Japan was but one of many vassal states huddled about the feet of the Imperial Chinese throne. In 1940 the Japanese military crushed the Chinese government while marching on to control much of South Asia.

What could have happened to turn this clear champion of technology, trade, enlightened leadership with all its advantages over both its neighbors and yet-distant foreign competitors into such a weak, backward giant?

Mokyr goes through a pretty complete list of potential causes. He looks at diet, climate, and inherent philosophical mindset rejecting each as a credible actor mainly on the bases that all of these conditions were present during the period of technological and economic growth as well as the subsequent stagnation. Therefore, these were not determining factors in the turnabout. In the end he concludes, as does Diamond and Levathes, that it was just politics.

Yep, that is right. It was good, old human politics. Dr. Levathes gives us a delightful insider's view of the personalities and politics of Imperial progressions during this critical time period. To make a short story of it, the party that had been in control during the expansionist period supported the great treasure fleets, commerce with foreign nations, use and expansion of technology, and a rather harsh control of the rival party. The rival party was based on Confucian philosophy that preached a rigid, inward-looking, controlled existence.

When the Confucian party gained control of the throne, they had their opportunity to push back on the prior ruling party that had oppressed them so harshly for so long. And they did. They wanted nothing to do with foreigners; we have all we need at home, here in China, they said. The fleet was disbanded and the making of ocean-going vessels forbidden. Technology was no longer "encouraged." Again, their position was what we have is good enough, stop with all this new nonsense. Over a period of just a few years, the course of the entire nation was shifted from what would have appeared to be a bright future as the leading power in the world to a large, but relatively insignificant, backwater, rich in history and culture, but all backward looking to a former glory.

That was it. A shift in the political agenda. At the time, to the leaders in control, one that made sense. Focus at home, use what you have now, create order, discipline, control. In 50 years Japanese pirates controlled the coast of China, and the former ruler of the seas from Asia to Africa could not get out of their harbors safely.

So, you see **if the "technology is bad" message gets incorporated into too many of our daily decisions,** we can turn from our bright future into something else. The difference is that this time the stakes are much higher than they were in fifteenth century China. If we, in the developed nations, make the wrong choices, we doom all of humanity by our folly. It is not just that we miss the potential bright future, we miss the chance to avoid the combined human population growth and resources exhaustion disaster coming at us like a runaway train. Technology is the only way to prevent that train wreck. We can hear the siren's call of anti-technology, come back to nature and let the train run us down in a bloody mess, or we can try our best to use technology wisely and win free to make a better life for everyone.

### 1ar

#### R and D directly ensures LFTR development

Lollis, 11 [October 10th, Ms. Tina, Funding for Liquid-Fluoride Thorium Reactor, Online Petition Request to the Obama Administration done via an independent third party, <http://www.thepetitionsite.com/2/Green-Energy/>]

We the undersigned petition you, the Obama Administration for a cleaner, more stable and sustainable energy source. During the years of the Johnson Administration they experimented with Molten-Salt Reactors using the natural element of Thorium, which we have have an abundance of buried in the Nevada desert. With use of the Liquid-Fluoride Thorium Reactors (LFTR), you will not only provide a cleaner, sustainable energy source to the United States, but to the world, as well. Using thorium has many advantages: -Research has already been conducted (reactor active from 1965-1969 Molten Salt Reactor Experiment). -One hundred grams of Thorium meets the current US citizen's lifetime energy needs. -LFTR 'burns' nearly all of its fuel. -Current Light Water Reactors burn only 3.4% of fuel, the rest is introduced into the waste stream. -LFTR generates much less waste. -LFTR burns existing nuclear waste as a fuel source. -The Thorium decay chain produces medical isotopes including Bi-213 (Distributed Cancers). -Thorium is abundant enough in the United States to achieve Energy Independence. -LFTR is passively safe, in a full power loss, LFTR cools naturally (No chance of meltdown via power-loss/natural disaster). -LFTR is perfect for Desalinization. -LFTR could completely replace fossil fuels as our grids energy source. -Thorium is 120x more abundant naturally than fissile uranium. -Known US Thorium reserves represent well over 500 years our current TOTAL power consumption. -Thorium fuel cycles does NOT produce weapons grade waste. -Kirk Sorenson has been invited to speak to Google about this tech multiple times. -Energy Independence has massive implications on our federal budget deficit. This, and many other benefits could be found by **funding further research and development** **of a Thorium LFTR reactors**. China, France, and other countries are currently working on this technology. It would be a great travesty to allow technology we developed 50 years ago, to be commercialized by the other great nations on this earth and fall behind with a 50 year head start. Thorium LFTR technology, is Green and Sustainable Technology. The resource is sufficiently large to be inexhaustible on a large scale time frame (500-5000 years in proven reserves per current energy usage). The resource is Green because of its lack of airborne greenhouse gasses, along with its ability to completely replace dirty fossil fuels. Kirk Sorenson projects 2-5 years for a prototype, 300-400million dollars, 5-10 years for commercial production.

#### Comprehensive international data proves the plan is feasible

Allen, 09 [Leslie Allen is a writer in Washington for the Washington Post, If Nuclear Power Has a More Promising Future ... Seth Grae Wants to Be the One Leading the Charge, http://www.washingtonpost.com/wp-dyn/content/article/2009/07/24/AR2009072401847\_5.html

And what if the technology had already gotten positive reviews from the American Nuclear Society, the World Nuclear Association and, in particular, from the International Atomic Energy Agency (IAEA), the world's nuclear watchdog, which, in a 2005 report titled Thorium Fuel Cycle -- Potential Benefits and Challenges, called it "**an attractive way to produce long-term nuclear energy** with low radiotoxicity waste?" You'd have the nuclear equivalent of unleaded gas, in Grae's analogy. Glancing around the room with a small smile, Grae is more than ready for skepticism. He's heard it many times over the years while explaining the new nuclear fuel that his company, the Northern Virginia-based Thorium Power Ltd., has been testing in Russia for several years and that he says will **be ready to license** for commercial use within a decade. One banker says flatly that many investors believe nuclear power, any nuclear power, is an "outdated technology." Grae, 46, who holds both law and business degrees, answers smoothly, occasionally deferring to Thomas Graham Jr., a courtly Kentuckian who is the company's executive chairman of the board and a retired ambassador. During his long State Department career, Graham participated in the negotiation of every major arms control and nonproliferation agreement drawn up over about three decades. (Hans Blix, who was director general of the IAEA and the United Nations' chief weapons inspector for Iraq from 2000 to 2003, is a senior adviser to the company.) By the time Graham excuses himself to attend another meeting, almost every question has been put to rest, it seems, but one: How come no one's heard of this technology?

#### No tech obstacles to thorium reactors -- government support overcomes any issues.

#### Kazimi, ‘2

[Mujid, American Scientist, “Thorium Fuel for Nuclear Energy,”

http://www.americanscientist.org/issues/id.884,y.0,no.,content.true,page.1,css.print/issue.aspx]

Even with a whole-assembly seed-and-blanket core, where each type of fuel assembly is of homogenous construction, it is clear that the manufacture of the fuel and its management within the reactor would be more complicated than usual. In a typical power reactor, the fuel assemblies are shuffled at intervals so that each will be exposed, on average, to the same conditions of heat and radiation. In a seed-and-blanket core, the seeds must sustain power levels that are significantly above average, while the blanket assemblies experience far less stressful conditions. Thus the fuel in the seed rods reaches higher temperatures, releases more of the gaseous fission products into the limited space allowed for them within the fuel rods and requires more cooling than does the fuel used in the blanket regions. These demands can be accommodated in various ways—for example, by allowing more coolant to flow through the seeds and by making the fuel materials less resistant to the flow of heat. In the Radkowsky-Kurchatov approach, the seed rods are made from a metallic uranium alloy (following designs that have been tested in Russian submarines), which improves their thermal conductivity. In the MIT-Brookhaven scheme, the uranium oxide pellets within the seed rods are hollow, which lowers their temperature. Although the blanket rods are less problematic in this regard, they too must be carefully engineered so that the exterior cladding holds up well, the working lifetime of these rods being in some designs as long as 13 or 14 years. In addition to examining these various engineering concerns, investigators at CANES have also quantified the advantages of the seed-and-blanket designs in terms of their contribution to averting the proliferation of bomb- making materials, and we have also tried to evaluate their economics. We found that the seed-and-blanket arrangements produce less plutonium than competing schemes in which uranium and thorium are mixed at finer scales. But our results are not quite as optimistic as Radkowsky's earlier work had indicated: We calculate a reduction of only 60 percent (for the whole-assembly system) or 70 percent (if both seed and blanket rods are used within each assembly), compared with Radkowsky's estimate of an 80-percent reduction for the latter. Our calculations of plutonium production do, however, support Radkowsky's assertions that the spent fuel would contain appreciable amounts of plutonium-238, a highly radioactive isotope, which thus produces a lot of heat. Indeed, the plutonium-238 content would be three to four times higher than with conventional uranium fuels. As Radkowsky pointed out, the heat given off by this isotope would make it quite difficult if not impossible to fabricate and maintain a nuclear weapon. The production of such large amounts of plutonium-238 comes about because more of the fuel is consumed (or "burned up," in the lingo of nuclear engineers) than is the case in conventional uranium-fueled reactors. An equivalent amount of plutonium-238 could be created using an all- uranium fuel, but this would require a higher initial amount of fissile uranium (235U) than is typical in today's practice, and the economic projections for that are discouraging. Thus our recent work amply confirms that the various engineering concerns can be met and that running reactors on thorium could indeed forestall clandestine efforts to use the spent fuel for making bombs. But the results of our investigation into the economics of thorium are less clear-cut. We estimate that thorium-based fuels could cost anywhere from 10 percent less to about 10 percent more than conventional nuclear fuels. The wide range stems from fundamental uncertainties about the cost of the seed uranium (which must be four times more enriched in uranium-235 than is the case with typical nuclear fuels), the cost of fabricating the fuel assemblies and the savings that might accrue in the future as a result of the reduction in the amount of spent fuel in need of disposal. Although it seems unlikely that economics alone could drive the adoption of thorium fuels, there are no technical "show-stoppers" here. Modifications to the existing commercial infrastructure would clearly be needed, but no fundamentally new technology is required. And the fact that the relevant materials (thorium and enriched uranium) have a long record of experimental use in reactors lends credibility to the notion that this scheme could one day find widespread application, should policymakers push the nuclear industry in that direction.

#### Neocleous is a joker

**Dayan 09** (Hilla, Phd Candidate @ New School for Social Research, "Critique of Security (review)," Canadian Journal of Law and Society, http://muse.jhu.edu.proxy2.library.uiuc.edu/journals/canadian\_journal\_of\_law\_and\_society/v024/24.2.dayan.html)

The book's main grievance is that the fetish of security—very broadly defined to include security both in the economic and in the political sense—is the root of anti-democratic measures, massive repression, and socio-economic injustice. In chapter 3, which deals with the relationship between social and national security, the overriding argument is that liberal democracies are, almost by definition, security states in the worst possible sense. The United States in particular is held responsible, given examples such as the New Deal and the Marshall Plan, for enforcing economic security intertwined with political and military interests on "the whole world, [which] was to be inclded in this new, 'secure' global liberal order" (p. 103). In this account, the desire to sustain a capitalist socio-economic order is portrayed as not much different from either the security obsessions of, for example, Israel and the apartheid regime of South Africa (p. 63) or the policies of any European welfare state. **This is a strikingly ahistorical approach that bundles up highly complex social, economic, and political systems into a generic straitjacket**. **Because of this overly generalizing line of argument, Critique of Security does not add much to the insights of critical theory** dating back to the 1970s, which has already dealt extensively with authoritarian practices and tendencies of liberal-capitalist orders.2 Moreover, **it curiously ignores the fact** that earlier post- or neo-Marxist critiques of the liberal-capitalist order have been **formulated primarily in the name of security—the demand to secure and protect the status of workers, women, minorities, and the environment**, for example.3 **Especially under the current conditions of insecurity generated by a global financial crisis, Neocleous' attack on welfare security seems misplaced or incomplete**. The interesting tension between popular and progressive demands for security from the ravages of capitalism, on the one hand, and security as a project of protecting the capitalist order, on the other hand, is not dealt with at all. Instead, the author pleads with us to simply eliminate the desire for security from our lives, or, in other words, to [End Page 291] **throw the baby out with the bathwater.** Still, Critique of Security serves as a useful reminder that demands for collective protection from the conditions generated by the systemic failures of the capitalist system must be accompanied by a sober re-evaluation of the limits and responsibilities of the state and its capacity to abuse power, especially in times of economic and political crisis and insecurity. It is a timely contribution that raises questions about the current responses by states to the global economic crisis. Now that all state resources are pulled and stretched to put capitalism back on track, whose security is really protected?

#### You still need field-specific contingent applications—not enough to just say we disrupt the assumptions

Yudkowsky 6 (Eliezer, Singularity Institute for AI Research Fellow and Director, 8/31, Cognitive Biases Potentially Affecting Judgment of Global Risk, http://www.singinst.org/ourresearch/publications/cognitive-biases.pdf)

Every true idea which discomforts you will seem to match the pattern of at least one psychological error.

Robert Pirsig said: "The world's biggest fool can say the sun is shining, but that doesn't make it dark out." if you believe someone is guilty of a psychological error, then demonstrate your competence by first demolishing their consequential factual errors. If there are no factual errors, then what matters the psychology? The temptation of psychology is that, knowing a little psychology, we can meddle in arguments where we have no technical expertise - instead sagely analyzing the psychology of the disputants. If someone wrote a novel about an asteroid strike destroying modern civilization, then someone might criticize that novel as extreme, dystopian, apocalyptic; symptomatic of the author's naive inability to deal with a complex technological society. We should recognize this as a literary criticism, not a scientific one; it is

about good or bad novels, not good or bad hypotheses. To quantify the annual probability of an asteroid strike in real life, one must study astronomy and the historical record: no amount of literary criticism can put a number on it. Garreau (2005) seems to hold that a scenario of a mind slowly increasing in capability, is more mature and sophisticated than a scenario of extremely rapid intelligence increase. But that's a technical question, not a matter of taste; no amount of psychologizing can tell you the exact slope of that curve. It's harder to abuse heuristics and biases than psychoanalysis. Accusing someone of conjunction fallacy leads naturally into listing the specific details that you think are burdensome and drive down the joint probability. Even so, do not lose track of the real- world facts of primary interest; do not let the argument become about psychology. Despite all dangers and temptations, it is better to know about psychological biases than to not know. Otherwise we will walk directly into the whirling helicopter blades of life. But be very careful not to have too much fun accusing others of biases. That is the road that leads to becoming a sophisticated arguer - someone who, faced with any discomforting argument, finds at once a bias in it. The one whom you must watch above all is yourself. Jerry Cleaver said: "what does you in is not failure to apply some high-level, intricate, complicated technique. It's overlooking the basics. Not keeping your eye on the ball." analyses should finally center on testable real-world assertions. Do not take your eye off the ball.

#### Most studies agree

**Drezner, 2005** [Daniel, Gregg Easterbrook, Associate Professor of International Politics at the Fletcher School of Law and Diplomacy at Tufts University, “War, and the dangers of extrapolation,” may 25]

Daily explosions in Iraq, massacres in Sudan, the Koreas smakestaring at each other through artillery barrels, a Hobbesian war of all against all in eastern Congo--combat plagues human society as it has, perhaps, since our distant forebears realized that a tree limb could be used as a club. But here is something you would never guess from watching the news: War has entered a cycle of decline. Combat in Iraq and in a few other places is an exception to a significant global trend that has gone nearly unnoticed--namely that, for about 15 years, there have been steadily fewer armed conflicts worldwide. In fact, it is possible that a person's chance of dying because of war has, in the last decade or more, become the lowest in human history.  Is Easterbrook right? He has a few more paragraphs on the numbers:  The University of Maryland studies find the number of wars and armed conflicts worldwide peaked in 1991 at 51, which may represent the most wars happening simultaneously at any point in history. Since 1991, the number has fallen steadily. There were 26 armed conflicts in 2000 and 25 in 2002, even after the Al Qaeda attack on the United States and the U.S. counterattack against Afghanistan. By 2004, Marshall and Gurr's latest study shows, the number of armed conflicts in the world had declined to 20, even after the invasion of Iraq. All told, there were less than half as many wars in 2004 as there were in 1991.  Marshall and Gurr also have a second ranking, gauging the magnitude of fighting. This section of the report is more subjective. Everyone agrees that the worst moment for human conflict was World War II; but how to rank, say, the current separatist fighting in Indonesia versus, say, the Algerian war of independence is more speculative. Nevertheless, the Peace and Conflict studies name 1991 as the peak post-World War II year for totality of global fighting, giving that year a ranking of 179 on a scale that rates the extent and destructiveness of combat. By 2000, in spite of war in the Balkans and genocide in Rwanda, the number had fallen to 97; by 2002 to 81; and, at the end of 2004, it stood at 65. This suggests the extent and intensity of global combat is now less than half what it was 15 years ago.  Easterbrook spends the rest of the essay postulating the causes of this -- the decline in great power war, the spread of democracies, the growth of economic interdependence, and even the peacekeeping capabilities of the United Nations.  Easterbrook makes a lot of good points -- most people are genuinely shocked when they are told that even in a post-9/11 climate, there has been a steady and persistent decline in wars and deaths from wars. That said, what bothers me in the piece is what Easterbrook leaves out.  First, he neglects to mention the biggest reason for why war is on the decline -- there's a global hegemon called the United States right now. Easterbrook acknowledges that "the most powerful factor must be the end of the cold war" but he doesn't understand whyit's the most powerful factor. Elsewhere in the piece he talks about the growing comity among the great powers, without discussing the elephant in the room: the reason the "great powers" get along is that the United States is much, much more powerful than anyone else. If you quantify power only by relative military capabilities, the U.S. is a great power, there are maybe ten or so middle powers, and then there are a lot of mosquitoes.[*If the U.S. is so powerful, why can't it subdue the Iraqi insurgency?--ed*. Power is a relative measure -- the U.S. might be having difficulties, but no other country in the world would have fewer problems.] Joshua Goldstein, who knows a thing or two about this phenomenon, made this clear in a Christian Science Monitor op-ed three years ago:  We probably owe this lull to the end of the cold war, and to a unipolar world order with a single superpower to impose its will in places like Kuwait, Serbia, and Afghanistan. The emerging world order is not exactly benign – Sept. 11 comes to mind – and Pax Americana delivers neither justice nor harmony to the corners of the earth. But a unipolar world is inherently more peaceful than the bipolar one where two superpowers fueled rival armies around the world

. The long-delayed "peace dividend" has arrived, like a tax refund check long lost in the mail. The difference in language between Goldstein and Easterbrook highlights my second problem with "The End of War?" Goldstein rightly refers to the past fifteen years as a "lull" -- a temporary reduction in war and war-related death. The flip side of U.S. hegemony being responsible for the reduction of armed conflict is what would happen if U.S. hegemony were to ever fade away. Easterbrook focuses on the trends that suggest an ever-decreasing amount of armed conflict -- and I hope he's right. But I'm enough of a realist to know that if the U.S. should find its primacy challenged by, say, a really populous non-democratic country on the other side of the Pacific Ocean, all best about the utility of economic interdependence, U.N. peacekeeping, and the spread of democracy are right out the window.  UPDATE: To respond to a few thoughts posted by the commenters:  1) To spell things out a bit more clearly -- U.S. hegemony important to the reduction of conflict in two ways. First, U.S. power can act as a powerful if imperfect constraint on pairs of enduring rivals (Greece-Turkey, India-Pakistan) that contemplate war on a regular basis. It can't stop every conflict, but it can blunt a lot of them. Second, and more important to Easterbrook's thesis, U.S. supremacy in conventional military affairs prevents other middle-range states -- China, Russia, India, Great Britain, France, etc. -- from challenging the U.S. or each other in a war. It would be suicide for anyone to fight a war with the U.S., and if any of these countries waged a war with each other,

#### 2ac Busby:

**Busby, 12** [Get Real Chicago IR guys out in force, Josh, Assistant Professor of Public Affairs and a fellow in the RGK Center for Philanthropy and Community Service as well as a Crook Distinguished Scholar at the Robert S. Strauss Center for International Security and Law. <http://duckofminerva.blogspot.com/2012/01/get-real-chicago-ir-guys-out-in-force.html>]

Is Unipolarity Peaceful? As evidence, Monteiro provides metrics of the number of years during which great powers have been at war. For the unipolar era since the end of the Cold War, the United States has been at war 13 of those 22 years or 59% (see his Table 2 below). Now, I've been following some of the discussion by and about Steven Pinker and Joshua Goldstein's [work](http://www.nytimes.com/2011/12/18/opinion/sunday/war-really-is-going-out-of-style.html?pagewanted=all) that suggests the world is becoming more peaceful with interstate wars and intrastate wars becoming more rare. I was struck by the graphic that Pinker used in a Wall Street Journal [piece](http://online.wsj.com/article/SB10001424053111904106704576583203589408180.html) back in September that drew on the Uppsala Conflict Data, which shows a steep decline in the number of deaths per 100,000 people. How do we square this account by Monteiro of a unipolar world that is not peaceful (with the U.S. at war during this period in Iraq twice, Afghanistan, Kosovo) and Pinker's account which suggests declining violence in the contemporary period? Where Pinker is focused on systemic outcomes, Monteiro's measure merely reflect years during which the great powers are at war. Under unipolarity, there is only one great power so the measure is partial and not systemic. However, Monteiro's theory aims to be systemic rather than partial. In critiquing Wohlforth's early work on unipolarity stability, Monteiro notes: Wohlforth’s argument does not exclude all kinds of war. Although power preponderance allows the unipole to manage conflicts globally, this argument is not meant to apply to relations between major and minor powers, or among the latter (17). So presumably, **a more adequate test of the peacefulness or not of unipolarity** (at least for Monteiro) is not the number of years the great power has been at war **but whether the system as a whole is becoming more peaceful under unipolarity compared** to previous eras, including wars between major and minor powers or wars between minor powers and whether the wars that do happen are as violent as the ones that came before. Now, as Ross Douthat pointed [out](http://douthat.blogs.nytimes.com/2011/10/17/steven-pinkers-history-of-violence/), Pinker's argument isn't based on a logic of benign hegemony. It could be that even if the present era is more peaceful, unipolarity has nothing to do with it. Moreover, Pinker may be wrong. Maybe the world isn't all that peaceful. I keep thinking about the places I don't want to go to anymore because they are violent (Mexico, Honduras, El Salvador, Nigeria, Pakistan, etc.) As Tyler Cowen [noted](http://marginalrevolution.com/marginalrevolution/2011/10/steven-pinker-on-violence.html), the measure Pinker uses to suggest violence is a per capita one, which doesn't get at the absolute level of violence perpetrated in an era of a greater world population. **But, if my read of other** [**reports**](http://www.hsrgroup.org/human-security-reports/20092010/graphs-and-tables.aspx) **based on Uppsala data is right, war is becoming more rare and less deadly** (though later [data](http://www.pcr.uu.se/research/ucdp/charts_and_graphs/) suggests lower level armed conflict may be increasing again since the mid-2000s). The apparent violence of the contemporary era may be something of a presentist bias and reflect our own lived experience and the ubiquity of news media .Even if the U.S. has been at war for the better part of unipolarity, the deadliness is declining, even compared with Vietnam, let alone World War II. Does Unipolarity Drive Conflict? So, I kind of took issue with the Monteiro's premise that unipolarity is not peaceful. What about his argument that unipolarity drives conflict? Monteiro suggests that the unipole has three available strategies - defensive dominance, offensive dominance and disengagement - though is less likely to use the third. Like Rosato and Schuessler, Monteiro suggests because other states cannot trust the intentions of other states, namely the unipole, that minor states won't merely bandwagon with the unipole. Some "recalcitrant" minor powers will attempt to see what they can get away with and try to build up their capabilities. As an aside, in Rosato and Schuessler world, unless these are located in strategically important areas (i.e. places where there is oil), then the unipole (the United States) should disengage. In Monteiro's world, disengagement would inexorably lead to instability and draw in the U.S. again (though I'm not sure this necessarily follows), but neither defensive or offensive dominance offer much possibility for peace either since it is U.S. power in and of itself that makes other states insecure, even though they can't balance against it.

#### Their indicts don’t deny the indisputable fact that violence is on the decline

**Boyd, 12** [Neil, Professor and Associate Director, School of Criminology at Simon Fraser University The Empirical Evidence for Declining Violence, <http://www.huffingtonpost.ca/neil-boyd/steven-pinker-violence-_b_1184510.html>]

The response to Steven Pinker's new book, The Better Angels of our Nature has been remarkable. While there are a few mixed reviews (James Q. Wilson in the [Wall Street Journal](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&ved=0CE4QFjAE&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424053111904332804576537813826824914.html&ei=vjkLT5O-EKrr0gHw5tzfCA&usg=AFQjCNHswRvsFx9EJnkHojHaLMn93Nodzg) comes to mind), virtually everyone else either raves about the book or expresses something close to ad hominem contempt and loathing.

At the heart of the disagreement are competing conceptions of research and scholarship. How are we to study violence and to assess whether it has been increasing or decreasing? What analytic tools do we bring to the table?

Pinker, sensibly enough (in my view), chooses to look at the rate of violent death over time, in pre-state societies, in medieval Europe, in the modern era, and always in a global context; he writes about inter-state conflicts, the two world wars, intra-state conflicts, civil wars, and homicides.

In doing so, he takes a critical barometer of violence to be the rate of homicide deaths per 100,000 citizens; the global gold standard for homicide can currently be found in states where the figure in question hovers at an annual rate of about [one per 100,000](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&sqi=2&ved=0CEIQFjAF&url=http%3A%2F%2Fonlinelibrary.wiley.com%2Fdoi%2F10.1111%2Fj.1468-229X.2011.00518.x%2Fpdf&ei=AkkLT-2hH6nu0gGa7PCKAg&usg=AFQjCNHkOa3T8YQk3UsMEE3dNvXL6OH-Tw) culpable homicides within a population -- a status currently achieved by the Baltic States of Finland, Denmark, and Norway, Newfoundland, and with many Western European states, and Canada itself, in close pursuit.

Pinker's aim is to explain the variables that have contributed to the global decline in violence that we have witnessed, particularly during the past 30 years, but also, perhaps more fundamentally, during the past 500 years. He points to the emergence of literacy and the enlightenment, to competent democratic governments, peaceful commerce, and more recently, the overwhelming support for racial equality, women's rights, gay rights, children's rights, and animal rights.

He does not pretend that the world is now safe from significant violence in the future; he is not so foolish as to make such a confident prediction about a necessarily complex future (see Dan Gardner's book, Future Babble). Pinker is simply assessing, rather, what the evidence is telling us about the extent of violence in the world today.

For example, we learn that the risk of being a victim of a homicide has always been much higher in often romanticized tribal or non-state societies than it is today in a modern liberal state. And even during the 1970s and early 1980s, the homicide rates in Canada and the United States were more than twice as high as they are today.

It is not surprising that Pinker has his critics, generally individuals who are reluctant to acknowledge quantitative data as relevant, and who cling to the notion that human beings have never been more violent than in this century. Elizabeth Kolbert, [writing](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCYQFjAA&url=http%3A%2F%2Fwww.newyorker.com%2Farts%2Fcritics%2Fbooks%2F2011%2F10%2F03%2F111003crbo_books_kolbert&ei=rToLT-GxCMrX0QGKnLDzCw&usg=AFQjCNHL4-lAOyx0KQe3MKka3EqwxBmqrA) in the New Yorker, laments, contrary to fact, that there is no discussion of "colonialism" in Pinker's book and concludes, "Name a force, a trend, or a 'better angel' that has tended to reduce the threat, and someone else can name a force, a trend, or an 'inner demon' pushing back the other way."

The response to this is simple: yes, one can do this, but **there will be no credible evidence in support of such a claim**. Kolbert and her dance of the dialectic **cannot disguise the reality that the rate of violence**, as measured by culpable homicide, has markedly decreased over human history.

Other critics (for example, [Robert Epstein](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CBwQFjAA&url=http%3A%2F%2Fwww.scientificamerican.com%2Farticle.cfm%3Fid%3Dbookreview-steven-pinker-the-better-angels-of-our-nature-why-violence-has-declined&ei=IjsLT_HSN8na0QHvypzpCA&usg=AFQjCNFhvT4yaEclbyupHANwljt91wuv9g) in Scientific American), oddly enough, take issue with canvassing the rate of culpable homicide, preferring to focus on the absolute numbers of deaths as a more critical variable of relevance.

And still others, John Gray in [Prospect](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CBwQFjAA&url=http%3A%2F%2Fwww.prospectmagazine.co.uk%2F2011%2F09%2Fjohn-gray-steven-pinker-violence-review%2F&ei=gjsLT8q-B-Ti0QHx8sS4Ag&usg=AFQjCNEEt2pHkAI7QrQGsC04s7V6PdsiKw) and Joe Carter in [First Thoughts](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CBwQFjAA&url=http%3A%2F%2Fwww.firstthings.com%2Fblogs%2Ffirstthoughts%2F2011%2F12%2F20%2Fthe-precious-steven-pinker%2F&ei=0zwLT8veC-Tv0gGnyKWxAg&usg=AFQjCNGHs5q2MgbK5-6AnG4QmyFLaKm_9Q), take issue with Pinker's atheism: "the delusions of liberal humanism," as Carter puts it, and a "delusion of peace" claims John Gray. He writes, "Pinker's attempt to ground the hope of peace in science is profoundly instructive, for it testifies to our enduring need for faith."

## round 5—neg v. cornell lw

### 1nc elections

#### Obama is winning but it will be close and it’s reversible – popularity is key

**Brownstein, 9/21/12** - a two-time finalist for the Pulitzer Prize for his coverage of presidential campaigns, is National Journal Group's Editorial Director, in charge of long-term editorial strategy.(Ronald, National Journal, “Heartland Monitor Poll: Obama Leads 50 Percent to 43 Percent” http://www.nationaljournal.com/2012-presidential-campaign/heartland-monitor-poll-obama-leads-50-percent-to-43-percent-20120921?page=1)

President Obama has opened a solid lead over Mitt Romney by largely reassembling the “coalition of the ascendant” that powered the Democrat to his landmark 2008 victory, the latest Allstate/National Journal Heartland Monitor Poll has found.

The survey found Obama leading Romney by 50 percent to 43 percent among likely voters, with key groups in the president’s coalition such as minorities, young people, and upscale white women providing him support comparable to their levels in 2008.

The survey, conducted by Ed Reilly and Jeremy Ruch of FTI Communications, a communications and strategic consulting firm, surveyed 1,055 likely voters by landline and cell phone from Sept. 15-19. It has a margin of error of plus or minus 3 percentage points. Full results from the survey, including a detailed look at Americans’ attitudes about opportunity and upward mobility, will be released in the Sept. 22 National Journal.

The Heartland Monitor’s results are in line with most other national surveys in recent days showing Obama establishing a measurable lead, including this week’s new Pew Research Center and NBC/Wall Street Journal polls. The saving grace for Republicans is that even as these surveys show Obama opening a consistent advantage, the president has not been able to push his support much past the critical 50 percent level, even after several difficult weeks for Romney that began with a poorly reviewed GOP convention. That suggests the president faces continued skepticism from many voters that **could allow Romney** to draw **a second wind** if he can stabilize his tempest-tossed campaign.

The poll found Obama benefiting from a small increase in optimism about the country’s direction. Among likely voters, 37 percent said the country was moving in the right direction. Even looking at all adults, the "right track" number now stands at 35 percent, its best showing since the April 2010 Heartland Monitor.

Obama’s approval rating in the new survey also ticked up to 50 percent, with 46 percent disapproving. That’s a slight improvement from May, when the survey of all adults found 47 percent approving and 48 percent disapproving. Among all adults, Obama’s rating improved to 49 percent approving and 45 percent disapproving, also one of his best showings since January 2010.

Those gains are critical, because as always with an incumbent president, attitudes toward Obama’s performance powerfully shape the race. Among likely voters who approve of Obama’s job performance, he leads Romney in the ballot test by 93 percent to 3 percent; those who disapprove prefer Romney by 87 percent to 5 percent.

#### New renewable allocations infuriate the public

Schirach, 12 (Paolo von Schirach, The global society monitor, “Grim prospects for renewable energy in the US subsidies politically unpopular- natural gas a much cheaper alternative USG should focus on R&D”, http://schirachreport.com/index.php/2012/05/11/grim-prospects-for-renewable-energy-in-the-us-subsidies-politically-unpopular-natural-gas-a-much-cheaper-alternative-usg-should-focus-on-rd/)

American enthusiasm for renewable energy, not too deep to begin with, has gone away. In part this has to do with loss of interest in “climate change” and its dire consequences. Unfortunately, climate change has been and is mostly an issue of political belief, rather than upholding science. And as the intensity of the political fervor somehow waned, in large part replaced by more immediate economic fears, so did political support for all the renewable energy technologies that were supposed to create, relatively quickly it was thought, workable alternatives to carbon based energy.

Unpopular subsidies

An additional reason for waning support is that keeping renewable energy alive means also subsidizing it for a few more years. And this is less and less politically palatable at a time of budgetary constraints at every level. Paying more for electricity simply because this kind is clean looks like an unaffordable luxury, whatever the consequences of burning more (cheaper) fossil fuels may be.

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from **promiscuous intervention** in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he **is not qualified to be president**. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

#### Specifically accesses Russia relations

**CSM, 10-26-11**, p. <http://www.alaskadispatch.com/article/putin-and-russian-empire-can-us-russian-relations-survive?page=0,1>

Russia's foreign policy community is watching with growing nervousness as leading Republicans in the US, including at least one top contender for the party's presidential nomination, turn their ire against Barack Obama's already troubled "reset" in US-Russian relations, which the Kremlin sees as vital to its future plans for repairing Russian influence in the world.

Republicans have been critical all along of Mr. Obama's policy of building strong, practical relations with Moscow while soft-peddling US disapproval of Kremlin power abuses and human rights violations. But as recently as last December, more than a dozen Republican senators joined Democrats to win the needed two-thirds Senate ratification of the START nuclear arms reduction accord, which was understood in Moscow as a sign that pragmatism would always prevail in Washington.

Now, Russian experts do not seem so sure.

Since former president Vladimir Putin decided to shoulder aside his hand-picked successor, Dmitry Medvedev, and seek a fresh term as Russia's supreme leader, the tone of discussion about Russia in the US has grown much harsher, many note.

Mr. Putin's recently publicized plan to establish a "Eurasian Union" – a strong economic, and potentially political, alliance of former Soviet states – has rekindled fears among many in the West that Russia's strategic goal is to bring back the USSR and return to its historic rivalry with the US.

"We had hoped that the reset with the US might help Russia move into a friendlier, closer relationship with the West, but that seems to be fading fast," says Viktor Kremeniuk, deputy director of the official Institute of USA-Canada Studies in Moscow. "Now it seems the general opinion in the US is that Russia is fast becoming an authoritarian state with the scarecrow figure of Putin as its next president. It's all starting to feel a bit hopeless."

In a Washington Post interview earlier this month, Republican presidential contender Mitt Romney, often seen as moderate, is quoted as saying that Putin "dreams of rebuilding the Russian empire." Obama's reset of relations "has to end ... we have to show strength," Mr. Romney added.

Reining in Russian ambitions?

At a Washington conference Tuesday, Republican House Speaker John Boehner slammed Russia's "use of old tools and old thinking" as an attempt "to restore Soviet-style power and influence," and called for tougher measures to rein in Russian ambitions. At the same meeting, Garry Kasparov, a leader of the banned Other Russia opposition movement, urged Americans to heed Ronald Reagan's advice and treat Putin's Russia as an "evil empire" beyond the pale of civilized nations.

The current cold war-style spat between Moscow and Washington over the suspicious death of Sergei Magnitsky, an anticorruption lawyer who died after being denied medical treatment in a Russian remand prison two years ago, clearly illustrates the reasons Moscow prefers Obama to any Republican who might come into the White House.

A bill currently before the US Senate, the Sergei Magnitsky Rule of Law Accountability Act of 2011, and heavily supported by Republicans, would impose tough visa restrictions and financial penalties on a list of Russian officials deemed to be implicated in his fate.

But the US State Department has moved to preempt the bill by issuing its own "secret" list of proscribed officials, without imposing any financial sanctions, and connecting it with global human rights policies rather than a measure specifically targeted at Russia. Last weekend Moscow announced its own list of US citizens allegedly implicated in human rights abuses, who would be denied entry to Russia.

"On the surface it looks like a bad dispute, but actually we see the actions of the Obama administration as proof that it is committed to the reset," says Dmitry Suslov, an expert with the Council on Foreign and Defense Policies, an influential Moscow think tank. "The Senate bill is purely anti-Russian, and for the time being at least, Obama has managed to blunt this. It's greatly appreciated in Moscow.... We know that if any of the current Republican presidential nominees makes it to the White House, things will go very badly for the US-Russian relationship."

#### Extinction

**Collins & Rojansky, 10** – \* U.S. Ambassador to the Russian Federation from 1997 to 2001, AND \*\*deputy director of the Russia and Eurasia Program at the Carnegie Endowment (8/18/10, James F. Collins, Matthew Rojansky, Foreign Policy, “Why Russia Matters,” http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=41409, JMP)

Yet however challenging this partnership may be, Washington can't afford not to work with Moscow. Ronald Reagan popularized the phrase, "Trust, but verify" -- a good guiding principle for Cold War arms negotiators, and still apt for today. Engagement is the only way forward. Here are 10 reasons why:

1. **Russia's nukes are still an existential threat.**

Twenty years after the fall of the Berlin Wall, Russia has thousands of nuclear weapons in stockpile and hundreds still on hair-trigger alert aimed at U.S. cities. This threat will not go away on its own; cutting down the arsenal will require direct, bilateral arms control talks between Russia and the United States. New START, the strategic nuclear weapons treaty now up for debate in the Senate, is the latest in a long line of bilateral arms control agreements between the countries dating back to the height of the Cold War. To this day, it remains the only mechanism granting U.S. inspectors access to secret Russian nuclear sites. The original START agreement was essential for reining in the runaway Cold War nuclear buildup, and New START promises to cut deployed strategic arsenals by a further 30 percent from a current limit of 2,200 to 1,550 on each side. Even more, President Obama and his Russian counterpart, Dmitry Medvedev, have agreed to a long-term goal of eliminating nuclear weapons entirely. But they can only do that by working together.

2. **Russia is a swing vote on the international stage.**

As one of the five permanent members of the U.N. Security Council, Moscow holds veto power over any resolution that the body might seek to pass -- including recent efforts to levy tougher sanctions on Iran or, in 2009, against North Korea following that country's second nuclear test. Russian support for such resolutions can also help persuade China and others not to block them. The post-reset relationship between Moscow and Washington works like a force multiplier for U.S. diplomacy. Russia plays an equally crucial role in the G-8 and G-20 economic groups, helping to formulate a coordinated approach in response to economic threats. In 2008, for example, Russia supported a G-20 resolution promising to refrain from protectionism and avoid new barriers to investment or trade.

3. Russia is big.

The country's borders span across Europe, Central and East Asia, and the Arctic -- all regions where the United States has important interests and where it cannot afford destructive competition. With an ongoing counterinsurgency campaign in Afghanistan, the United States has a strong interest in Central Asian stability and relies on Russia not only for direct assistance with logistics and information sharing, but to help manage threats like the recent political upheaval and sectarian violence in Kyrgyzstan. In the former Soviet space, Moscow's historical ties to newly independent states are still fresh and powerful. Moscow is the linchpin to resolving "frozen conflicts" that prevent countries like Moldova, Georgia, and Azerbaijan from prospering economically and moving toward European Union membership. Recently, for example, Moscow signaled renewed interest in resolving frozen conflicts in Nagorno-Karabakh and Transnistria. And despite recent troop movements into Abkhazia, a negotiated settlement is still very possible, one that returns some territory to Georgia but preserves its autonomous status, along with that of its fellow breakaway republic, South Ossetia.

4. Russia's environment matters.

As the catastrophic fires across Western Russia have dramatically illustrated, Russia is both a victim of global climate change and a steward of natural resources -- including many of the forests now badly burned -- **needed to reverse the global warming trend.** With more than one-tenth of the world's total landmass, vast freshwater and ocean resources, plus deposits of nearly every element on the periodic table, Russia is an indispensable partner in the responsible stewardship of the global environment. On climate change, there is work to be done, but progress is evident. Russia today is the world's fourth-largest carbon emitter, but as a signatory to the Copenhagen Accord, it has pledged to reduce emissions to 20 to 25 percent below 1990 levels. Another black spot is Russia's use of "flaring" -- a technique that burns natural gas into the open atmosphere during oil extraction, but Medvedev agreed to capture 95 percent of the gas currently released through flaring. Last year he also signed Russia's first law on energy efficiency, which takes such steps as requiring goods to be marked according to their energy efficiency and banning incandescent light bulbs after 2014. True, most of Russia's other commitments are short on deadlines and concrete deliverables. But like China's cleanup for the Beijing Olympics, Moscow could transform resolve into reality with surprising speed, given the right amount of international engagement. And in the meantime, Russia's natural climate-cleaning properties are vast; the Siberian provinces alone contain more clean oxygen-producing forests and reserves of freshwater than continental Europe.

5. Russia is rich.

As the "R" in the famous BRIC grouping of emerging economies, Russia is the 12th-largest market in world, with the third-largest foreign currency reserves. And the country's role in world markets is only growing. Russia is a big player in commodity trading, the country boasts a volatile but increasingly attractive stock exchange, and it is open to foreign investment -- even in state-owned industries. Russian businesses are increasingly looking abroad to form strategic partnerships, acquire assets, and sell their products. And as a country that felt the global financial crisis viscerally -- economic growth fell by almost 8 percent in 2009 -- Russia has a strong interest in making sure there is no repeat. Despite occasional retrenchments, such as the ban on grain exports after the summer fires, Russia is committed to becoming a free-trading World Trade Organization member, and wants more access to U.S. and European technology and management know-how to drive its modernization. Excessive bureaucracy and widespread corruption are the biggest challenges to Russia's further economic growth, but these are already top talking points in Medvedev's modernization drive, and engagement with more transparent Western countries such as the United States can only help.

6. One word: energy.

The American way of life depends on stable and predictable commodity prices -- gasoline, natural gas, and coal in particular -- and Russia plays a large role in the global production and pricing of these fossil fuels. Russia alone possesses roughly one-quarter of the world's known gas reserves, and it is currently responsible for over a fifth of global exports. It is the second largest oil-producing state after Saudi Arabia and has the second-largest coal reserves after the United States. The even better news for Washington is that Russia is not a member of OPEC, the cartel of oil-producing countries. This gives the country far more freedom to focus on increasing exports rather than reducing them to keep prices down. When it comes to bringing supply to market, many will no doubt remember the so-called gas wars between Russia and Ukraine and Russia and Belarus that left Eastern Europe in the cold several times in recent years. Much of the trouble is attributable to the legacy of Soviet energy infrastructure in Russia's western neighbors, which put a choke-hold on Russia's gas pipelines. Moscow is currently working with the United States, China, and Western Europe to find a way around this problem, which will entail building new pipelines through the Baltic Sea, Black Sea and Siberia.

7. **Russia is a staunch ally in the war on terror** (and other scourges).

Even during the dark days after the 2008 Russia-Georgia war, Moscow and Washington cooperated effectively on counterterrorism, counternarcotics, infectious disease prevention and response, and other shared security priorities. Recently, the two have worked together under the auspices of the Bilateral Presidential Commission to coordinate relief strategies for catastrophes such as the Haiti earthquake and the violence in Kyrgyzstan. Both Washington and Moscow recognize that swift, well-organized responses to such crises are key to preventing weaknesses from being exploited -- for example by extremist groups who are happy to fill the vacuum of government authority. Russia is also a critical partner in U.S. law enforcement efforts to defeat organized crime and terrorism financing. The two countries are currently working to map smuggling routes in Central Asia. And Russia has shared information with the United States on the informal financial networks used to fund Taliban and Afghan warlords.

8. The roads to Tehran and Pyongyang go through Moscow.

Russia maintains unique relationships with Iran and North Korea -- both top concerns on Washington's nuclear nonproliferation radar. In the past, the Kremlin has used its leverage to keep the path open for negotiations, sending senior diplomats to Tehran and offering carrots such as civilian nuclear assistance and weapons sales (though it has deferred the sale of advanced S-300 ground-to-air missiles that could be used to blunt a U.S. or Israeli air strike). Now more than ever, Washington needs allies with that kind of leverage to help punish violators and **discourage cascading nuclear proliferation worldwide.** Leading by example on nonproliferation is also a must; as the world's biggest nuclear powers, the United States and Russia are looked to as the standard-setters. If they fail to ratify their latest modest step forward on bilateral nuclear arms control, it will be difficult to push other countries to take similar counter-proliferation measures.

9. **Russia can be a peacemaker.**

Moscow has the potential to play a role in the settlement of key regional conflicts -- or if it chooses, to obstruct progress. Russia is a member of the Middle East "Quartet," the six-party talks dealing with North Korean denuclearization, and each of the working groups addressing conflicts in the post-Soviet space, such as the OSCE Minsk group on Nagorno-Karabakh, and the 5+2 group on Transnistria. In such post-Soviet regions in particular, Russia has a unique capacity to contribute to peaceful resolution of territorial disputes by facilitating trade and economic engagement with and between former adversaries, and acting as a peacekeeper once a final settlement is reached. In the Middle East, Russia still controls a network of commercial and intelligence assets and has substantial influence with the Syrians, who should be pushed to play a more productive role in the Arab-Israeli peace process.

10. Russians buy U.S. goods.

As the U.S. economy stops and starts its way out of recession, most everyone agrees that boosting exports is a key component in the recovery. And Russia is a big market. U.S. companies such as Boeing, International Paper, and John Deere have invested billions in Russian subsidiaries and joint ventures. In all, there are more than 1,000 U.S. companies doing business there today. They are in Russia not only to take advantage of the country's vast natural resources and highly skilled workers but also to meet the demand for American-branded goods. The Russian middle class wants consumer goods and the country's firms increasingly seek advanced U.S. equipment and machinery. Between 2004 and 2008, before the financial crisis hit, U.S.-Russia trade grew by more than 100 percent to over $36 billion annually, and although that figure dropped by a third in 2009, there is potential for an even better, more balanced trade relationship in the coming decade.

In short, **Russia is indispensible**. As long as the United States participates in the global economy and has interests beyond its own borders, it will have no choice but to maintain relations with Russia. And good relations would be even better.

### 1nc grid da

#### Expanding tax incentives encourages overproduction – this overloads the electricity grid, causing blackouts and increasing electricity prices

**Michaels, 08** - professor of economics at California State University and a senior fellow at the Institute for Energy Research. (Robert, “A Federal Renewable Electricity Requirement: What’s Not to Like?,” 11/13, <http://cato.org/pubs/pas/pa-627.pdf>)

Over the past 20 years, markets for “whole- sale” power have grown in scope and competi-tiveness. Instead of relying only on generation that they own, to varying degrees utilities everywhere can now obtain power by contracts with other generation owners (including non- utilities and industrial cogenerators). Utilities can also often use regional energy markets in which day-ahead and hourly prices equate supply and demand.

The case for competitive contracting and markets in electricity is the same as else- where—competition motivates the efficient use of resources, the efficient planning of investments for the future, and rewards inno- vation. Electricity markets, however, are con-strained by operating considerations. The production of power in an interconnected grid must equal its load at all times. Since a mismatch (in either direction) lasting only a single second can bring regional blackouts, the operator must have reserves available that can be brought on line quickly, and have units operating that can follow second-by- second changes in load.

Further, transmission constraints in elec- tricity differ in important ways from those in other networks. Unlike water or gas, power flows along individual AC lines follow physi-cal laws and cannot be directly controlled by the system operator. Instead the operator (often a computer algorithm) must some- times operate high cost generators in partic-ular locations in order to maintain regional balance and neither overload nor destabilize (underload) individual lines.

These technological requirements mean that the scope of power markets and the behav-ior of their participants must be constrained to maintain reliability. If there are no transmis- sion constraints and generators may be started and stopped on a moment’s notice, the least- cost production mix will ensure that those units with the lowest marginal costs will oper- ate before those with higher costs, a phenome- non known in the field as “dispatch by merit order.” A single utility that owned and operat- ed all of the generation in a control area would dispatch by merit order, and a competitive market where generators bid in their power at marginal cost would behave similarly. Security constraints, however, mean that strict merit order dispatch is impossible in both cases. Dispatch is also complicated by different “ramp rates” at which the outputs of different types of generators can be changed. Nuclear and coal units have low operating costs, but their output can not be altered quickly enough to match unexpected changes in load. Gas- fired units have higher operating costs, but the need to “follow” unexpected load changes will mean that some must operate even if lower marginal cost coal units are available. Hydro- electric power burns no fuel and renews itself with the seasons, but it does have a marginal opportunity cost—using part of a limited reser- voir at one date means that less will be available on others when it might be more valuable. In practice, hydro in the west is valuable for “shaping” power over the day to minimize the costs of bringing gas-fired units up to meet peaks and turning them down as demand falls in the evening.

Whether the system is centrally dispatched or market-based, a renewable—like hydro—can improve reliability and reduce operating costs. Renewables like biomass and geothermal may be base-loaded and integrated into either a market or a centralized system like conven-tional plants. Intermittent renewables, as we have seen, can bring operating problems to centralized systems if they are a large enough component of resources. They also, however, can constrain the use of markets.

The simple fact that wind units have a seeming marginal cost of zero (and that their output is not storable) does not unambigu- ously imply that they are beneficial.129 As not-ed above, for efficient operation, the net income to the producer of a wind-generated energy must equal the difference between the cost of the power it replaces and the increased costs of maintaining reliability that its inter- mittency imposes. As also noted above, this figure can become negative when wind looms large enough, meaning that the system’s avoidable costs would be minimized if the units were disconnected. In the absence of some method for assessing the wind’s actual contribution in real time, wind units will always bid into the market (at a zero price) while operating costs are higher than other- wise. The ancillary services will be priced at their scarcity value, but if wind is not, market prices will induce overinvestment in wind and require that more, rather than less, fuel be burned. Adding a production tax credit increases the distortion.

#### It could overload the entire grid

**Rutgers News, 08** (“Sustainable Energy Must Be Integrated Into Existing Power Grid, Says Rutgers–Camden Finance Scholar,” 11/18, <http://news.rutgers.edu/medrel/news-releases/2008/11/sustainable-energy-m-20081118/>)

CAMDEN --  Engineers and entrepreneurs are rushing to explore alternative sources of efficient and renewable energy in New Jersey and elsewhere in the country. A Rutgers School of Business—Camden professor has strong words of caution as projects involving wind farms and photovoltaic cells proliferate.

With the electric-power industry poised for its most dramatic changes in decades, too little thought is being devoted to coordinating these piecemeal initiatives, warns [Richard Michelfelder](http://business.camden.rutgers.edu/FacultyStaff/Directory/michelfelder.htm) in a recent edition of The Electricity Journal, the leading policy journal for the electric industry.

The consequence, he fears, might well be a disastrous overload of the nation’s electrical grid.

An assistant professor of finance at the Rutgers School of Business—Camden and former president and CEO of Quantum Consulting Inc., a national public utilities consulting firm based in Berkeley, Cal., Michelfelder comes to his assessment after a quarter-century in the energy-technology industry.

“When you start adding random assets to the grid, you also add the possibility of disruptions in the coordination of the flow of electricity,” says Michelfelder.

#### The economy would be destroyed

**Bryan**, **03 (**Jay, The Gazette (Montreal, Quebec), 8/19, "Power grids vital in information age: "Just a few days could theoretically take economic growth ... right down to zero," lexis

This worsened the already-anemic state of a U.S. economy that had been hammered by a massive stock-market meltdown and a series of confidence-sapping corporate scandals. It hurt Canada, too, weakening OlIf biggest market. So now, just when there are signs of healthy growth in both countries, is the last time you'd want to see a large part of the continent's electric-power network collapse. We can be grateful that the immediate impacts look modest. David Rosenberg, chief North American economist with Merrill Lynch, estimates thatthe U.S. impact could amount to as much as $30 billion for each day of interrupted activity.That's roughly one percentage point of quarterly economic growth, which means that just a few days could theoreticallytake economic growthin the third quarterright down to zero. But this is just the first step in his analysis. In reality, most activity was returning to something close to normal by yesterday. More important, Rosenberg says, any losses in August are likely to be recouped in September, much as economic activity rebounds to wipe out most losses after a severe winter stann. But even if we do look back on the great blackout of'03 as a mere hiccup for the economy, there will be little reason for complacency. As Royal Bank economist John Anania notes, the reliability of the power grid is absolutely indispensable in an information-age economy.

#### Extinction

**Tilford 2008** – PhD in history from George Washington University, served for 32 years as a military officer and analyst with the Air Force and Army (Earl, “Critical mass: economic leadership or dictatorship”, Cedartown Standard, lexis)

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to “socialism” as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble. A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations—the world powers of North America, Europe, and Asia—need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

### 1nc consult cp

#### The United States federal government should subject long-term tradable tax credits to corporations and governments of Indigenous Peoples for development of wind or solar energy projects in the United States to prior, binding consultation with Indigenous Peoples. Tradable tax credits to corporations and governments of Indigenous Peoples for development of wind or solar energy projects in the United States should only be approved for Indigenous Peoples that request the aforementioned proposal in this consultation process.

#### It competes - the CP is less than the plan – many tribes will say yes to more wind incentives but the assumption they all will is based on romantic cultural stereotypes.

**Bosworth, 10** – Honors Thesis for Environmental Studies at Macalester College (Kai, “Straws in the Wind: Race, Nature and Technoscience in Postcolonial South Dakotan Wind Power Development,” 5/3,

<http://digitalcommons.macalester.edu/cgi/viewcontent.cgi?article=1007&context=envi_honors>

As many rural communities reject wind power projects, developers are more likely to turn towards communities that may be more accepting of the risks of wind power. Although Native American communities are not the only marginalized rural communities in the US, they have disproportionately born the brunt of many of the environmental risks of energy production, and wind power has the potential to slot into this same process. A number of restrictive policies may change in the upcoming years that will make it easier for both tribes and independent developers to construct wind power projects. As President Barack Obama remarked in 2009, “We’re streamlining and expediting the permit process for energy development and transmission across Tribal lands. We are securing Tribal access to financing and investments for new energy projects” (National Wildlife Federation 2010, 16). A federal amendment to restructure the tax credits available to wind power and make them available to tribes is being debated as I finish this paper. While these policy changes have yet to emerge, it is likely that as the wind power industry continues to grow nationwide, more wind power projects will be developed in Native American communities.

Articulations of wind power and Native American communities have fit into narratives of indigeneity and nature, and these narratives further help to change the conditions through which wind power projects can be developed. The assumption that Native Americans will or should unequivocally accept wind power because they value nature differently or more authentically denies Native American communities any agential role to negotiate their own livelihoods and relationships with diverse

environmental processes. It is to assume that each Native American community, or each individual, values the same thing – the global environmental benefit of the wind turbine. Policies, guidebooks, histories, and other representations are built upon this romantic image rather than the various other conditions that govern renewable energy development.

#### Genuine, binding consultation with tribes over new energy productionis vital to ending racism, fostering collaboration and ending jurisdictional conflicts over energy development. The permutation is lip-service and reinforces status quo mistrust. The counterplan alone creates a process that solves the case better – the plan is more likely to turn itself

**Tanana and Ruple, 12** - \* Fellow with the University of Utah's Institute for Clean and Secure Energy AND \*\* Fellow with the University of Utah's Wallace Stegner Center for Land, Resources & the Environment (Heather and John, “Energy Development in Indian Country: Working within the Realm of Indian Law and Moving towards Collaboration,” 32 Utah Envtl. L. Rev. 1, lexis)

B. Moving Towards Collaboration

A collaborative approach in and around Indian country is needed to ensure efficient energy development. Land and resource ownership is highly fragmented, and Indian country jurisdiction remains a complicated and often misunderstood concept. Agency personnel may not understand the geographic extent of Indian country or why Indian country is not synonymous with current reservation boundaries. Formal agreements and maps of the geographic extent of Indian country and associated state regulatory jurisdictional limits are rare. n309 As a result, federal, state, and tribal officials must rely on informal understandings and ad-hoc [\*44] decision-making processes. The lack of clarity can create uncertainty for those potentially subject to regulation, as they legitimately question who will regulate their development and fear that a project extending across jurisdictional boundaries could be subject to multiple and conflicting requirements or worse, a jurisdictional battle between governments or agencies. Moreover, energy developers may be forced to configure proposals to address regulatory rather than resource constraint, which may in turn lead to inefficient development, redundant infrastructure, and a greater overall level of environmental impact.

Where jurisdiction is unclear, the risk of inconsistent regulation increases, uncoordinated cumulative effects assessments become more likely, and inadequate protection of transient resources, such as migrating wildlife and air quality related values, is more likely to occur. Energy resources within Indian country hold tremendous promise to reduce dependence on foreign oil and spur economic development. However, in order to prevent haphazard development, federal, state, and tribal governments must work together. Failure to coordinate plans among federal agencies, tribal governments, state governments, and the general public can lead to program duplication and inefficient accomplishment of governmental programs. n310 It is essential to bring all the relevant players into the land use planning process "so that they will have a voice in decisions that affect their interests." n311

Presently, energy resources are managed by different parties under different requirements, advancing different interests. Fragmented ownership, combined with divergent management objectives, threatens to either impede development or result in development that neither maximizes efficiencies nor minimizes environmental degradation. In order to prevent such outcomes, it is critical that federal, state, and tribal leaders coordinate their efforts to create synergies rather than conflicts.

Intergovernmental coordination can be facilitated by cross-jurisdictional, landscape-level land and resource management strategies, such as an ecosystem co-management agreement. n312 "Ecosystem management focuses on entire ecosystems, not just individual resources, emphasizing the need for inter-jurisdictional coordination to ensure ecological integrity and sustainable resource systems." n313 Such agreements, when done appropriately, can bring multiple sovereigns together to address and resolve maters of mutual concern to each [\*45] other. n314 Co-management agreements can also help avoid litigation and overcome situations when limited tribal capacities impede independent resource management. n315 Different levels of power sharing can be utilized in a co-management approach as well, ranging from joint decision-making to mere notification. n316 This flexibility allows agreements to be tailored to the individual needs and capabilities of a given area.

Overall, "intergovernmental agreements can serve both Indian and non-Indian communities by reducing cross-jurisdictional disputes and providing flexible and effective ways to manage inter-jurisdictional environmental resources." n317 Given the overlapping concerns and impacts of energy development, including the mobility of pollutants, such agreements provide an ideal solution for federal-tribal-state conflicts.

Neither tribes nor states can effectively regulate regional environmental quality without the cooperation of the other. Joint regulatory programs avoid jurisdictional disputes by allowing the parties to agree on who will regulate a particular activity for a particular period of time. Moreover, cooperative agreements lower intergovernmental tensions that can damage the overall quality of state/tribal relations and also provide greater flexibility for both tribal and state policy-makers in the future. n318

In order to be successful, one scholar suggests that co-management must include the following principles: 1) recognition of tribes as sovereign governments; 2) incorporation of the federal trust responsibility; 3) legitimate structures for tribal involvement; 4) integration of tribes early in the decision-making process; 5) recognition and incorporation of tribal expertise; and 6) dispute resolution mechanisms. n319 As the next section discusses, there are various obstacles in achieving each of these principles.

[\*46]

IV. Moving towards Collaboration

Competition between tribes and states is mutually destructive, wastes taxpayer dollars, impedes economic development, and is based on racism and self-defeatism. Only through communication, cooperation, and understanding can sovereignty be made a positive force for the continued growth of both sovereigns and the people they serve. n320

While co-management between federal, state, and tribal governments may represent one advantageous path forward, achieving true collaboration will be difficult. This section addresses the barriers that must be overcome to pave the way for future partnerships and concludes with examples of innovative agreements to share regulatory responsibilities across jurisdictional boundaries.

A. Stumbling Blocks to Reaching Collaboration

Various hurdles stand between current practices and effective cooperative management. First, deep-rooted mistrust between the sovereign entities must be overcome. "Even where cooperative agreements prove, on balance, beneficial to tribes, it may be difficult to sustain them if ... mistrust makes them politically controversial." n321 Historic federal policies and state mistreatment resulted in harm to tribes, culminating in mistrust of these entities. For example, the allotment era left many tribal communities in a state of disarray, and the subsequent termination era called for an end to the trust relationship between the federal and tribal governments. As a result, more than 100 tribes and bands lost federal recognition and were terminated. n322

Additionally, tribes have historically battled states over resources, boundaries, and jurisdiction. Disputes over natural resources within the Uintah Basin have been contentious, with the tribe deferring development of the promised Ute Indian Water Project until other portions of the Central Utah Project (CUP) could be completed, delivering water to non-Indians along the Wasatch Front. n323 When the promised Ute Indian Water Project was not built, the tribe declared the deferral agreement null and void and obtained a $ 198 million settlement from the federal [\*47] government. n324 The State of Utah continued to negotiate settlement of Indian water right claims, but with the atmosphere tainted by cases such as Hagen and Brough n325 and continuing concerns over administration of tribal water rights, no resolution could be obtained. n326

Consultation with tribes is the first step towards remedying past harm and providing tribes with an equal seat at the table. Historic adversaries must be able to sit face-to-face before they can see eye-to-eye. While current federal policy encourages consultation and coordination with Indian tribes, n327 in the eyes of some, it remains "difficult to avoid the conclusion that "consultation' is the latest federal codeword for lip service." n328 Despite the existence of internal agency policies advocating government-to-government relations with tribes, "the ability of tribes to participate as decision makers with enforceable rights is often ambiguous," leaving open the question of what it means to have meaningful consultation. n329 Similarly, [\*48] few states include a tribal consultation requirement in their state environmental review laws. n330

### 1nc pic

#### COUNTERPLAN: The United States Federal Government should offer a cash grant equal to 30% of the cost of solar facilities for projects owned by a corporation or government of Indigenous Peoples in the United States or any partnership of which a corporation or government of Indigenous Peoples in the United States is a partner or holder of equity interest that would otherwise qualify for an Investment Tax Credit or a Production Tax Credit for a solar project.

#### Wind increases CO2 emissions—it forces grid operators to rely on conventional energy because of intermittence, even if we expand renewables to 20% of power supply

**Rosenbloom, 06** - science editor living in Vermont (Eric, “A Problem With Wind Power”, <http://www.aweo.org/ProblemWithWind.html>)

The DOE says there are 18,000 square miles of good wind sites in the U.S., which with current technology could produce 20% of the country’s electricity. This rosy plan, based on the wind industry’s sales brochures, as well as on a claim of electricity use that is only threequarters of the actual use in 2002, would require “only” 142,060 1.5-MW towers. They also explain, “If the wind resource is well matched to peak loads, wind energy can effectively contribute to system capacity.” That’s a big if—counting on the wind to blow exactly when demand rises—especially if you expect the wind to cover 20% (or even 5%) of that demand. As in Denmark and Germany, you would quickly learn that the prudent thing to do is to look elsewhere first in meeting the load demand. And we’d be stuck with a lot of generally unhelpful hardware covering every windy spot in the U.S., while the developers would be looking to put up yet more to make up for and deny their failings.

As in Denmark and Germany, the electricity from those towers—no matter how many—would be too variable to provide the predictable supply that the grid demands. They would have no effect on established electricity generation, energy use, or continuing pollution. Christopher Dutton, the CEO of Green Mountain Power, a partner in the Searsburg wind farm in Vermont and an advocate of alternative energy sources, has said (in an interview with Montpelier’s The Bridge) that there is no way that wind power can replace more traditional sources, that its value is only as a supplemental source that has no impact on the base load supply. “By its very nature, it’s unreliable,” says Jay Morrison, senior regulatory counsel for the National Rural Electric Cooperative Association.

As Country Guardian, a U.K. conservation group, puts it, wind farms constitute an increase in energy supply, not a replacement. They do not reduce the costs—environmental, economic, and political—of other means of energy production. If wind towers do not reduce conventional power use, then their manufacture, transport, and construction only *increases* the use of dirty energy. The presence of “free and green” wind power may even give people license to use more energy.

#### Expanding U.S. wind subsidies undermines Chinese wind competitiveness

**Chhabara 8** (Rajesh, Climate Change Corp, “Who’ll Solve the Wind Turbine Supply Crisis?” 4/29/8, http://www.climatechangecorp.com/content.asp?contentid=5344)

In April this year, China set a massive target of expanding wind power capacity to 100,000MW by 2020, from the current 5,600MW. Previously, in 2006, China passed the Renewable Energy Law, which requires power grid companies to buy the entire output of registered renewable energy producers in their areas. The National Development and Reform Commission (NDRC), China’s top industry planning body, sets the purchase price.

CLSA Research estimates that the US, Europe and China will be spending about $150 billion on wind projects in the next five years.

US dithers, China surges ahead

In the US, an unstable regulatory regime is one factor hindering turbine production.

Sporadic tax breaks for renewable energy projects, usually on a year-to-year basis, have discouraged US manufacturers from scaling up. Congress, for example, has stalled the extension of PTCs beyond the end of 2008.

In the past, when tax credits lapsed the demand for wind turbines came crashing down the following year. If the trend is repeated this time, it may actually result in overcapacity of turbine manufacturing in the US, at least for the domestic market.

Yet energy analysts say that if the US market slows down due to lack of tax breaks, China will more than compensate.

In the short term, massive demand from China may further tighten turbine supply, but expanding local production should ease the global crunch within a couple of years. Today, the Chinese market is dominated by the top three foreign manufacturers, Vestas, GE Wind and Gamesa, who enjoy a combined market share of 47%. However, this is set to change.  
Zhang Guobao, vice president of China’s NDRC, says: “We are planning several measures to support the wind power industry including localisation of equipment production.” According to the Global Wind Energy Council (www.worldenergy.org), China will become the top wind turbine manufacturer by 2009.

To encourage production, China increased tariffs on imported wind turbines in May, while slashing import taxes on components. The latter incentive, to help Chinese firms compete internationally for scarce parts, will put pressure on the industry in the rest of the world. But, again, this is a short-term problem. Government rules already require that turbines have at least 70% domestically produced components. As a result, leading manufacturers have been setting up factories in China.

As things presently stand, most Chinese manufacturers can produce only smaller turbines, up to 1MW. Chinese firms are trying to overcome this weakness by licensing agreements and joint ventures with western companies.

Goldwind, China’s largest wind turbine maker, raised $245 million through an Initial Public Offer (IPO) early this year to fund a huge expansion. LM Glassfiber of Denmark, which has a cooperation agreement with Goldwind, opened its second turbine blade factory in China in October last year.  
Other major Chinese turbine makers – Sinovel, Windey, Dongfang, MingYang and HEC – are also expanding capacities and shopping for joint ventures and licensing agreements with global players.

China High, the country’s largest manufacturer of gearboxes – the most critical and complex part in a wind turbine – plans a four-fold increase in production in the next two years. The company is aiming to become one of the top three global manufacturers of gearboxes, with half of revenue coming from exports.   
China High, which already supplies to GE, REpower, Nordex and Goldwind, raised $272 million through an IPO to fund massive expansion. The company is raising another $250 million through convertible bonds and plans to buy a special-steel plant to secure supplies and reduce costs. Special steel accounts for half the cost of gearboxes.  
Among the foreign players, Germany’s Nordex – the fourth largest wind turbine maker in China – announced in November that it would quadruple production capacity to 800MW by 2011 to meet growing demand.  
Currently, MingYang is China’s only turbine exporter. But in the next three to five years, the number of exporters is likely to grow as other firms aggressively expand and acquire technology. Foreign manufacturers may be scaling up their production in China, but in the longer term it is the emergence of Chinese turbine and component manufacturers that will probably change the global landscape of wind power.

Response from the big players

With over 8,000 parts required to make a wind turbine, requiring a large network of reliable suppliers, component supply is creating the most problematic bottleneck for turbine makers. In order to meet increasing demand, leading players are rushing to beef up their supplies by setting up new plants, signing long-term contracts with suppliers and even making acquisitions.

#### Chinese wind competitiveness is vital to sustainable Chinese development model

**Wang, 05** – Michigan State University (Joy, Wind Power in China: Social Acceptability and Development of a Domestic Manufacturing Industry”, http://forestry.msu.edu/China/New%20Folder/Joy\_Wind.pdf)

China does not necessarily require the development of its own domestic wind industry and market, but from the successes of various other countries utilizing wind power, it seems such development is key to the success of wind energy within a country.

“All leading turbine manufacturers are from countries with significant domestic wind power development, and most all have been very successful in their home markets…the size of the home market is a key determinant of global success in wind turbine manufacturing. Moreover,…the top 5 countries in terms of installed capacity are also home to 9 of the top 10 wind companies globally” (Lewis & Wiser, 2005, p. 58).

The wind power market and domestic turbine manufacturers support each other. To form a strong market, a government can formulate incentives for industry to become involved. “Companies facing unstable markets are less willing to spend money on R&D and product development” (Lewis & Wiser, p. 58). With a more stable wind market, more investor interest could be gathered, and more spending on long term manufacturing R&D could be stimulated.

2. Decrease costs to further the market

A domestic wind industry can lower costs and further the market. “As the market has grown, wind power has shown a dramatic fall in cost. Production costs have fallen by up to 50% over 15 years” (BTM Consult, 2005, p. 10). Wind turbines hold about 75% of the total cost of an onshore wind project (BTM Consult, 2005,). With localized production, not only would less be spent on transportation, labor costs would also be much cheaper in China than abroad. A significant savings could be realized in turbine production, bettering the economics and feasibility of large-scale utilization of wind energy in China.

3. Better accessibility to best available wind technology

With its booming economy and strong desire to prove itself, China is demanding better products with its increasing wealth. The wind industry will be no different. If no domestic turbine manufacturers develop cutting-edge technology, any technology China receives will be second rate. Products are likely tested intensely before placement on the global market, where their performance reflects upon the manufacturing company. All commercially sold turbines will generally be reliable, with the newest technology in continued research and testing.

If China relies on non-domestic wind turbine manufacturers to supply its wind power generation facilities, it cannot expect the best technology to enter its borders first. So far, the largest installation in China to date is 1.5MW at the Nanhui and Chongming wind farms in Shanghai by General Electric (GE Wind), while the largest wind turbine installation to date has been 300 MW in the United States (BTM Consult, 2005), 200 times larger. Higher turbine capacities will transform to land savings since more electricity is generated per turbine. With limited arable land, it would make sense for China to search for better and larger turbines to reduce land requirements for the same amount of generated electricity.

4. Opportunity to demonstrate technological prowess

With its economic rise, China has shown an increasing desire to prove itself. The 2003 launch of China’s first manned rocket demonstrates its drive to push domestic technology to further limits. The successful rocket launching caused a swell of national pride. A show of local technological prowess in wind energy could cause a similar effect (Lewis & Wiser, 2005), while also offering a relatively new global industry in which to make a presence. From this aspect, it is not surprising to see China’s desire to have its own domestic wind power industry.

5. Alleviate power shortages in areas of need

Wind power could be used to alleviate brown-outs and other electricity shortages in the more affluent east coast. Near the time of Wallace’s paper (1997), over 20 million households in the heavily populated areas were without electricity. With the largest wind resources located along the southeastern coast and an intense appetite for energy in the same region, it is likely wind power can help alleviate the lacking electricity supply there.

6. Employment opportunities

The creation of a domestic wind power market and industry could generate employment opportunities in both urban and rural areas. A strong domestic market and wind turbine manufacturing industry will create a demand and supply for wind power. By having a local manufacturing base, China could mobilize significant numbers of its currently unemployed

masses. In 2003, 8 million urban people registered unemployment. Once the numbers of unregistered urban unemployed is considered, the total could further increase. From 1998-2003, unemployment grew at an annual rate of 5.6% (“China Statistical,” 2004). With almost 60% of China’s 2003 population located in rural areas (“China Statistical,” 2004), the total unemployed number could be significantly larger. Wind Force 12 estimates that 444,000 individuals will be occupied in the Chinese wind power industry in 2020 (2005).

7. Poverty alleviation

Though the demand for electricity may be greatest along the coast, the wind turbine manufacturers may be elsewhere. Strategically placed manufacturers throughout rural China could provide higher paying work, alleviating poverty. The 2003 per capita net income of rural households in the 12 western provinces was 1966¥, less than 75% of the national per capital rural net income (“China Statistical,” 2004).

8. Catalyst for further infrastructure development

A domestic wind industry could provide an additional catalyst for the development of efficient transportation systems in which to transport wind related turbines. Factories in rural locations would not necessarily be distanced from the final product destination. With 23.9% of the national energy industry located in the 12 western provinces (“China Statistical,” 2004), a well-established energy transmission infrastructure must already exist. Much of China’s wind resources also are in the area. Not only will manufacturers to realize financial savings by being geographically closer to more final product destinations, the location of wind power manufacturers there could also stimulate the improvement and adaptation of existing infrastructure to suit new needs. This possibility might require large financial resources, but the reaped benefits might justify further exploration.

9. Environmental benefits

Other environmental benefits can be realized through localized production outside of the clean energy turbines produce. If turbine manufacturers locate to more rural areas, resident income and standard of living will increase. Farmland might be less stressed, as income no longer relies singly on the land’s goods. Grasslands could benefit similarly as flock size decrease when factory work is obtained. From such possibilities, wind energy could potentially benefit soil stability. As school fees become more affordable, educational levels will increase. Higher educational attainment could increase environmental consciousness and also lessen environmental degradation.

#### That collapses the CCP

**Pethokoukis 12-1-**08 (James, US News, “Bad Economy Could Cause China Crackup” <http://www.usnews.com/blogs/capital-commerce/2008/12/1/bad-economy-could-cause-china-crackup.html?s_cid=etRR-0126>)

I have written a series of blog posts warning about the geopolitical and economic fallout of a sharp slowdown in China's economy. Simply put: Slower growth could lead to dangerous political instability. The sole source of the authoritarian government's legitimacy has been its ability to deliver an even-rising standard of living for more than a generation. Don't believe me? Here is what President Jintao Hu said over the weekend at a party meeting:

*“In this coming period, we will starkly confront the effects of the sustained deepening of the international financial crisis and pressure as global economic growth clearly slows. ... Whether we can turn this pressure into momentum, turn challenges into opportunities, and maintain steady and relatively fast economic development is a test of our Party's capacity to govern.”*

This is why China has been hesitant to allow any dramatic appreciation by the yuan vs. the dollar. To the extent that a stronger currency slows the economy, the ruling Communist Party views a rapid yuan appreciation as an existential threat. This what journalist Will Hutton, author of *The Writing on the Wall: Why We Must Embrace China as a Partner or Face It as an Enemy*, [told me early last year](http://www.usnews.com/usnews/biztech/articles/070105/5china.htm):

*"Unrest is growing even under current conditions. Such a rapid appreciation of the yuan over a short period could be a tipping point for a wave of unrest, which could threaten the regime's stability. The party leadership sees the demand for fast yuan appreciation as an act of economic warfare. In these terms, you can see why. ... The World Bank estimates that if China's growth rate fell by just 2 percent, up to 60 percent of China's bank loans would become nonperforming–so threatening both China's and, via Hong Kong, Asia's financial system. The flow of saving to finance the U.S.'s deficit would dry up, probably forcing U.S. interest rates up–so worsening the economic slowdown. ... There is the risk of a credit crunch forced by the banking system being overwhelmed by nonperforming loans. ... The risk of political instability is low, but it exists."*

Me: Let's remember that China a) has been -- along with America -- one of the primary engines of global economic growth as well as buy of U.S. bonds, and b) has nuclear weapons. While no freedom-loving member of Western Civilization has any love for the current despotic regime, neither do we want to see political and economic chaos in China. Fun China Fact: Back in the 1990s, Pentagon analysts thought a bad economy could result in the fall of the Communists from power and the political dissolution of the country into maybe a dozen smaller nations. Hey, have fun, Hillary!

#### Nuclear war

**Plate 2003** (Tom, Professor at UCLA, The Straits Times, June 28, L/N)

But, while China's prosperity may be good for Americans, is it necessarily the same for the totalitarians running China? After all, having created a runaway economic elephant, will the Communist Party leaders be able to stay in the saddle? Before long, the Chinese middle class alone may approach the size of the entire population of America. It will want more freedom, not less – bet on it. But imagine a China disintegrating – on its own, without neo-conservative or Central Intelligence Agency prompting, much less outright military invasion – because the economy (against all predictions) suddenly collapses. That would knock Asia into chaos. A massive flood of refugees would head for Indonesia and other places with poor border controls, which don't want them and can't handle them; some in Japan might lick their lips at the prospect of World War II Revisited and look to annex a slice of China. That would send Singapore and Malaysia – once occupied by Japan – into nervous breakdowns. Meanwhile, India might make a grab for Tibet, and Pakistan for Kashmir. Then you can say hello to World War III, Asia-style. That's why wise policy encourages Chinese stability, security and economic growth – the very direction the White House now seems to prefer.

### 1nc self determination

#### No internal link to social diversity --- solely targeting indigenous peoples doesn’t set a precedent for wider inclusion – decline is historically denied by millions of cultures that have gone extinct previously – like the Romans and the Mayans

#### No impact to cultural survival

**Coates 2009** – former adjunct professor at George Washington University, President of the Kanawha Institute for the Study of the Future and was President of the International Association for Impact Assessment and was President of the Association for Science, Technology and Innovation, M.S., Hon D., FWAAS, FAAAS, (Joseph F., Futures 41, 694-705, "Risks and threats to civilization, humankind, and the earth”, ScienceDirect, WEA)

The first category of significant dreadful outcomes: the death of cultures, raises definitional questions of what is a culture, and how to define the boundaries on it and what it means for it to disappear. Obviously, most of the cultures that would be at risk today are small, involving thousands, tens of thousands, or surely well under a million people. Cultures larger than that are becoming increasingly globalized, westernized, and part of an expanding international advanced-nation culture, with local flavors in different parts of the world. When we turn to the smaller cultures, there is not even a good guess as to how many there are, but an excellent surrogate for that is the number of languages that there are. Each culture insofar as it is isolated has created its own language. The linguists tell us that languages are dying in great numbers.

Another side of the question is, whether the death of cultures is good or bad. There are, worldwide, people who deplore the loss of any culture. (We are not thinking about people, but about the culture of a people.) Unfortunately, they would like to see functional groups of the people at cultural risk preserved to become parts of a living museum. That is unfair and, to say the least, undemocratic. Consider the case of the people who manage and harvest the reindeer in Finland, the Lapps. Their culture is in large part framed around a great annual cycle. The animals are collected together and moved much like the situation so common in our western movies of taking the herds of cattle from Texas to the Midwest slaughter houses and railroad yards. The snowmobile was introduced into Lapp society and has been rapidly changing their customs. Some outsiders, as noted, deplore this. But remember, no one forced the snowmobile on the Lapps; it is their free choice and it is outrageous to think that we would deprive them of free choice to adopt what they see will enhance the quality of their lives. On net, I see the loss of cultures as, in some romantic sense, regrettable and undesirable, but in terms of the overall benefits to humankind, the integration of the minor cultures into a global culture carries far more benefit for them and for the world than local survival does.

#### And, you don’t have a moral obligation to preserve self-determination – the only rational way to calculate the ballot is based on the number of lives saved

Cummiskey 90 – Professor of Philosophy, Bates (David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor, AG)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. **Persons** may **have "dignity**, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), **but**, as rational beings, persons **also** have **a fundamental equality which dictates that some must** sometimes **give way for the sake of others.** The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

#### And, Indian culture is resilient

Stephen Cornell and Joseph Kalt, Harvard Project on American Indian Economic Development, 1993, Reloading the Dice: Improving the Chances for Economic Development on American Indian Reservations, http://www.hks.harvard.edu/hpaied/pubs/pub\_120.htm,

American Indian societies are phenomenally resilient. In the last several centuries, they have faced winds of economic, political, and cultural change that have blown as fiercely over them as over any people in history. These winds have brought military violence and subjugation, epidemics of disease, seizures of land and property, vicious racism, and economic deprivation. Yet, as the twenty-first century approaches, hundreds of distinct Indian nations built upon dozens of cultural lineages still persevere and grow, variously bound together by ties of family, language, history, and culture. The lesson from Indian Country is a lesson of strength.

#### No model – other countries won’t comply

Walter, 2003.(Barbara F., Associate Professor Graduate School of International Relations and Pacific Studies at University of California, San Diego, December, “REPUTATION AND WAR: Explaining the Intractability of Territorial Conflict,” International Studies Review. Vol. 5, no. 4., http://www.ciaonet.org/wps/wab04/wab04.pdf )

Between 1940 and 1996, governments were seventy percent less likely to negotiate with rebels seeking independence or greater territorial autonomy than with rebels seeking any other goal. Current theories suggest that this is due to the economic, strategic, or psychological value of territory under dispute. I argue that a government’s decision to negotiate has more to do with the signal the government wishes to send to future challengers than with any specific characteristics of the land in question. If the government believes it could face multiple separatist challenges in the future, it will invest in a reputation for toughness now rather than face additional challengers down the road. If the government knows it will face such a challenge only once, there is less reason to invest in a reputation and negotiation is likely to result. An analysis of all self determination movements between 1940 and 2000 demonstrates that governments of multiethnic states are far *less* likely to negotiate than are governments that preside over more homogenous populations.

#### And, at best the model is only selective

Gevork **Ter-Gabrielian**, Department of Political Science Bowling Green State University, August **1999** “Strategies in Ethnic Conflict” Fourth World Journal <http://www.cwis.org/fwj/41/ethnic.html>

Accommodation, if it is possible to achieve in a form of federation or consociation, is a solution. However, the cases of accommodation are rare, and there is no guarantee that accommodation in a society divided by ethnic conflict will result in a long-lasting peace. Moreover, state elites are reluctant to consider accommodation as an option because they believe that a federative arrangement would give ethnic groups an even more legitimate opportunity to break away. This happened in Czechoslovakia. Before 1992, it was only nominally federation. In the 1992 Constitution, it was re-named Czecho-Slovakia, and the federation comprised of two equal republics was constituted. In less than a year Slovakia seceded. This was the only case of indeed peaceful ('velvet') divorce in the post-Soviet space. All other post-Soviet states, except for Russia and Romania, rather than enhancing the status of their ethnic groups have nominally discarded even the existing political autonomies (in the best case substituting them by a vague cultural autonomy), which, in turn, has become a cause for ethnic conflict escalation (Naumkin, 1994). If states are not liberal by their ideology, if they are not economically secure and politically well-established democracies, they tend to reject the option of accommodation to the demands of ethnic groups.

#### Expanding conceptions of self-determination ruins its political efficacy

Michael **Kelly**, Director of Legal Research,Writing & Advocacy at   
Michigan State University's Detroit College of Law, **1999**, Drake Law Review

One possible negative counter-effect to this newly discovered elasticity for   the principle of self-determination is the undermining of its legitimacy.78 The   more diverse the situations to which this principle is applied, the further its   achieved meaning will be eroded.79 In other words, at some point, when this   metaphorical rubber band can no longer stretch, it will break-becoming dysfunctional and useless.

#### The Aff lumps all Native Americans into one group with one problem, which reinforces cultural divergences.

[Stephen **Cornell**; The Return of the Native: American Indian Political Resurgence; Page 112; Oxford Press, Oxford University, New York; **1988**. AS]

These same tendencies were apparent in debates over Indian policy. In writings by the late-nineteenth-century reformers, for example- the self-designated “friends of the Indian”- one is struck by the extent to which it is “the Indian problem,” not the problems of particular Indians, that preoccupied the reform movement. Given that reformers were concerned not so much with what the Indian was as with what he or she was not – that is, socially, economically, culturally White – the differences among Indians were of little importance. Indeed, the unitary conception was a predictable by-product of the place Indians occupied in the non-Indian calculus of Indian-White relations. At the heart of those relations lay both economic and cultural designs: the dispossession of Indians of their lands and their cultural transformation into Whites. In both contexts Indians were perceived categorically: either as non-Whites or as encumbrances on lands coveted by non-Indians. Neither category encouraged or required distinctions among Indian peoples other than those derived from their relative degree of cultural non-Whiteness or physical obtrusiveness in the path of progress.

#### And, the plan doesn’t solve – US imposition of self-determination reifies paternalism

**Fourth World Center for the Study of Indigenous Law** **and Politics ‘96** (Marc Sills and Glenn Morris), Spring/Summer 19**6**, Fourth World Bulletin, http://carbon.cudenver.edu/public/fwc/Issue10/fwbtoc.html) **9**

The reticence of the US to extend international law is most clearly evident on the issue of self-determination. Again, the US wants to confine any discussion to a domestic context and offers the distorted definition of self-determination that it has fabricated in US Indian Law for application within a global context. According to the US statement, self-determination "means promoting tribal self-government and autonomy over a broad range of issues." In domestic practice, the US definition of "self-determination" has meant the opportunity for "tribal" governments, as subordinate sovereigns (sometimes referred to as comprador or puppet governments), to expend money that has been allocated (and can as quickly be unallocated) by the federal government. The US brand of domestic "self-determination" is exercised in indigenous territories where the ultimate, overarching title is claimed by the US, contrived through the miraculous "Christian discovery doctrine" which was sanctified through US case law. "Self-determination" in US Indian Policy is deliberately shaped around the British colonial model of "indirect rule." In the US version of "self-determination," indigenous peoples have rights only as "domestic dependent nations," and only to the degree that the "plenary (absolute) power" of the US Congress and the President allows them to exercise those rights. US policy has allowed the government to make solemn international treaties with indigenous nations (sometimes with their consent, but often through coercion), take the benefits of the treaties, and then unilaterally violate or completely abrogate those agreements, without any effective or impartial recourse for the indigenous peoples. The effect has been to create a state enterprise built on stolen land and resources, with the dispossessed peoples condemned to an eternity of internal colonialism. Under US "self-determination" policy, the territorial integrity of every indigenous nation has been violated, every indigenous government has been altered, supplanted or destroyed, every indigenous economy has been subverted, and the cultural integrity of virtually every indigenous nation within the claimed US territory has been assaulted. Now, the US would like to export its version of "self-determination" and indigenous freedom to the rest of the world.

### 1nc warming

#### The aff doesn’t solve warming - countries have an overwhelming economic incentive and political desire to continue current levels of emissions – the plans model doesn’t change that underlying calculus

**Hale 11** PhD Candidate in the Department of Politics at Princeton University and a Visiting Fellow at LSE Global Governance, London School of Economics (Thomas, © 2011 Center for Strategic and International Studies, The Washington Quarterly, 34:1 pp. 89-101, “A Climate Coalition of the Willing,” http://www.twq.com/11winter/docs/11winter\_Hale.pdf)

Intergovernmental efforts to limit the gases that cause climate change have all but failed. After the unsuccessful 2010 Copenhagen summit, and with little progress at the 2010 Cancun meeting, it is hard to see how major emitters will agree any time soon on mutual emissions reductions that are sufficiently ambitious to prevent a substantial (greater than two degree Celsius) increase in average global temperatures. It is not hard to see why. No deal excluding the United States and China, which together emit more than 40 percent of the world’s greenhouse gases (GHGs), is worth the paper it is written on. But domestic politics in both countries effectively block ‘‘G-2’’ leadership on climate. In the United States, the Obama administration has basically given up on national cap-and-trade legislation. Even the relatively modest Kerry-Lieberman-Graham energy bill remains dead in the Senate. The Chinese government, in turn, faces an even harsher constraint. Although the nation has adopted important energy efficiency goals, the Chinese Communist Party has staked its legitimacy and political survival on raising the living standard of average Chinese. Accepting international commitments that stand even a small chance of reducing the country’s GDP growth rate below a crucial threshold poses an unacceptable risk to the stability of the regime. Although the G-2 present the largest and most obvious barrier to a global treaty, they also provide a convenient excuse for other governments to avoid aggressive action. Therefore, the international community should not expect to negotiate a worthwhile successor to the Kyoto Protocol, at least not in the near future.

#### Even if they win modeling they still lose – localities don’t enforce environmental regulations

Elizabeth C. Economy, C. V. Starr Senior Fellow and Director for Asia Studies at the Council on Foreign Relations, September/October 2007

(The Great Leap Backward, Foreign Affairs)

Unfortunately, much of this enthusiasm stems from the widespread but misguided belief that what Beijing says goes. The central government sets the country's agenda, but it does not control all aspects of its implementation. In fact, local officials **rarely heed** Beijing's environmental mandates, preferring to concentrate their energies and resources on further advancing economic growth. The truth is that turning the environmental situation in China around will require something far more difficult than setting targets and spending money; it will require revolutionary bottom-up political and economic reforms.

#### Other fossil fuel emissions from cars prove you don’t solve- no threshold for a sufficient reduction

#### Warmings irreversible – past the tipping point

**Solomon et al ‘10** Susan Solomon et. Al, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Ph.D. in Climotology University of California, Berkeley, Nobel Peace Prize Winner, Chairman of the IPCC, Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland, John S. Daniel, research scientist at the National Oceanic and Atmospheric Administration (NOAA), Ph.D. in physics from the University of Michigan, Ann Arbor, Todd J. Sanford, Cooperative Institute for Research in Environmental Science, University of Colorado Daniel M. Murphy, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Boulder Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change, Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland Reto Knutti, Institute for Atmospheric and Climate Science, Eidgenössiche Technische Hochschule Zurich and Pierre Friedlingstein, Chair, Mathematical Modelling of Climate Systems, member of the Science Steering Committee of the Analysis Integration and Modeling of the Earth System (AIMES) programme of IGBP and of the Global Carbon Project (GCP) of the Earth System Science Partnership (ESSP) (Proceedings of the National Academy of the Sciences of the United States of America, "Persistence of climate changes due to a range of greenhouse gases", October 26, 2010 Vol 107.43: 18354-18359)

Carbon dioxide, methane, nitrous oxide, and other greenhouse gases increased over the course of the 20th century due to human activities. The human-caused increases in these gases are the primary forcing that accounts for much of the global warming of the past fifty years, with carbon dioxide being the most important single radiative forcing agent (1). Recent studies have shown that the human-caused warming linked to carbon dioxide is nearly irreversible for more than 1,000 y, even if emissions of the gas were to cease entirely (2–5). The importance of the ocean in taking up heat and slowing the response of the climate system to radiative forcing changes has been noted in many studies (e.g., refs. 6 and 7). The key role of the ocean’s thermal lag has also been highlighted by recent approaches to proposed metrics for comparing the warming of different greenhouse gases (8, 9). Among the observations attesting to the importance of these effects are those showing that climate changes caused by transient volcanic aerosol loading persist for more than 5 y (7, 10), and a portion can be expected to last more than a century in the ocean (11–13); clearly these signals persist far longer than the radiative forcing decay timescale of about 12–18 mo for the volcanic aerosol (14, 15). Thus the observed climate response to volcanic events suggests that some persistence of climate change should be expected even for quite short-lived radiative forcing perturbations. It follows that the climate changes induced by short-lived anthropogenic greenhouse gases such as methane or hydrofluorocarbons (HFCs) may not decrease in concert with decreases in concentration if the anthropogenic emissions of those gases were to be eliminated. In this paper, our primary goal is to show how different processes and timescales contribute to determining how long the climate changes due to various greenhouse gases could be expected to remain if anthropogenic emissions were to cease. Advances in modeling have led to improved AtmosphereOcean General Circulation Models (AOGCMs) as well as to Earth Models of Intermediate Complexity (EMICs). Although a detailed representation of the climate system changes on regional scales can only be provided by AOGCMs, the simpler EMICs have been shown to be useful, particularly to examine phenomena on a global average basis. In this work, we use the Bern 2.5CC EMIC (see Materials and Methods and SI Text), which has been extensively intercompared to other EMICs and to complex AOGCMs (3, 4). It should be noted that, although the Bern 2.5CC EMIC includes a representation of the surface and deep ocean, it does not include processes such as ice sheet losses or changes in the Earth’s albedo linked to evolution of vegetation. However, it is noteworthy that this EMIC, although parameterized and simplified, includes 14 levels in the ocean; further, its global ocean heat uptake and climate sensitivity are near the mean of available complex models, and its computed timescales for uptake of tracers into the ocean have been shown to compare well to observations (16). A recent study (17) explored the response of one AOGCM to a sudden stop of all forcing, and the Bern 2.5CC EMIC shows broad similarities in computed warming to that study (see Fig. S1), although there are also differences in detail. The climate sensitivity (which characterizes the long-term absolute warming response to a doubling of atmospheric carbon dioxide concentrations) is 3 °C for the model used here. Our results should be considered illustrative and exploratory rather than fully quantitative given the limitations of the EMIC and the uncertainties in climate sensitivity. Results One Illustrative Scenario to 2050. In the absence of mitigation policy, concentrations of the three major greenhouse gases, carbon dioxide, methane, and nitrous oxide can be expected to increase in this century. If emissions were to cease, anthropogenic CO2 would be removed from the atmosphere by a series of processes operating at different timescales (18). Over timescales of decades, both the land and upper ocean are important sinks. Over centuries to millennia, deep oceanic processes become dominant and are controlled by relatively well-understood physics and chemistry that provide broad consistency across models (see, for example, Fig. S2 showing how the removal of a pulse of carbon compares across a range of models). About 20% of the emitted anthropogenic carbon **remains in the atmosphere for** many **thousands of years** (with a range across models including the Bern 2.5CC model being about 19 4% at year 1000 after a pulse emission; see ref. 19), until much slower weathering processes affect the carbonate balance in the ocean (e.g., ref. 18). Models with stronger carbon/climate feedbacks than the one considered here could display larger and more persistent warmings due to both CO2 and non-CO2 greenhouse gases, through reduced land and ocean uptake of carbon in a warmer world. Here our focus is not on the strength of carbon/climate feedbacks that can lead to differences in the carbon concentration decay, but rather on the factors that control the climate response to a given decay. The removal processes of other anthropogenic gases including methane and nitrous oxide are much more simply described by exponential decay constants of about 10 and 114 y, respectively (1), due mainly to known chemical reactions in the atmosphere. In this illustrative study, we do not include the feedback of changes in methane upon its own lifetime (20). We also do not account for potential interactions between CO2 and other gases, such as the production of carbon dioxide from methane oxidation (21), or changes to the carbon cycle through, e.g., methane/ozone chemistry (22). Fig. 1 shows the computed future global warming contributions for carbon dioxide, methane, and nitrous oxide for a midrange scenario (23) of projected future anthropogenic emissions of these gases to 2050. Radiative forcings for all three of these gases, and their spectral overlaps, are represented in this work using the expressions assessed in ref. 24. In 2050, the anthropogenic emissions are stopped entirely for illustration purposes. The figure shows nearly irreversible warming for at least 1,000 y due to the imposed carbon dioxide increases, as in previous work. **All published studies to date**, which use multiple EMICs and one AOGCM, show largely irreversible warming due to future carbon dioxide increases (to within about 0.5 °C) on a timescale of at least 1,000 y (3–5, 25, 26). Fig. 1 shows that the calculated future warmings due to anthropogenic CH4 and N2O also persist notably longer than the lifetimes of these gases. The figure illustrates that emissions of key non-CO2 greenhouse gases such as CH4 or N2O could lead to warming that both temporarily exceeds a given stabilization target (e.g., 2 °C as proposed by the G8 group of nations and in the Copenhagen goals) and remains present longer than the gas lifetimes even if emissions were to cease. A number of recent studies have underscored the important point that reductions of non-CO2 greenhouse gas emissions are an approach that can indeed reverse some past climate changes (e.g., ref. 27). Understanding how quickly such reversal could happen and why is an important policy and science question. Fig. 1 implies that the use of policy measures to reduce emissions of short-lived gases will be less effective as a rapid climate mitigation strategy than would be thought if based only upon the gas lifetime. Fig. 2 illustrates the factors influencing the warming contributions of each gas for the test case in Fig. 1 in more detail, by showing normalized values (relative to one at their peaks) of the warming along with the radiative forcings and concentrations of CO2 , N2O, and CH4 . For example, about two-thirds of the calculated warming due to N2O is still present 114 y (one atmospheric lifetime) after emissions are halted, despite the fact that its excess concentration and associated radiative forcing at that time has dropped to about one-third of the peak value.

#### No extinction – empirically denied

**Carter 11–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (March 8th, “[Surviving](file:///C:\Users\Marc\Desktop\Surviving) the Unpreceented Climate Change of the IPCC” <http://www.nipccreport.org/articles/2011/mar/8mar2011a5.html>) Jacome

On the other hand, they indicate that some biologists and climatologists have pointed out that "many of the predicted increases in climate have happened before, in terms of both magnitude and rate of change (e.g. Royer, 2008; Zachos *et al*., 2008), and yet biotic communities have remained remarkably resilient (Mayle and Power, 2008) and in some cases thrived (Svenning and Condit, 2008)." But they report that those who mention these things are often "placed in the 'climate-change denier' category," although the purpose for pointing out these facts is simply to present "a sound scientific basis for understanding biotic responses to the magnitudes and rates of climate change predicted for the future through using the vast data resource that we can exploit in fossil records." Going on to do just that, Willis *et al*. focus on "intervals in time in the fossil record when atmospheric CO2 concentrations increased up to 1200 ppm, temperatures in mid- to high-latitudes increased by greater than 4°C within 60 years, and sea levels rose by up to 3 m higher than present," describing studies of past biotic responses that indicate "the scale and impact of the magnitude and rate of such climate changes on biodiversity." And what emerges from those studies, as they describe it, "is evidence for rapid community turnover, migrations, development of novel ecosystems and thresholds from one stable ecosystem state to another." And, most importantly in this regard, they report "there is very little evidence for broad-scale extinctions due to a warming world." In concluding, the Norwegian, Swedish and UK researchers say that "based on such evidence we urge some caution in assuming broad-scale extinctions of species will occur due solely to climate changes of the magnitude and rate predicted for the next century," reiterating that "the fossil record indicates remarkable biotic resilience to wide amplitude fluctuations in climate.

**Oceans resilient**

**Kennedy 2** (Victor, Coastal and Marine Ecosystems and Global Climate Change, http://www.pewclimate.org/projects/marine.cfm)

There is evidence that marine organisms and ecosystems are resilient to environmental change. Steele (1991) hypothesized that the biological components of marine systems are tightly coupled to physical factors, allowing them to respond quickly to rapid environmental change and thus rendering them ecologically adaptable. Some species also have wide genetic variability throughout their range, which may allow for adaptation to climate change.

#### Studies disprove their claims

**Carter 11** – Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change, Published by The Heartland Institute) Jacome

Closely tied to the prior two sections, but deserving its own treatment, is the potential effect of CO2-induced global warming on aquatic biodiversity. Some experts claim rising temperatures will suppress or reduce ecosystem species richness. We examine this hypothesis as it pertains to both freshwater and saltwater ecosystems. Working in Switzerland along an elevation gradient stretching from 210 to 2,760 meters above sea level, Rosset et al. (2010) identified 55 colline ponds with an overlying mean annual air temperature of more than 8°C, 27 montane ponds with mean annual air temperatures of 5–8°C, 15 subalpine ponds in the 2.5–5°C temperature range, and 16 alpine ponds with temperatures less than 2.5°C. For all of these ponds, they evaluated species richness in five taxonomic groups: aquatic vascular plants, aquatic gastropoda, aquatic coleoptera (larvae and adults), odonata adults, and amphibia. Then, utilizing 15 environmental variables—including mean annual air temperature, which they found to be ―the best climatic variable to characterize pond thermal conditions‖—they developed generalized additive models of species richness and used them to predict richness for the end of the next century (2090–2100) based on the temperature increase predicted to occur in conjunction with the A2 emission scenario of the IPCC. The paper‘s authors found ―temperature rise could significantly increase pond species richness,‖ while noting ―for the five taxonomic groups pooled, species richness would potentially increase from 41 to 75 (+83%) in lowland ponds,‖ and ―in presently species-poor high altitude ponds, the potential increase would be particularly marked, with a proportional increase (+150%; from 14–35 species) almost double that in lowland areas.‖

Prior to the Rosset et al. study, the effects of global warming on the biodiversity of small ecosystems had been given little attention. At the regional scale, species richness had ―been shown to increase under the influence of climate warming in Europe and North America (e.g. Iverson and Prasad, 2001; Daufresne and Boet, 2007; Buisson et al., 2008).‖ And Rosset et al. write ―it is also well-known and well-described in almost every ecology textbook, that terrestrial and freshwater species richness tends to be lower in colder areas, i.e., at higher altitude or latitude (e.g. Gaston and Spicer, 2004; Nagy and Grabherr, 2009).‖ They note ―this trend has also been well-described at the local scale for plants, invertebrates, and vertebrates (reviewed in Rahbek, 1995),‖ while noting still further ―among the few existing studies, Henderson (2007) and Hiddink and ter Hofstede (2008), using time series, report an increase in fish species richness in marine ecosystems in response to climate warming,‖ and ―long-term monitoring of vegetation plots in terrestrial environments indicates an increase in local species richness (Pauli et al., 2007; Vittoz et al., 2009).‖ Clearly, the findings of Rosset et al. harmonize well with a vast body of other research conducted at many scales and across many different environments, all of which demonstrate warming tends to increase ecosystem species richness.

#### Algea Photosynthesis checks ocean acidification

**Carter 11** – Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change, Published by The Heartland Institute]

Another reason to doubt Pelejero et al.‘s forecast of falling pH levels is that high rates of aquatic photosynthesis by marine micro- and macro-algae, which have been shown to be stimulated and maintained by high levels of atmospheric CO2—see, for example, Wu et al. (2008), Fu et al. (2008), and Egge et al. (2009)—can **dramatically increase the pH of marine bays, lagoons, and tidal pools** (Gnaiger et al., 1978; Santhanam et al., 1994; Macedo et al., 2001; Hansen, 2002; Middelboe and Hansen, 2007) and significantly increase the surface-water pH of areas as large as the North Sea (Brussaard et al., 1996). Thus it is logical to presume anything else that enhances marine photosynthesis, such as nutrient delivery to the waters of the world‘s coastal zones (i.e., eutrophication), may increase pH as well. Thinking along these lines, Borges and Gypens (2010) employed an idealized biogeochemical model of a river system (Billen et al., 2001) and a complex biogeochemical model describing carbon and nutrient cycles in the marine domain (Gypens et al., 2004) ―to investigate the decadal changes of seawater carbonate chemistry variables related to the increase of atmospheric CO2 and of nutrient delivery in the highly eutrophied Belgian coastal zone over the period 1951–1998.‖ The findings of the two researchers indicate, as they describe it, that ―the increase of primary production due to eutrophication could **counter the effects of ocean acidification** on surface water carbonate chemistry in coastal environments,‖ and ―changes in river nutrient delivery due to management regulation policies can lead to **stronger** **changes in carbonate chemistry than ocean acidification**,‖ as well as changes that are ―faster than those related solely to ocean acidification.‖ And to make these facts perfectly clear, they add, ―the response of carbonate chemistry to changes of nutrient delivery to the coastal zone is **stronger than ocean acidification**.‖

#### Adaptation Solves

**Carter 11**, Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change, Published by The Heartland Institute]

In further discussing the subject, Langer et al. (2009) write, ―shifts in dominance between species and/or between clones within a species might therefore be expected,‖ as the air‘s CO2 content continues to rise; but they state that too often ―the possibility of adaptation is not taken into account.‖ This should not be assumed away, for the great genetic diversity that exists both among and within species, in the words of Stoll, ―is good insurance in a changing ocean.‖ Indeed, this could be interpreted as evidence that Earth‘s coccolithophorids are well prepared for whatever the future may thrust at them in this regard, for as Langer et al. (2006) have more boldly and explicitly stated, ―genetic diversity, both between and within species, may allow calcifying organisms to prevail in a high CO2 ocean.‖

#### Historical climate occilation proves its natural

**Carter 2-8–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (February 2012, “Eight Centuries of Climate Change in Northeast Spain” <http://www.nipccreport.org/articles/2012/feb/8feb2012a3.html>) Jacome

According to Morellon *et al*. (2011), "in the context of present-day global warming, there is increased interest in documenting climate variability during the last millennium," since "it is crucial to reconstruct pre-industrial conditions to discriminate anthropogenic components (i.e., greenhouse gases, land-use changes) from natural forcings (i.e., solar variability, volcanic emissions)."

Against this backdrop, Morellon *et al*. conducted a multi-proxy study of several short sediment cores they recovered from Lake Estanya (42°02'N, 0°32'E) in the Pre-Pyrenean Ranges of northeast Spain, which "provides a detailed record of the complex environmental, hydrological and anthropogenic interactions occurring in the area since medieval times." More specifically, they say that "the integration of sedimentary facies, elemental and isotopic geochemistry, and biological proxies (diatoms, chironomids and pollen), together with a robust chronological control, provided by AMS radiocarbon dating and 210Pb and 137Cs radiometric techniques, enabled precise reconstruction of the main phases of environmental change, associated with the Medieval Warm Period (MWP), the Little Ice Age (LIA) and the industrial era." And what did they find?

The thirteen researchers identified the MWP as occurring in their record from AD 1150 to 1300, noting that their pollen data reflect "warmer and drier conditions," in harmony with the higher temperatures of the Iberian Peninsula over the same time period that have been documented by Martinez-Cortizas *et al*. (1999), the higher temperatures of the Western Mediterranean region found by Taricco *et al*. (2008), and the global reconstructions of Crowley and Lowery (2000) and Osborn and Briffa (2006), which "clearly document warmer conditions from the twelfth to fourteenth centuries," which warmth, in the words of Morellon *et al*. is "likely related to increased solar irradiance (Bard *et al*., 2000), persistent La Niña-like tropical Pacific conditions, a warm phase of the Atlantic Multidecadal Oscillation, and a more frequent positive phase of the North Atlantic Oscillation (Seager *et al*., 2007)."

Following hard on the heels of the MWP, Morellon *et al*. note the occurrence of the LIA, which they recognize as occurring from AD 1300 to 1850. And here they report that, on the Iberian Peninsula, "lower temperatures (Martinez-Cortizas *et al*., 1999) characterize this period," which "coincided with colder North Atlantic (Bond *et al*., 2001) and Mediterranean sea surface temperatures (Taricco *et al*., 2008) and a phase of mountain glacier advance (Wanner *et al*., 2008)." And following the LIA they identify the transition period of AD 1850-2004 that takes the region into the Current Warm Period.

In discussing all three of these distinctive periods, they say that "a comparison of the main hydrological transitions during the last 800 years in Lake Estanya and solar irradiance (Bard *et al*., 2000) reveals that lower lake levels dominated during periods of enhanced solar activity (MWP and post-1850 AD) and higher lake levels during periods of diminished solar activity (LIA)." And *within* the LIA, they note that periods of higher lake levels or evidence of increased water balance occurred during the solar minima of Wolf (AD 1282-1342), Sporer (AD 1460-1550), Maunder (AD 1645-1715) and Dalton (AD 1790-1830).

In light of these several observations it would appear that the multi-centennial climate oscillation uncovered by Morellon *et al*. has been driven by a similar oscillation in solar activity, as well as by multi-decadal solar activity *fluctuations* superimposed upon that longer-period *oscillation*. And these relationships suggest that **there is no compelling need to attribute 20th-century global warming to the concomitant increase in the air's CO2 content**. **Natural variability appears** quite **capable of explaining it all.**

### 2nc

#### U.S. energy policy will determine whether it can prevent China from surpassing U.S. wind leadership

**Markatos, 2/3/**09 - founder of Sustainable Energy Transition (Dennis, “Record Global Wind Growth: Becomes Race Between US & China”, Huffington Post,

http://www.huffingtonpost.com/dennis-markatos/record-global-wind-growth\_b\_163728.html)

Wind power did not just have [outstanding growth in the US](http://setenergy.org/2009/01/28/2008-a-record-year-for-wind/) last year. This renewable energy success story was a worldwide phenomenon. Global wind capacity grew a record [27 GW](http://www.gwec.net/index.php?id=30&no_cache=1&tx_ttnews%5Btt_news%5D=177&tx_ttnews%5BbackPid%5D=4&cHash=04fdc8c00a), growing at the awesome speed of 28.8%.

The US became the global wind leader at 25.2 GW with Germany moving to #2 at 23.9 GW. The North American and European markets were roughly equal in 2008 growth, with Asia following closely behind.

China Rising

China doubled its wind capacity again this year, adding a big 6.3 GW to hit 12.2 GW installed (4th globally after Spain). And China is poised to grow faster than any other country in 2009, potentially doubling again to ~24 GW. At such a quick rate, China will probably pass Spain and Germany by 2010 (and accomplish its 30 GW by 2020 national goal 10 years in advance). Whether China will pass the US in 2010-12 depends on US energy policy. If the US puts significant resources behind its stated goal to foster a green economic recovery, we may grow quickly enough to outpace China for many years.

#### Increasing U.S. wind subsidies will take markets from foreign competitors

**Wiser et al, 07** - Lawrence Berkeley National Laboratory, (Ryan Wiser, Mark Bolinger, and Galen Barbose, "Using the Federal Production Tax Credit to Build a Durable Market for Wind Power in the United States" November <http://eetd.lbl.gov/ea/EMS/reports/63583.pdf>)

As the wind power business becomes more global in scope, turbines and components will be increasingly manufactured in areas where labor and materials are relatively inexpensive. Given transportation costs, however, some degree of local manufacturing will remain. **In part because of the uncertain availability of the federal PTC, however, U.S.-**based **manufacturing** of wind turbines and components **remains** somewhat **limited**. This is true despite recent progress in increasing local manufacturing of certain components by both domestic and international firms.15 Industry members were asked to estimate the proportion of U.S. wind project costs currently sourced from or manufactured in the United States, as well as expected trends in domestic manufacturing in the coming ten years under both an uncertain (i.e., short-term) PTC environment and under a single 10-year PTC extension.

Though responses show a range of opinions on the magnitude of future domestic manufacturing, directional consistency is clear: a longer-term PTC extension is expected by industry to yield a sizable increase in domestic wind turbine and component manufacturing (Figure 3). **Under the present uncertain** (i.e., short-term) PTC **extension path,** **domestic manufacturing content is expected to remain largely constant** over time at its current base of roughly 30%. A single, 10- year PTC extension, on the other hand, yields a median expected domestic manufacturing share of over 70%, bringing with it jobs and local economic development benefits.

#### China is competing with the U.S. for market share in wind power – extending wind subsidies undermines Chinese wind

**Hays, 08 –** director of Emerging Energy Research (Keith, “Research Update 4Q 2007: Global Wind Energy”,

<http://www.emerging-energy.com/user/category_docs.aspx?l1=1&catid=GlobalWindEnergyAdvisory1277812780&docid=/user/GlobalWindEnergyAdvisory1277812780_reg/EERru4Q2007GlobalWind.pdf&cattype=AdvisoryServices>)

China's explosive industrial build-up around wind power underlines the country's wind power potential as it ramps up for the 2008 Beijing Games, which will accent China's green energy credentials. Led by state juggernauts such as [LongYuan](http://www.emerging-energy.com/user/category_docs.aspx?l1=1&catid=AsiaPacificWindEnergyAdvisory379240004&docid=/user/AsiaPacificWindEnergyAdvisory379240004_sub/APW915-071220IPOtoSecureLongYuansLeadinChinaWind.pdf&cattype=AdvisoryServices), the national industrial complex is prioritizing the sector alongside its massive coal generation build-out. This focus delivers opportunities for many manufacturers to the tune of over 3 GW annually, while CDM credit buyers such as [Japan](http://www.emerging-energy.com/user/category_docs.aspx?l1=1&catid=AsiaPacificWindEnergyAdvisory379240004&docid=/user/AsiaPacificWindEnergyAdvisory379240004_sub/GW925-071026JapanSearchesforNewWindGrowth.pdf&cattype=AdvisoryServices) have also flocked to China for deals. European players are now tasked with solidifying their regional portfolios while expanding aggressively into the Americas and Asia to tap major global growth opportunities. Offshore wind, seen as a key market for European expansion, continues to progress slowly, both in Europe and the US. On the positive side, German pilot project [Alpha Ventus](http://www.emerging-energy.com/user/category_docs.aspx?l1=&catid=EuropeWindEnergyAdvisory397991763&docid=/user/EuropeWindEnergyAdvisory397991763_sub/EW915-071012PilotProjectAdvancesGermanOffshoreWind.pdf&cattype=AdvisoryServices) progressed with full permitting and turbine procurement, though the [German offshore](http://www.emerging-energy.com/user/category_docs.aspx?l1=1&catid=EuropeWindEnergyAdvisory397991763&docid=/user/EuropeWindEnergyAdvisory397991763_sub/EW925-071221GermanyFacesOffshoreWindReality.pdf&cattype=AdvisoryServices) market is facing the challenging realities of large-scale build-up. A similar scenario played out in the US, where rising offshore wind costs set back [Babcock & Brown's](http://www.emerging-energy.com/user/category_docs.aspx?l1=1&catid=USCanadaWindEnergyAdvisory1259859002&docid=/user/USCanadaWindEnergyAdvisory1259859002_sub/UCW915-071112BabcockBrownFailstoFloatUSOffshore.pdf&cattype=AdvisoryServices) recent efforts for a project ofof Delaware's coast. Looking ahead, **EER's forecast** update **indicates a shift in the global market pecking order, as China will battle it out with the US**, followed by Germany, Spain, and India for global yearly MW added leadership. Key events that will determine the outcome of global competition in 2008 include:  US general elections on 4 November 2008  The renewal or expiration of the US PTC incentive in December  The EU's burden-sharing policy adoption to impose its 20% by 2020 target on member states  China's next round of NRDC project tenders combined with additional wind IPOs

#### Wind components are finite and subject to bottlenecks—every US expansion necessitates a weaker Chinese industry

**Johnson, 08** (Keith, Environmental Capital – Wall Street Journal energy blog, 3/18, “A Mighty Wind: What Will China’s Green Appetite Mean?”, <http://blogs.wsj.com/environmentalcapital/2008/03/18/a-mighty-wind-what-will-chinas-green-appetite-mean/?mod=WSJBlog>)

China’s renewable-energy push is a recognition by the NDRC that its economic development must be fueled by something other than coal—which accounts for about 75% of the country’s power generation—if big environmental impacts are to be avoided. (And bad PR, like [spooking marathon champs](http://edition.cnn.com/2008/SPORT/03/18/beijing.haile/) away from the Olympics.) It’s also a recognition that wind power is already booming in China: It had about 4 gigawatts installed last year, which meant the 2010 targets were already in sight.

But—like with almost every other energy choice China makes, from [coal to oil to gas](http://www.economist.com/specialreports/displaystory.cfm?story_id=10795714)—adding more wind will likely create more headaches for the rest of the world.

Other countries, especially the U.S., have also been massively ramping up wind power in recent years; last year, wind power accounted for one-quarter of all new power in the U.S. The big problem: There still aren’t enough wind turbines to meet global demand, even though wind turbine makers have been scrambling since last year to remove production bottlenecks and boost output.

Will China’s fast-growing domestic wind turbine business come to the rescue? Not likely. While a handful of players are building top-notch turbines, domestic capacity still falls far short of China’s needs. According to a [report](http://www.gwec.net/uploads/media/wind-power-report.pdf) compiled by the Global Wind Energy Council, China’s domestic wind turbine production capacity in 2006 was 540 megawatts (about 300 good-sized machines). That’s less than half of what the country needs every year.

More worrying, even its booming domestic industry still completely relies on imports of key wind-turbine components, especially ball bearings. That means China’s appetite will just add pressure to already-stretched global supply chains, likely increasing turbine prices and thus capital costs for new wind farms everywhere.

#### We control uniqueness—most recent ev says wind industry is currently doomed and PTC will expire

**Cardwell 9/20**/2012 (Diane, NYT, “Tax Credit in Doubt, Wind Power Industry Is Withering”, http://www.nytimes.com/2012/09/21/business/energy-environment/as-a-tax-credit-wanes-jobs-vanish-in-wind-power-industry.html?pagewanted=all&\_moc.semityn.www&pagewanted=print, WEA)

FAIRLESS HILLS, Pa. — Last month, Gamesa, a major maker of wind turbines, completed the first significant order of its latest innovation: a camper-size box that can capture the energy of slow winds, potentially opening new parts of the country to wind power.

But by the time the last of the devices, worth more than $1.25 million, was hitched to a rail car, Gamesa had furloughed 92 of the 115 workers who made them.

“We are all really sad,” said Miguel Orobiyi, 34, who worked as a mechanical assembler at the Gamesa plant for nearly five years. “I hope they call us back because they are really, really good jobs.”

Similar cuts are happening throughout the American wind sector, which includes hundreds of manufacturers, from multinationals that make giant windmills to smaller local manufacturers that supply specialty steel or bolts. In recent months, companies have announced almost 1,700 layoffs.

At its peak in 2008 and 2009, the industry employed about 85,000 people, according to the American Wind Energy Association, the industry’s principal trade group.

About 10,000 of those jobs have disappeared since, according to the association, as wind companies have been buffeted by weak demand for electricity, stiff competition from cheap natural gas and cheaper options from Asian competitors. Chinese manufacturers, who can often underprice goods because of generous state subsidies, have moved into the American market and have become an issue in the larger trade tensions between the countries. In July, the United States Commerce Department imposed tariffs on steel turbine towers from China after finding that manufacturers had been selling them for less than the cost of production.

And now, on top of the business challenges, the industry is facing a big political problem in Washington: the Dec. 31 expiration of a federal tax credit that makes wind power more competitive with other sources of electricity.

The tax break, which costs about $1 billion a year, has been periodically renewed by Congress with support from both parties. This year, however, it has become a wedge issue in the presidential contest. President Obama has traveled to wind-heavy swing states like Iowa to tout his support for the subsidy. Mitt Romney, the Republican nominee, has said he opposes the wind credit, and that has galvanized Republicans in Congress against it, perhaps dooming any extension or at least delaying it until after the election despite a last-ditch lobbying effort from proponents this week.

Opponents argue that the industry has had long enough to wean itself from the subsidy and, with wind representing a small percentage of total electricity generation, the taxpayers’ investment has yielded an insufficient return.

“Big Wind has had extension after extension after extension,” said Benjamin Cole, a spokesman for the American Energy Alliance, a group partly financed by oil interests that has been lobbying against the credit in Washington. “The government shouldn’t be continuing to prop up industries that never seem to be able to get off their training wheels.”

But without the tax credit in place, the wind business “falls off a cliff,” said Ryan Wiser, a staff scientist at Lawrence Berkeley National Laboratory who studies the market potential of renewable electricity sources.

#### Uncertainty alone about PTC

**Orcutt, MIT Technology Review, 8/17/2012** (Mike, http://www.technologyreview.com/news/428927/does-the-wind-production-tax-credit-matter/, WEA)

Analysts expect a record or near-record number of installations this year, as developers rush to take advantage of the PTC before it possibly disappears. The market uncertainty that would face the industry, together with low natural gas prices, could “dramatically” slow new installations starting next year, [according to the U.S. Department of Energy](http://www1.eere.energy.gov/wind/pdfs/2011_wind_technologies_market_report.pdf). As shown in the second chart, market forecasters generally anticipate much lower wind capacity additions in the absence of federal tax incentives.

#### Empirically – wind farms don’t decrease conventional power or CO2 use – and it tradesoff with superior solutions like energy efficiency

**Rosenbloom, 06** - science editor living in Vermont (Eric, “A Problem With Wind Power”, <http://www.aweo.org/ProblemWithWind.html>)

As described in part I, wind farms do not bring about any reduction in the use of conventional power plants. Requiring the upgrading of power plants to be more efficient and cleaner would actually do something rather than simply support the image of “green” power that energy companies profit from while in fact doing nothing to reduce pollution or fuel imports. An April 2000 E.U. report found that, using existing technology, increased efficiency could decrease energy consumption by more than 18% by 2020. The U.N.-sponsored Intergovernmental Panel on Climate Change has stated that simple voluntary energy-efficiency improvements in buildings will reduce world energy use 10%–15% by 2020. They state that, with technology already in use, efficiency improvements in buildings, manufacturing, and transport can reduce world carbon emissions more than 50% by 2020. In the U.S., 61.5% of the energy used is “lost,” i.e., only 38.5% of the energy consumed is actually extracted.**20** In transmission alone, 7.34% of the electricity generated is lost. There is obviously much that can be improved in what we already have and will continue to live with for quite some time.

Electricity represents only 39% of energy use in the U.S. (in Vermont, 20%; and only 1% of Vermont’s greenhouse gas emissions is from electricity generation). Pollution from fossil fuels also comes from transportation (cars, trucks, aircraft, and ships) and heating. Despite the manic installation of wind facilities in the U.K., their CO2 emissions rose in 2002 and 2003. At a May 27, 2004, conference in Copenhagen, the head of development from the Danish energy company Elsam stated, “Increased development of wind turbines does not reduce Danish CO2 emissions.” Demanding better gas mileage in cars, including pickup trucks and SUVs, promoting rail for both freight and travel, and supporting the use of biodiesel (for example, from hemp) would make a huge impact on pollution and dependence on foreign oil, whereas wind power makes none. Some hybrid gas-electric cars (the ones that don't just add the electric motor just for a “green” acceleration boost) already use 60% less gasoline than average conventional new cars in the U.S.

**CCP staked its future on economic growth – decline causes collapse**

**Abebe and Masur 10** [Daniel Abebe and Jonathan S. Masur, Assistant Professors of Law, University of Chicago Law School, Article: International Agreements, Internal Heterogeneity, and Climate Change: The "Two Chinas" Problem, Winter, 50 Va. J. Int'l L. 325]

First, since the collapse of the Marxist-Leninist ideology that served as the basis for the party's authority, the CCP has adopted economic growth as the central justification for its one-party rule. The CCP has pegged its political future to a type of "performance legitimacy" n12 - it governs because it can provide faster growth and higher standards of living than any alternative form of central authority. In Eastern China, the CCP's approach has been a nearly unqualified success. Special coastal economic zones, favorable banking policies, and massive decentralization of government have combined to spur blistering economic growth. Western China, however, has been left starkly behind: per capita gross domestic product (GDP) in Western China is less than half of what it is in Eastern China. The result has been rising income inequality, social instability, and dramatic divisions between East and West, rural and city, and peasants and urban residents, along with the creation of a roaming underclass of Western Chinese seeking work in the coastal cities. n13 Worse still, these social schisms coincide with ethnic and religious fault lines: Western China is home to many ethnic minority groups that harbor substantial animosity toward CCP rule. Poorer conditions in the West have created the political environment for the emergence of separatist movements. Brisk economic growth in Western China has thus become a political imperative for the CCP, and the CCP has [\*330] prioritized it accordingly. China is likely to balk at any international agreement that might imperil this growth. Second, as a result of its growth-driven delegation of power, the CCP suffers from a surprising (for such a centralized government) erosion of state capacity: the provinces often ignore the central government's directives, frequently without meaningful consequences. n14 The political structure of the CCP and the institutional structure of China's government are sometimes overlapping or redundant and, in many places, lack effective vertical or horizontal accountability. The environmental regulatory agencies are often subordinate to the very agencies they are intended to regulate. Province-level CCP officials are often evaluated (both locally and in Beijing) by their ability to produce high levels of economic growth, not their commitment to environmental protection. Although the CCP has recently tried to recentralize power and rationalize the governance structure, n15 the center's capacity to enforce environmental regulations on the provinces is much weaker than in a typical industrialized state. The existing structural relationship between the provinces and Beijing often results in a chronic inability on the part of the CCP to provide public goods like environmental protection, an inability it will not be able to reverse without incurring substantial costs. Finally, there is reason to believe that the vast majority of economic and scientific projections have substantially underestimated China's future carbon emissions by failing to account for heterogeneity among provinces. Eastern China is already highly industrialized and reasonably wealthy; there is every reason to expect that it will begin to move towards cleaner technologies and shift economic production away from industry and towards services (which are generally less energy and carbon-intensive). n16 Western China, by contrast, is poorer and more agrarian, and the typical development pattern for such an area involves a shift towards greater industrialization and higher per capita energy consumption (and carbon production). Indeed, this is precisely the direction in which Western China is moving. n17 Every quantitative forecast of Chinese emissions - save for two important exceptions - uses only national-level data, a methodological weakness that can wash out distinctions between East and West. Of the [\*331] two studies that employ sub-national data, one projects higher emissions than any of the national-level studies; the other projects much higher emissions than any other study. n18 We read this as suggesting that Chinese carbon emissions over the forthcoming several decades may be significantly greater than the standard models have anticipated, with correspondingly higher costs to China from any agreement to curb carbon emissions. In light of the importance of economic growth to the CCP, the internal structure of Chinese governance, and the need to develop Western China, the prospects for China choosing to join such an agreement in the immediate future seem slim. This Article proceeds in four parts. Part I focuses on the general importance of economic growth to the CCP, the distribution of growth within China, and the social and economic difficulties generated by the CCP's hyper-growth policies. Part II analyzes the CCP's internal environmental enforcement capacity and argues that China would encounter substantial domestic challenges in implementing a climate accord, even if it chooses to sign one. Part III critiques the assumptions underlying quantitative forecasts of Chinese carbon emissions and suggests that future emissions may exceed conventional projections by substantial margins. Part IV canvasses extant potential frameworks for an international climate change agreement and argues that they are likely to be unsuitable to one or more of the relevant parties. Our conclusion is a pessimistic one: it will be difficult to convince China to join a meaningful international climate agreement in the near future under the best of circumstances. The Two Chinas, coupled with China's internal political dynamics, present circumstances that are hardly ideal. I. The Chinese Growth Imperative Modern China has reinvented itself on a foundation of kudzu-like economic growth. Where Marxism once served as the unifying national ideology, the CCP has substituted wealth generation and prosperity as the touchstones of the regime and suggested that the Chinese people judge the legitimacy of CCP rule by the increases in their own standards of living. Economic growth in China has been spectacular, but it has also been highly uneven. Eastern, coastal provinces have become wealthy, while central and western provinces have lagged far behind. In effect, there is no longer simply "China." There is now Eastern China, which is urban, industrialized, and relatively prosperous, and Western China, [\*332] which is rural, agrarian, and relatively poor. This divergence in economic outcomes - a divergence that in places coincides with pre-existing ethnic and religious fault lines - poses a serious threat to social stability within China. n19 In response, the CCP has begun an aptly named "Western Development Program" in an attempt to prioritize economic growth, encourage national integration, and curb nationalist unrest in Western provinces. Accordingly, the governing regime will be reluctant to join a climate agreement that might contribute to greater instability by stunting crucial economic development in Western China. A. Foundations of CCP Rule: Economic Growth Since 1949, China has been governed by the autocratic CCP, dominated by Chairman Mao's conception of Marxism and designed to bring "socialist glory" to China while preserving party rule. After the Cultural Revolution and Mao's death in 1976, however, the CCP, led by Deng Xiaoping, began to move away from the Marxist ideological foundation that served as the legitimating discursive force for CCP authority. n20 Concerned with increasing levels of apathy toward communism and questions about its efficacy as the governing regime, n21 the CCP turned to two new sources of authority and legitimacy to galvanize support among the populace and strengthen its hold on power. The first of these was a new Chinese nationalism. The second was an emphasis on continued economic growth - a type of "performance legitimacy" n22 - as a benchmark and measure of the regime's success. From the late 1970s until the suppression of student-led democratic protests in Tiananmen Square in 1989, Deng and the CCP moved slowly toward a reform of China's centralized economic policies and internal governance structure. Deng and some of the reformers began to argue that the Chinese people wanted a higher standard of living, technological dynamism, and economic efficiency, not more ideology and excessive bureaucracy. To be economically successful, they argued, China needed the CCP's one-party rule to ensure stability and regain international prestige. In the words of one scholar, "in the most fundamental sense ... China's economic reform strategy has been guided by a strategic [\*333] vision at the top of the political system. This vision links China's security, global influence, and domestic stability to the state of its economy." n23 Sustained economic growth is paramount for the continuation of the CCP, the maintenance of China's territorial integrity, and the pursuit of China's national interests in international politics. n24 The CCP's reform strategy has been marked by incremental opening of the domestic economy, beginning with agriculture in the late 1970s and continuing through China's accession to the World Trade Organization (WTO) in 2001. n25 During the 1980s, the CCP delegated a significant amount of authority from the central government to the provinces and cities, freeing local actors - province and city-level officials - to develop policies that encouraged economic growth independent of the center. n26 After a temporary delay in reforms after Tiananmen Square, the 1990s saw the CCP commit to the creation of a market system, the privatization of some state-owned enterprises, and the development of the private sector. At the turn of the century, the CCP began to embrace private entrepreneurs and "retreat from economic administration to economic regulation as the core economic function of government." n27 From a national perspective, the CCP's economic reforms are an unqualified success. Fueled by these reforms, the Chinese economy has produced tremendous economic growth and a rapidly improving standard of living for many of China's citizens (in addition to severe consequences for the environment). Between 1978 and 2000, "overall per capita gross domestic product (GDP) in constant yuan roughly quadrupled." n28 Today, China has the world's second largest economy by purchasing power parity, surpassing Japan, India, and Germany. n29 It has the world's largest foreign capital reserves. n30 It enjoys a trade surplus of [\*334] $ 163.3 billion with the United States. n31 It is a leading destination for foreign direct investment, n32 and has become more integrated into the world economy through its membership in the WTO. By almost every economic measure, the CCP's economic policies and drive for modernization have produced tremendous aggregate gains for China and its citizens. The CCP's policies have also created a consumer society in the formerly Marxist China. From telephones to televisions, newspapers to the internet, and automobiles to overseas travel, the CCP has brought to the Chinese people access to information, goods, and technology that were unimaginable during the Maoist era. n33 The CCP's economic policies have reduced the role of the state in the affairs of daily life, leaving ordinary citizens more free to engage in social and economic activities. In so doing, the CCP has reinforced the norm that prioritizing hyper-growth polices and ensuring economic development are the party's overriding responsibilities. China is hardly unique in favoring continued economic growth; there are few nations on earth that are not attempting to grow their economies and produce wealth for their citizens. In China, however, economic growth is not merely a matter of policy. Growth, particularly in certain geographic regions, is viewed by the CCP as a political imperative, integral to the regime's survival. As subsequent discussion will demonstrate, this focus on economic growth significantly impacts the CCP's incentives to curb environmental degradation and reduce greenhouse gas emissions.

**WMD war**

**Renxing 05** (San Renxing, Epoch Times. 8-5-05. “The CCP’s Last-ditch Gamble: Biological and Nuclear War” <http://www.theepochtimes.com/news/5-8-5/30931.html>)

Since the Party’s life is “above all else,” **it would not be surprising if the CCP resorts to the use of biological, chemical, and nuclear weapons in its attempt to extend its life**. The CCP, which disregards human life, would not hesitate to kill two hundred million Americans, along with seven or eight hundred million Chinese, to achieve its ends. These speeches let the public see the CCP for what it really is. With evil filling its every cell the **CCP intends to wage a war against humankind in its desperate attempt to cling to life**. That is the main theme of the speeches. This theme is murderous and utterly evil. In China we have seen beggars who coerced people to give them money by threatening to stab themselves with knives or pierce their throats with long nails. But we have never, until now, seen such a gangster who would use biological, chemical, and nuclear weapons to threaten the world, that all will die together with him. This bloody confession has confirmed the CCP’s nature: that of a monstrous murderer who has killed 80 million Chinese people and who now plans to hold one billion people hostage and gamble with their lives.

**And, it causes a nuclear civil war**

**Yee and Storey 02** [Professor of Politics and International Relations at the Hong Kong Baptist University and Storey, Lecturer in Defence Studies at Deakin University, Herbert Yee, Professor of Politics and International Relations at the Hong Kong Baptist University and Ian Storey, Lecturer in Defence Studies at Deakin University, 2002, “The China Threat: Perceptions, Myths and Reality,” p5]

The fourth factor contributing to the perception of a China threat is the fear of political and economic collapse in the PRC, resulting in territorial fragmentation, civil war and waves of refugees pouring into neighbouring countries. Naturally, any or all of these scenarios would have a profoundly negative impact on regional stability. Today the Chinese leadership faces a raft of internal problems, including the increasing political demands of its citizens, a growing population, a shortage of natural resources and a deterioration in the natural environment caused by rapid industrialisation and pollution. These problems are putting a strain on the central government's ability to govern effectively. Political disintegration or a Chinese civil war might result in millions of Chinese refugees seeking asylum in neighbouring countries. Such an unprecedented exodus of refugees from a collapsed PRC would no doubt put a severe strain on the limited resources of China's neighbours. A fragmented China could also result in another nightmare scenario - nuclear weapons falling into the hands of irresponsible local provincial leaders or warlords.2 From this perspective, a disintegrating China would also pose a threat to its neighbours and the world.

**Ethical obligations are tautological—the only coherent rubric is to maximize number of lives saved**

**Greene 2010** – Associate Professor of the Social Sciences Department of Psychology Harvard University (Joshua, Moral Psychology: Historical and Contemporary Readings, “The Secret Joke of Kant’s Soul”, [www.fed.cuhk.edu.hk/~lchang/material/Evolutionary/Developmental/Greene-KantSoul.pdf](http://www.fed.cuhk.edu.hk/~lchang/material/Evolutionary/Developmental/Greene-KantSoul.pdf), WEA)

What turn-of-the-millennium science is telling us is that human moral judgment is not a pristine rational enterprise, that our moral judgments are driven by a hodgepodge of emotional dispositions, which themselves were shaped by a hodgepodge of evolutionary forces, both biological and cultural. Because of this, it is exceedingly unlikely that there is anyrationallycoherentnormativemoral theory that can accommodateourmoral intuitions. Moreover, anyone who claims to have such a theory, or even part of one, almost certainly doesn't. Instead, what that person probably has is a moral rationalization.

It seems then, that we have somehow crossed the infamous "is"-"ought" divide.  How did this happen? Didn't Hume (Hume, 1978) and Moore (Moore, 1966) warn us against trying to derive an "ought" from and "is?" How did we go from descriptive scientific theories concerning moral psychology to skepticism about a whole class of normative moral theories? The answer is that we did not, as Hume and Moore anticipated, attempt to derive an "ought" from and "is." That is, our method has been inductive rather than deductive. We have inferred on the basis of the available evidence that the phenomenon of rationalist deontological philosophy is best explained as a rationalization of evolved emotional intuition (Harman, 1977).

Missing the Deontological Point  
I suspect that rationalist deontologists will remain unmoved by the arguments presented here. Instead, I suspect, they will insist that I have simply misunderstoodwhatKant and like-minded deontologistsare all about. Deontology, they will say, isn't about this intuition or that intuition. It's not defined by its normative differences with consequentialism. Rather, deontology is about taking humanity seriously. Above all else, it's about respect for persons. It's about treating others as fellow rational creatures rather than as mere objects, about acting for reasons rational beings can share. And so on (Korsgaard, 1996a; Korsgaard, 1996b).This is, no doubt, how many deontologists see deontology. But this insider's view, as I've suggested, may be misleading. The problem, more specifically, is that it defines deontology in terms of **values that are not**distinctively**deontological**, though they may appear to be from the inside. Consider the following analogy with religion. When one asks a religious person to explain the essence of his religion, one often gets an answer like this: "It's about love, really. It's about looking out for other people, looking beyond oneself. It's about community, being part of something larger than oneself." This sort of answer accurately captures the phenomenology of many people's religion, but it's nevertheless inadequate for distinguishing religion from other things. This is because many, if not most, non-religious people aspire to love deeply, look out for other people, avoid self-absorption, have a sense of a community, and be connected to things larger than themselves. In other words, secular humanists and atheists can assent to most of what many religious people think religion is all about. From a secular humanist's point of view, in contrast, what's distinctive about religion is its commitment to the existence of supernatural entities as well as formal religious institutions and doctrines. And they're right. These things really do distinguish religious from non-religious practices, though they may appear to be secondary to many people operating from within a religious point of view.  
In the same way, I believe that most of the standard deontological/Kantian self-characterizatons fail to distinguish deontology from other approaches to ethics. (See also Kagan (Kagan, 1997, pp. 70-78.) on the difficulty of defining deontology.) It seems to me that consequentialists, as much as anyone else, have respect for persons, are against treating people asmereobjects, wish to act for reasons that rational creatures can share, etc. A consequentialist respects other persons, and refrains from treating them as mere objects, by counting **every person's well-being**in the decision-making process. Likewise, a consequentialist attempts to act according to reasons that rational creatures can share by acting according to principles that give equal weight to everyone's interests, i.e. that are impartial. This is not to say that consequentialists and deontologists don't differ. They do. It's just that the real differences may not be what deontologists often take them to be.  
What, then, distinguishes deontology from other kinds of moral thought? A good strategy for answering this question is to start with concrete disagreements between deontologists and others (such as consequentialists) and then work backward in search of deeper principles. This is what I've attempted to do with the trolley and footbridge cases, and other instances in which deontologists and consequentialists disagree. If you ask a deontologically-minded person why it's wrong to push someone in front of speeding trolley in order to save five others, you will getcharacteristically deontological answers. Some will betautological: "Because it's murder!"Others will be more sophisticated: "The ends don't justify the means." "You have to respect people's rights." But, as we know, these answers don't really explain anything, because if you give the same people (on different occasions) the trolley case or the loop case (See above), they'll make the opposite judgment, even though their initial explanation concerning the footbridge case applies equally well to one or both of these cases. Talk about rights, respect for persons, and reasons we can share are natural attempts to explain, in "cognitive" terms, what we feel when we find ourselves having emotionally driven intuitions that are odds with the cold calculus of consequentialism. Although these explanations are inevitably incomplete, there seems to be "something deeply right" about thembecause they give voice to powerful moral emotions. But, as with many religious people's accounts of what's essential to religion, they don't really explain what's distinctive about the philosophy in question.

**Extinction outweighs—only we access value of future generations**

**Nye, 86** (Joseph S. 1986; Phd Political Science Harvard. University; Served as Assistant Secretary of Defense for International Security Affairs; “Nuclear Ethics” pg. 45-46)

Is there any end that could justify a nuclear war that threatens the survival of the species? Is not all-out nuclear war just as self contradictory in the real world as pacifism is accused of being? Some people argue that "we are required to undergo gross injustice that will break many souls sooner than ourselves be the authors of mass murder."73 Still others say that "when a person makes survival the highest value, he has declared that there is nothing he will not betray. But for a civilization to sacrifice itself makes no sense since there are not survivors to give meaning to the sacrifical [sic] act. In that case, survival may be worth betrayal." Is it possible to avoid the "moral calamity of a policy like unilateral disarmament that forces us to choose between being dead or red (while increasing the chances of both)"?74 How one judges the issue of ends can be affected by how one poses the questions. If one asks "what is worth a billion lives (or the survival of the species)," it is natural to resist contemplating a positive answer. But suppose one asks, "is it possible to imagine any threat to our civilization and values that would justify raising the threat to a billion lives from one in ten thousand to one in a thousand for a specific period?" Then there are several plausible answers, including a democratic way of life and cherished freedoms that give meaning to life beyond mere survival. When we pursue several values simultaneously, we face the fact that they often conflict and that we face difficult tradeoffs. If we make one value absolute in priority, we are likely to get that value and little else. Survival is a necessary condition for the enjoyment of other values, but that does not make it sufficient. Logical priority does not make it an absolute value. Few people act as though survival were an absolute value in their personal lives, or they would never enter an automobile. We can give survival of the species a very high priority without giving it the paralyzing status of an absolute value. Some degree of risk is unavoidable if individuals or societies are to avoid paralysis and enhance the quality of life beyond mere survival. The degree of that risk is a justifiable topic of both prudential and moral reasoning.

### 1nr

**Zenko says no war – that is wrong – not obsolete**

**Joyner 2010** – managing editor of the Atlantic Council, Ph.D. in national security affairs from the University of Alabama (3/5, James, Atlantic, “Are nuclear weapons obsolete?”, http://www.acus.org/new\_atlanticist/are-nuclear-weapons-obsolete, WEA)

Nuclear Weapons Obsolete? There appears to be a growing sentiment in Europe that nuclear weapons are obsolete, kept around only for symbolic value. Their use is considered so morally reprehensible, the argument goes, that no political leader would dare authorize their use and be forever a pariah. And, if there are no circumstances under which they might be used by Western leaders, then the deterrence argument goes out the window. The problem with that theory is that desperation changes the utility equation. No sane Japanese government would have provoked war with the United States in 1941. But, facing even worse alternatives, they threw a Hail Mary with the Pearl Harbor bombing and hoped for the best. Could China or Russia be backed into a corner and become so desperate that they'd launch a nuclear first strike? It's pretty hard to imagine. Then again, the mere fact that they have that theoretical option makes it less likely that they'll be backed into a corner. It's a little easier to come up with a scenario under which North Korea's Kim Jong Il or a nuclear-empowered Iranian ayatollah might see nuclear weapons as a plausible option. Or, goodness knows, India and Pakistan. More likely, though, the sense of security that comes with being a nuclear possessor will prevent conflicts that might otherwise have been tenable. Clausewitz taught us that war and politics are inextricably linked. So, the distinction between the "political" and "military" viability of nuclear weapons is one without meaning. The bottom line is that deterrence theory still works, at least amongst state actors. After all, no nuclear power has ever been attacked by another state. The same can't be said about attacks by nuclear powers against non-nuclear states. Indeed, this argument was laid out quite nicely three years ago by Des Browne, the UK's then-Secretary of State for Defense, in a speech to King's College: Why do we need a nuclear deterrent? The answer is because it works. Our deterrent has been a central plank of our national security strategy for fifty years. And the fact is that over this fifty years, neither our nor any other country’s nuclear weapons have ever been used, nor has there been a single significant conflict between the world’s major powers. We believe our nuclear deterrent, as part of NATO, helped make this happen. In the same speech, he asked, "Are we prepared to tolerate a world in which countries who care about morality lay down their nuclear weapons, leaving others to threaten the rest of the world or hold it to ransom?" Quite obviously, the answer is No. A World Without Nuclear Weapons The obvious retort, then, is that we maintain nuclear weapons only because others might use them against us. So why not rid ourselves of these weapons entirely? The Europeans seem very enthusiastic about President Obama's Prague nuclear disarmament speech of last April, in which he promised, "The United States will take concrete steps toward a world without nuclear weapons." While most Americans likely took that as rhetorical throat clearing, what with the difficulty of uninventing 60-year-old technology. (Indeed, Obama acknowledged that "This goal will not be reached quickly –- perhaps not in my lifetime.") Europeans apparently see that as a legitimate goal. Indeed, one parliamentarian announced that "no sane person" would disagree with it.

**Begs the question—if we win our internal link story then war can still happen, this overwhelms their wearrants**

**Kagan 1999** – not Robert, Hilihouse Professor of History and Classics at Yale University (Donald, Survival, Vol. 41, No. 2, “Is Major War Obsolete? An Exchange”)

I agree that the present moment in history provides a better chance than ever for achieving a long period of peace, that the deterrent offered by nuclear weapons works towards that end, and that the growth of trade, democracy and economic interdependence assists that prospect. I do not, however, believe that war is obsolete – not yet, anyway. Nor do I believe that the present situation is unique in history any more than any moment is. As always, the chances for peace in the future depend on the decisions and the actions taken by people and these, as always, provide no guarantee against war – even ‘major’ war as Michael Mandelbaum has defined it. This is not the first time in history that people have thought that they had arrived at such a moment, such an extraordinary turning point. In 29BC, when Augustus closed the doors of the Temple of Janus in Rome for only the third time in the 500 years of Rome’s history, as a demonstration, a propaganda move, but also as a statement of a real expectation that new conditions had arrived that made peace appear to be a lasting peace. He turned out to be wrong. A more interesting year, perhaps, is 1792: a wonderful year for people to be stunningly optimistic about the prospects for the future. William Pitt the Younger, then Prime Minister of England, predicted that there were going to be at least 15 years of peace; never had the horizon looked clearer. And in the same year, two intellectuals of different sorts, Joseph Priestley and Tom Paine, had expectations of the same kind. In fact, they were less limited and more like the optimistic views that Michael Mandelbaum puts forward in his article. They based their future on a major change of conditions in the world. Priestley said:1 The present commercial treaties between England and France and between other nations, formerly hostile to each other, seem to show that mankind begin to be sensible to the folly of war and promise a new and important era in the state of the world in general, at least in Europe. Paine said: ‘If commerce were permitted to act to the universal extent it is capable, it would extirpate the system of war’. And of course, to this view were added the views of Kant and Montesquieu, who thought that the establishment of the political institution of the republic was going to have the same pacifying effect. Monarchies were really what war was about. Now that they were gone, there would be no more war. As Paine put it:2 The instant the form of government was changed in France, the republican principles of peace and domestic prosperity and economy arose with the new government, and the same consequences would follow in the case of other nations. Of course, within a year, France and England were at war, and 20 years or so of terrible, dreadful conflict followed. In 1848, John Stuart Mill also sang the praises of commerce:3 Commerce, which is rapidly rendering war obsolete, by strengthening and multiplying the personal interests which act in natural opposition to it …The great extent and rapid increase of international trade … [is] the principal guarantee of the peace of the world. And then, of course, at the end of the nineteenth century and early in the twentieth century, two people of note wrote important statements of this thesis. One had a great impact; the other was not much noticed but was perhaps the more perceptive. The former was Norman Angell’s famous work, The Great Illusion. Basically, his message was that war had become so devastating from an economic point of view that nobody would ever fight. The only problem in Angell’s view was to teach people enough to know war was a disaster. Ivan Bloch was the other one, who said that war was so horrible in his day because the incredible means that had become available for fighting meant that no society could survive very long if they ever started such a war. The horror and danger of future war, he felt, would deter these conflicts. Well, of course, within a few years came the First World War. Now having said all this, even if all these men were wrong, this does not mean that Michael Mandelbaum cannot be right. But it should inspire some degree of modesty and caution. In fact Mandelbaum is very cautious in the language that he uses. Major war is not necessarily finished, he concedes. It’s not dead, it’s obsolete. This is a charming term that seems to say more than it does, because that allows Mandelbaum to draw back from the more total claims later on. A major war is unlikely but not unthinkable, which is to say he thinks it can happen. It is obsolete, he writes, in the sense that it is no longer fashionable. To pick up the metaphor is to see some of its limitations as well as its charm. Is war really a matter of fashion? And even if it is, don’t we have to face the fact that there are some people who choose to be unfashionable, and then there are other people who have never heard of fashion in the first place? China and Russia are two cases to which the writer points. He identifies the Taiwan Straits and the Russo-Ukrainian border as places where wars may well break out, should they erupt anywhere. They are the ‘potential Sarajevos of the twenty-first century’. He is right. And, of course, it is this concession, however genuinely and generously and modestly expressed, that gives away the game. Since there are at least two places where major wars between great powers might well break out even today – and two are quite enough – it seems to me that his entire thesis is undermined.

#### Rejection of securitization causes the state to become more interventionist—turns the K

Tara **McCormack, ’10**, is Lecturer in International Politics at the University of Leicester and has a PhD in International Relations from the University of Westminster. 2010, (Critique, Security and Power: The political limits to emancipatory approaches, page 127-129)

The following section will briefly raise some questions about the rejection of the old security framework as it has been taken up by the most powerful institutions and states. Here we can begin to see the political limits to critical and emancipatory frameworks. In an international system which is marked by great power inequalities between states, the rejection of the old narrow national interest-based security framework by major international institutions, and the adoption of ostensibly emancipatory policies and policy rhetoric, has the consequence of **problematising weak or unstable states** and allowing international institutions or major states a more interventionary role, yet without establishing mechanisms by which the citizens of states being intervened in might have any control over the agents or agencies of their emancipation. Whatever the problems associated with the pluralist security framework **there were at least formal and clear demarcations**. This has the consequence of **entrenching international power inequalities** and allowing for a shift towards a hierarchical international order in which the citizens in weak or unstable states may arguably have even less freedom or power than before. Radical critics of contemporary security policies, such as human security and humanitarian intervention, argue that we see an assertion of Western power and the creation of liberal subjectivities in the developing world. For example, see Mark Duffield’s important and insightful contribution to the ongoing debates about contemporary international security and development. Duffield attempts to provide a coherent empirical engagement with, and theoretical explanation of, these shifts. Whilst these shifts, away from a focus on state security, and the so-called merging of security and development are often portrayed as positive and progressive shifts that have come about because of the end of the Cold War, Duffield argues convincingly that these shifts are highly problematic and unprogressive. For example, the rejection of sovereignty as formal international equality and a presumption of nonintervention has eroded the division between the international and domestic spheres and led to an international environment in which Western NGOs and powerful states have a major role in the governance of third world states. Whilst for supporters of humanitarian intervention this is a good development, Duffield points out the depoliticising implications, drawing on examples in Mozambique and Afghanistan. Duffield also draws out the problems of the retreat from modernisation that is represented by sustainable development. The Western world has moved away from the development policies of the Cold War, which aimed to develop third world states industrially. Duffield describes this in terms of a new division of human life into uninsured and insured life. Whilst we in the West are ‘insured’ – that is we no longer have to be entirely self-reliant, we have welfare systems, a modern division of labour and so on – sustainable development aims to teach populations in poor states how to survive in the absence of any of this. Third world populations must be taught to be self-reliant, they will remain uninsured. Self-reliance of course means **the condemnation of millions to** **a barbarous life of inhuman bare survival**. Ironically, although sustainable development is celebrated by many on the left today, by leaving people to fend for themselves rather than developing a society wide system which can support people, sustainable development actually leads to a less human and humane system than that developed in modern capitalist states. Duffield also describes how many of these problematic shifts are embodied in the contemporary concept of human security. For Duffield, we can understand these shifts in terms of Foucauldian biopolitical framework, which can be understood as a regulatory power that seeks to support life through intervening in the biological, social and economic processes that constitute a human population (2007: 16). Sustainable development and human security are for Duffield technologies of security which aim to *create* self-managing and self-reliant subjectivities in the third world, which can then survive in a situation of serious underdevelopment (or being uninsured as Duffield terms it) without causing security problems for the developed world. For Duffield this is all driven by a neoliberal project which seeks to control and manage uninsured populations globally. Radical critic Costas Douzinas (2007) also criticises new forms of cosmopolitanism such as human rights and interventions for human rights as a triumph of American hegemony. Whilst we are in agreement with critics such as Douzinas and Duffield that these new security frameworks cannot be empowering, and ultimately lead to more power for powerful sta**tes**, we need to understand why these frameworks have the effect that they do. We can understand that these frameworks have political limitations without having to look for a specific plan on the part of current powerful states. In new security frameworks such as human security we can see the political limits of the framework proposed by critical and emancipatory theoretical approaches.

#### Threats are real – bias goes our way

**Schweller 4** [Randall L. Schweller, Associate Professor in the Department of Political Science at The Ohio State University, “Unanswered Threats A Neoclassical RealistTheory of Underbalancing,” International Security 29.2 (2004) 159-201, Muse]

Despite the historical frequency of underbalancing, little has been written on the subject. Indeed, Geoffrey Blainey's memorable observation that for "every thousand pages published on the causes of wars there is less than one page directly on the causes of peace" could have been made with equal veracity about overreactions to threats as opposed to underreactions to them.92 Library shelves are filled with books on the causes and dangers of exaggerating threats, ranging from studies of domestic politics to bureaucratic politics, to political psychology, to organization theory. By comparison, there have been few studies at any level of analysis or from any theoretical perspective that directly explain why states have with some, if not equal, regularity underestimated dangers to their survival. There may be some cognitive or normative bias at work here. Consider, for instance, that there is a commonly used word, paranoia, for the unwarranted fear that people are, in some way, "out to get you" or are planning to do oneharm. I suspect that just as many people are afflicted with the opposite psychosis: the delusion that everyone loves you when, in fact, they do not even like you. Yet, we do not have a familiar word for this phenomenon. Indeed, I am unaware of any word that describes this pathology (hubris and overconfidence come close, but they plainly define something other than what I have described). That noted, international relations theory does have a frequently used phrase for the pathology of states' underestimation of threats to their survival, the so-called Munich analogy. The term is used, however, in a disparaging way by theorists to ridicule those who employ it. The central claim is that the naïveté associated with Munich and the outbreak of World War II has become an overused and inappropriate analogy because few leaders are as evil and unappeasable as Adolf Hitler. Thus, the analogy either mistakenly causes leaders [End Page 198] to adopt hawkish and overly competitive policies or is deliberately used by leaders to justify such policies and mislead the public. A more compelling explanation for the paucity of studies on underreactions to threats, however, is the tendency of theories to reflect contemporary issues as well as the desire of theorists and journals to provide society with policy- relevant theories that may help resolve or manage urgent security problems. Thus, born in the atomic age with its new balance of terror and an ongoing Cold War, the field of security studies has naturally produced theories of and prescriptions for national security that have had little to say about—and are, in fact, heavily biased against warnings of—the dangers of underreacting to or underestimating threats. After all, the nuclear revolution was not about overkill but, as Thomas Schelling pointed out, speed of kill and mutual kill.93 Given the apocalyptic consequences of miscalculation, accidents, or inadvertent nuclear war, small wonder that theorists were more concerned about overreacting to threats than underresponding to them. At a time when all of humankind could be wiped out in less than twenty-five minutes, theorists may be excused for stressing the benefits of caution under conditions of uncertainty and erring on the side of inferring from ambiguous actions overly benign assessments of the opponent's intentions. The overwhelming fear was that a crisis "might unleash forces of an essentially military nature that overwhelm the political process and bring on a war thatnobody wants. Many important conclusions about the risk of nuclear war, and thus about the political meaning of nuclear forces, rest on this fundamental idea."94 Now that the Cold War is over, we can begin to redress these biases in the literature. In that spirit, I have offered a domestic politics model to explain why threatened states often fail to adjust in a prudent and coherent way to dangerous changes in their strategic environment. The model fits nicely with recent realist studies on imperial under- and overstretch. Specifically, it is consistent with Fareed Zakaria's analysis of U.S. foreign policy from 1865 to 1889, when, he claims, the United States had the national power and opportunity to expand but failed to do so because it lacked sufficient state power (i.e., the state was weak relative to society).95 Zakaria claims that the United States did [End Page 199] not take advantage of opportunities in its environment to expand because it lacked the institutional state strength to harness resources from society that were needed to do so. I am making a similar argument with respect to balancing rather than expansion: incoherent, fragmented states are unwilling and unable to balance against potentially dangerous threats because elites view the domestic risks as too high, and they are unable to mobilize the required resources from a divided society. The arguments presented here also suggest that elite fragmentation and disagreement within a competitive political process, which Jack Snyder cites as an explanation for overexpansionist policies, are more likely to produce underbalancing than overbalancing behavior among threatened incoherent states.96 This is because a balancing strategy carries certain political costs and risks with few, if any, compensating short-term political gains, and because the strategic environment is always somewhat uncertain. Consequently, logrolling among fragmented elites within threatened states is more likely to generate overly cautious responses to threats than overreactions to them. This dynamic captures the underreaction of democratic states to the rise of Nazi Germany during the interwar period.97 In addition to elite fragmentation, I have suggested some basic domestic-level variables that regularly intervene to thwart balance of power predictions.

#### Reps don’t come first and don’t cause violence

**Rodwell, 5** [PhD candidate, Manchester, Jonathan, Trendy But Empty: A Response to Richard Jackson, http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm]

In this response I wish to argue that the Post-Structural analysis put forward by Richard Jackson is inadequate when trying to understand American Politics and Foreign Policy. The key point is that this is an issue of methodology and theory. I do not wish to argue that language is not important, in the current political scene (or indeed any political era) that would be unrealistic. One cannot help but be convinced that the creation of identity, of defining ones self (or one nation, or societies self) in opposition to an ‘other’ does indeed take place. Masses of written and aural evidence collated by Jackson clearly demonstrates that there is a discursive pattern surrounding post 9/11 U.S. politics and society. [i] Moreover as expressed at the start of this paper it is a political pattern and logic that this language is useful for politicians, especially when able to marginalise other perspectives. Nothing illustrates this clearer than the fact George W. Bush won re-election, for whatever the reasons he did win, it is undeniable that at the very least the war in Iraq, though arguable far from a success, at the absolute minimum did not damage his campaign. Additionally it is surely not stretching credibility to argue Bush performance and rhetoric during the immediate aftermath of the 9/11 attacks also strengthened his position. However, having said that, the problem is Jackson’s own theoretical underpinning, his own justification for the importance of language. If he was merely proposing that the understanding of language as one of many causal factors is important that would be fine. But he is not. The epistemological and theoretical framework of his argument means the ONLY thing we should look at is language and this is the problem.[ii] Rather than being a fairly simple, but nonetheless valid, argument, because of the theoretical justification it actually becomes an almost nonsensical. My response is roughly laid out in four parts. Firstly I will argue that such methodology, in isolation, is fundamentally reductionist with a theoretical underpinning that does not conceal this simplicity. Secondly, that a strict use of post-structural discourse analysis results in an epistemological cul-de-sac in which the writer cannot actually say anything. Moreover the reader has no reason to accept anything that has been written. The result is at best an explanation that remains as equally valid as any other possible interpretation and at worse a work that retains no critical force whatsoever. Thirdly, possible arguments in response to this charge; that such approaches provide a more acceptable explanation than others are, in effect, both a tacit acceptance of the poverty of force within the approach and of the complete lack of understanding of the identifiable effects of the real world around us; thus highlighting the contradictions within post-structural claims to be moving beyond traditional causality, re-affirming that rather than pursuing a post-structural approach we should continue to employ the traditional methodologies within History, Politics and International Relations. Finally as a consequence of these limitations I will argue that the post-structural call for ‘intertextuals’ must be practiced rather than merely preached and that an understanding and utilisation of all possible theoretical approaches must be maintained if academic writing is to remain useful rather than self-contained and narrative. Ultimately I conclude that whilst undeniably of some value post-structural approaches are at best a footnote in our understanding . The first major problem then is that historiographically discourse analysis is so capacious as to be largely of little use. The process of inscription identity, of discourse development is not given any political or historical context, it is argued that it just works, is simply a universal phenomenon. It is history that explains everything and therefore actually explains nothing. To be specific if the U.S. and every other nation is continually reproducing identities through ‘othering’ it is a constant and universal phenomenon that fails to help us understand at all why one result of the othering turned out one way and differently at another time. For example, how could one explain how the process resulted in the 2003 invasion of Iraq but didn’t produce a similar invasion of Afghanistan in 1979 when that country (and by the logic of the Regan administrations discourse) the West was threatened by the ‘Evil Empire’. By the logical of discourse analysis in both cases these policies were the result of politicians being able to discipline and control the political agenda to produce the outcomes. So why were the outcomes not the same? To reiterate the point how do we explain that the language of the War on Terror actually managed to result in the eventual Afghan invasion in 2002? Surely it is impossible to explain how George W. Bush was able to convince his people (and incidentally the U.N and Nato) to support a war in Afghanistan without referring to a simple fact outside of the discourse; the fact that a known terrorist in Afghanistan actually admitted to the murder of thousands of people on the 11h of Sepetember 2001. The point is that if the discursive ‘othering’ of an ‘alien’ people or group is what really gave the U.S. the opportunity to persue the war in Afghanistan one must surly wonder why Afghanistan. Why not North Korea? Or Scotland? If the discourse is so powerfully useful in it’s own right why could it not have happened anywhere at any time and more often? Why could the British government not have been able to justify an armed invasion and regime change in Northern Ireland throughout the terrorist violence of the 1980’s? Surely they could have just employed the same discursive trickery as George W. Bush? Jackson is absolutely right when he points out that the actuall threat posed by Afghanistan or Iraq today may have been thoroughly misguided and conflated and that there must be more to explain why those wars were enacted at that time. Unfortunately that explanation cannot simply come from the result of inscripting identity and discourse. On top of this there is the clear problem that the consequences of the discursive othering are not necessarily what Jackson would seem to identify. This is a problem consistent through David Campbell’s original work on which Jackson’s approach is based[iii]. David Campbell argued for a linguistic process that ‘always results in an other being marginalized’ or has the potential for ‘demonisation’[iv]. At the same time Jackson, building upon this, maintains without qualification that the systematic and institutionalised abuse of Iraqi prisoners first exposed in April 2004 “is a direct consequence of the language used by senior administration officials: conceiving of terrorist suspects as ‘evil’, ‘inhuman’ and ‘faceless enemies of freedom creates an atmosphere where abuses become normalised and tolerated”[v]. The only problem is that the process of differentiation does not actually necessarily produce dislike or antagonism. In the 1940’s and 50’s even subjected to the language of the ‘Red Scare’ it’s obvious not all Americans came to see the Soviets as an ‘other’ of their nightmares. And in Iraq the abuses of Iraqi prisoners are isolated cases, it is not the case that the U.S. militarily summarily abuses prisoners as a result of language. Surely the massive protest against the war, even in the U.S. itself, is also a self evident example that the language of ‘evil’ and ‘inhumanity’ does not necessarily produce an outcome that marginalises or demonises an ‘other’. Indeed one of the points of discourse is that we are continually differentiating ourselves from all others around us without this necessarily leading us to hate fear or abuse anyone.[vi] Consequently, the clear fear of the Soviet Union during the height of the Cold War, and the abuses at Abu Ghirab are unusual cases. To understand what is going on we must ask how far can the process of inscripting identity really go towards explaining them? As a result at best all discourse analysis provides us with is a set of universals and a heuristic model.

**China is key**

Elizabeth C. **Economy**, C. V. Starr Senior Fellow and Director for Asia Studies at the Council on Foreign Relations, September/October **2007**

(The Great Leap Backward, Foreign Affairs)

Furthermore, China is already attracting international attention for its rapidly growing contribution to climate change. According to a 2007 report from the Netherlands Environmental Assessment Agency, it has already surpassed the United States as the world's largest contributor of carbon dioxide, a leading greenhouse gas, to the atmosphere. Unless China rethinks its use of various sources of energy and adopts cutting-edge environmentally friendly technologies, warned Fatih Birol, the chief economist of the International Energy Agency, last April, in 25 years China will emit twice as much carbon dioxide as all the countries of the Organization for Economic Cooperation and Development combined.

**Warming tipping points inevitable – too late  
NPR 9** (1/26, Global Warming Is Irreversible, Study Says, All Things Considered, http://www.npr.org/templates/story/story.php?storyId=99888903)  
Climate change is essentially **irreversible,** according to a sobering new scientific study. As carbon dioxide emissions continue to rise, the world will experience more and more long-term environmental disruption. The damage will persist even when, and if, emissions are brought under control, says study author Susan Solomon, who is among the **world's top climate scientists.** "We're used to thinking about pollution problems as things that we can fix," Solomon says. "Smog, we just cut back and everything will be better later. Or haze, you know, it'll go away pretty quickly." That's the case for some of the gases that contribute to climate change, such as methane and nitrous oxide. But as Solomon and colleagues suggest in a new study published in the Proceedings of the National Academy of Sciences, it is not true for the most abundant greenhouse gas: carbon dioxide. Turning off the carbon dioxide emissions won't stop global warming. "People have imagined that if we stopped emitting carbon dioxide that the climate would go back to normal in 100 years or 200 years. What we're showing here is that's not right. It's essentially an irreversible change that will last for **more than a thousand years,"** Solomon says. This is because the oceans are currently soaking up a lot of the planet's excess heat — and a lot of the carbon dioxide put into the air. The carbon dioxide and heat will eventually start coming out of the ocean. And that will take place for many hundreds of years. Solomon is a scientist with the National Oceanic and Atmospheric Administration. Her new study looked at the consequences of this long-term effect in terms of sea level rise and drought.

**Can’t solve climate change even if we stopped all emissions today**

**ANI, 1o** 3-20 10, http://news.oneindia.in/2010/03/20/ipcchas-underestimated-climate-change-impacts-sayscientis.html

According to Charles H. Greene, Cornell professor of Earth and atmospheric science, "Even if all man-made greenhouse gas emissions were stopped tomorrow and carbon-dioxide levels stabilized at today's concentration, by the end of this century, the global average temperature would increase by about 4.3 degrees Fahrenheit, or about 2.4 degrees centigrade above pre-industrial levels, which is significantly above the level which scientists and policy makers agree is a threshold for dangerous climate change." "Of course, greenhouse gas emissions will not stop tomorrow, so the actual temperature increase will likely be significantly larger, resulting in potentially catastrophic impacts to society unless other steps are taken to reduce the Earth's temperature," he added. "Furthermore, while the oceans have slowed the amount of warming we would otherwise have seen for the level of greenhouse gases in the atmosphere, the ocean's thermal inertia will also slow the cooling we experience once we finally reduce our greenhouse gas emissions," he said. This means that the temperature rise we see this century will be largely **irreversible for the next thousand years.** "Reducing greenhouse gas emissions alone is unlikely to mitigate the risks of dangerous climate change," said Green.

#### The CP turns their self determination advantage – collaboration over tribal wind is vital

Victoria Sutton, 2007 (Environmental & Energy Policy & Law Journal, “Wind and Wisdom,” 1 Envt'l & Energy L. & Pol'y J. 345, https://litigation-essentials.lexisnexis.com/webcd/app?action=DocumentDisplay&crawlid=1&doctype=cite&docid=1+Envt'l+%26+Energy+L.+%26+Pol'y+J.+345&srctype=smi&srcid=3B15&key=f8fcddf422745ce31396bfec07b6c067)

The protection of tribal nations cannot depend only on self-government and self-determination because the federal government plays such a large role in altering the economy, environment, culture, and even the spirituality of tribal nations. Environmental justice requires that the burden of environmental impacts should not fall disproportionately on minorities and the communities more unable to protect themselves from these actions. Nor should these tribal nations be made a laboratory for experiments not found suitable for implementation by wealthier communities. A truly collaborative approach can move aspects of wind projects for tribal nations in the context of what remains a somewhat experimental technology.

**Consultation must occur prior to carrying out any policy change – tribes need a voice over policy design**

**Tanana and Ruple, 12** - \* Fellow with the University of Utah's Institute for Clean and Secure Energy AND \*\* Fellow with the University of Utah's Wallace Stegner Center for Land, Resources & the Environment (Heather and John, “Energy Development in Indian Country: Working within the Realm of Indian Law and Moving towards Collaboration,” 32 Utah Envtl. L. Rev. 1, lexis)

To help ensure substantive tribal involvement, the EPA established the National Environmental Justice Advisory Council; the Council's Indigenous Peoples Subcommittee prepared a guide on consultation and collaboration with tribes, specific to environmental decision-making. n331 The Subcommittee distinguished consultation within the realm of environmental law from the unique context of interaction with tribes.

Consultation between the federal and tribal governments should be a collaborative process between government peers that seeks to reach a consensus on how to proceed. Many federal statutes specifically recognize the obligation of the federal government to consult with tribal officials on a government-to-government basis. Moreover in some instances specific requirements demand the federal government give special deference to tribal preference. n332

The Subcommittee further identifies guiding principles to facilitate effective consultation and collaboration with tribes. n333 These principles include the following: 1) know the tribes; 2) build on-going consultation relationships with tribes; 3) institutionalize consultation and collaboration procedures; 4) contact tribes as early as practicable and allow sufficient time for the consultation process; 5) establish training programs for all staff on consultation with tribes; 6) maintain honesty and integrity in their consultation process; and 7) view tribal consultation as an integral and essential element of the government-to-government relationship [\*49] with tribal governments, and not simply as a procedural requirement. n334 Principles like those developed in the Subcommittee's guide should be utilized to build trust with tribes through real consultation.

**– “should” requires immediate legal effect**

Summers 94 (Justice – Oklahoma Supreme Court, “Kelsey v. Dollarsaver Food Warehouse of Durant”, 1994 OK 123, 11-8, http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13)

¶4 The legal question to be resolved by the court is whether the word "should"[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287" \l "marker3fn13) in the May 18 order connotes futurity or may be deemed a ruling *in praesenti*.[14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287" \l "marker3fn14) The answer to this query is not to be divined from rules of grammar;[15](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287" \l "marker3fn15) it must be governed by the age-old practice culture of legal professionals and its immemorial language usage. To determine if the omission (from the critical May 18 entry) of the turgid phrase, "and the same hereby is", (1) makes it an in futuro ruling - i.e., an expression of what the judge will or would do at a later stage - or (2) constitutes an in in praesenti resolution of a disputed law issue, the trial judge's intent must be garnered from the four corners of the entire record.[16](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287" \l "marker3fn16)

[CONTINUES – TO FOOTNOTE]

[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn13) "*Should*" not only is used as a "present indicative" synonymous with *ought* but also is the past tense of "shall" with various shades of meaning not always easy to analyze. See 57 C.J. Shall § 9, Judgments § 121 (1932). O. JESPERSEN, GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE (1984); St. Louis & S.F.R. Co. v. Brown, 45 Okl. 143, 144 P. 1075, 1080-81 (1914). For a more detailed explanation, see the Partridge quotation infra note 15. Certain contexts mandate a construction of the term "should" as more than merely indicating preference or desirability. Brown, supra at 1080-81 (jury instructions stating that jurors "should" reduce the amount of damages in proportion to the amount of contributory negligence of the plaintiff was held to imply an *obligation* *and to be more than advisory*); Carrigan v. California Horse Racing Board, 60 Wash. App. 79, [802 P.2d 813](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=802&box2=P.2D&box3=813) (1990) (one of the Rules of Appellate Procedure requiring that a party "should devote a section of the brief to the request for the fee or expenses" was interpreted to mean that a party is under an *obligation* to include the requested segment); State v. Rack, 318 S.W.2d 211, 215 (Mo. 1958) ("should" would mean the same as "shall" or "must" when used in an instruction to the jury which tells the triers they "should disregard false testimony"). [14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn14) *In praesenti* means literally "at the present time." BLACK'S LAW DICTIONARY 792 (6th Ed. 1990). In legal parlance the phrase denotes that which in law is *presently* or *immediately effective*, as opposed to something that *will* or *would* become effective *in the future [in futurol*]. See Van Wyck v. Knevals, [106 U.S. 360](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=106&box2=U.S.&box3=360), 365, 1 S.Ct. 336, 337, 27 L.Ed. 201 (1882).

**Voting issue – “substantial increase” is the key locus of all ground – the mechanism determines the direction of core links**

## round 6—aff v. michigan state rz

### 2ac states cp

#### Doesn’t solve the case – restrictions are codified in federal law – prevents the requisite licensing, means the cp fails to cause commercialization – that’s 1ac Martin AND

MIT, 10 [Massachusetts Institute of Technology, “Nuclear Energy Research and Development Roadmap: Report to Congress”, April 2010, http://ocw.mit.edu/courses/nuclear-engineering/22-033-nuclear-systems-design-project-fall-2011/readings/MIT22\_033F11\_read\_core\_doe.pdf]

**In the United States, it is the responsibility of industry to design, construct, and operate commercial nuclear power plants. However,** DOE has statutory authority under the Atomic Energy Act to promote and support nuclear energy technologies for commercial applications. **In general,** appropriate government roles include researching high-potential technologies beyond the investment horizon of industry and also reducing the technical risks of new technologies**. In the case of new commercial reactor designs,** potential areas of NE involvement could include: Enabling new technologies to be inserted into emerging and future designs by providing access to unique laboratory resources for new technology development and, **where appropriate,** demonstration**. •** Working through the laboratories and universities to provide unique expertise and facilities to industry for R&D in the areas of: **o Innovative concepts and** advanced technologies**. o Fundamental phenomena and performance data. o Advanced modeling and simulation capabilities. APRIL 2010 22 34 NUCLEAR ENERGY RESEARCH AND DEVELOPMENT ROADMAP o New technology testing and, if appropriate, demonstration. o Advanced manufacturing methods. Representative R&D activities that support each of the roles stated above are presented below. The level of DOE investment relative to industry investment will vary across the spectrum of these activities, with a generally increasing trend in DOE investment for longer-term activities. Finally,** there is potential to leverage and amplify effective U.S. R&D through collaborations with other nations **through multilateral and bilateral agreements including the Generation IV International Forum, which is investigating multiple advanced reactor concepts. DOE is also a participant in OECD/NEA and IAEA initiatives that bear directly on the development and deployment of new reactor systems.**

And, doesn’t solve prolif leadership - Hargraves and Wallace say only a national initiative sends a credible signal and creates barriers to use – NRC credibility is key that’s Bengelsdorf – only federal action solves nuclear cred

Fertel, 05 - Senior Vice President And Chief Nuclear Officer Nuclear Energy Institute (Marvin, CQ Congressional Testimony, “NUCLEAR POWER'S PLACE IN A NATIONAL ENERGY POLICY,” 4/28, lexis) //DH

Industry and government will be prepared to meet the demand for new emission-free baseload nuclear plants in the 2010 to 2020 time frame only through a sustained focus on the necessary programs and policies between now and then. As it has in the past, strong Congressional oversight will be necessary to ensure effective and efficient implementation of the federal government's nuclear energy programs, and to maintain America's leadership in nuclear technology development and its influence over important diplomatic initiatives like nonproliferation. Such efforts have provided a dramatic contribution to global security, as evidenced by the U.S.-Russian nonproliferation agreement to recycle weapons-grade material from Russia for use in American reactors. Currently, more than 50 percent of U.S. nuclear power plant fuel depends on converted Russian warhead material. Nowhere is continued congressional oversight more important than with DOE's program to manage the used nuclear fuel from our nuclear power plants. Continued progress toward a federal used nuclear fuel repository is necessary to support nuclear energy's vital role in a comprehensive national energy policy and to support the remediation of DOE defense sites. Since enactment of the 1982 Nuclear Waste Policy Act, DOE's federal repository program has repeatedly overcome challenges, and challenges remain before the Yucca Mountain facility can begin operation. But as we address these issues, it is important to keep the overall progress of the program in context. There is international scientific consensus that a deep geologic repository is the best solution for long-term disposition of used military and commercial nuclear power plant fuel and high-level radioactive byproducts. The Bush administration and Congress, with bipartisan support, affirmed the suitability of Yucca Mountain for a repository in 2002. Over the past three years, the Energy Department and its contractors have made considerable progress providing yet greater confirmation that this is the correct course of action and that Yucca Mountain is an appropriate site for a national repository. --During the past year, federal courts have rejected significant legal challenges by the state of Nevada and others to the Nuclear Waste Policy Act and the 2002 Yucca Mountain site suitability determination. These challenges questioned the constitutionality of the Yucca Mountain Development Act and DOE's repository system, which incorporates both natural and engineered barriers to contain radioactive material safely. In the coming year, Congress will play an essential role in keeping this program on schedule, by taking the steps necessary to provide increased funding for the project in fiscal 2006 and in future years. Meeting DOE's schedule for initial repository operation requires certainty in funding for the program. This is particularly critical in view of projected annual expenditures that will exceed $1 billion beginning in fiscal 2007. Meeting these budget requirements calls for a change in how Congress provides funds to the project from monies collected for the Nuclear Waste Fund. The history of Yucca Mountain funding is evidence that the current funding approach must be modified. Consumer fees (including interest) committed to the Nuclear Waste Fund since its f6rmation in 1983 total more than $24 billion. Consumers are projected to pay between $750 million to $800 million to the fund each year, based on electricity generated at the nation's 103 reactors. This is more than $2 million per day. Although about $8 billion has been used for the program, the balance in the fund is nearly $17 billion. In each of the past several years, there has been a gap between the annual fees paid by consumers of electricity from nuclear power plants and disbursements from the fund for use by DOE at Yucca Mountain. Since the fund was first established, billions of dollars paid by consumers of electricity from nuclear power plants to the Nuclear Waste Fund-intended solely for the federal government's used fuel program-in effect have been used to decrease budget deficits or increase surpluses. The industry believes that Congress should change the funding mechanism for Yucca Mountain so that payments to the Nuclear Waste Fund can be used only for the project and be excluded from traditional congressional budget caps. Although the program should remain subject to congressional oversight, Yucca Mountain appropriations should not compete each year for funding with unrelated programs when Congress directed a dedicated funding stream for the project. The industry also believes that it is appropriate and necessary to consider an alternative perspective on the Yucca Mountain project. This alternative would include an extended period for monitoring operation of the repository for up to 300 years after spent fuel is first placed underground. The industry believes that this approach would provide ongoing assurance and greater confidence that the repository is performing as designed, that public safety is assured, and that the environment is protected. It would also permit DOE to apply evolving innovative technologies at the repository. Through this approach, a scientific monitoring program would identify additional scientific information that can be used in repository performance models. The project then could update the models, and make modifications in design and operations as appropriate. Congressional committees like this one can help ensure that DOE does not lose sight of its responsibility for used nuclear fuel management and disposal, as stated by Congress in the Nuclear Waste Policy Act of 1982. The industry fully supports the fundamental need for a repository so that used nuclear fuel and the byproducts of the nation's nuclear weapons program are securely managed in an underground, specially designed facility. World-class science has demonstrated that Yucca Mountain is the best site for that facility. A public works project of this magnitude will inevitably face challenges. Yet, none is insurmountable. DOE and its contractors have made significant progress on the project and will continue to do so as the project enters the licensing phase. Congressional oversight also can play a key role in maintaining and encouraging the stability of the NRC's regulatory process. Such stability is essential for our 103 operating nuclear plants and equally critical in licensing new nuclear power plants. Congress played a key role several years ago in encouraging the NRC to move toward a new oversight process for the nation's nuclear plants, based on quantitative performance indicators and safety significance. Today's reactor oversight process is designed to focus industry and NRC resources on equipment, components and operational issues that have the greatest importance to, and impact on, safety. The NRC and the industry have worked hard to identify and implement realistic security requirements at nuclear power plants. In the three-and-a-half years since 9/11, the NRC has issued a series of requirements to increase security and enhance training for security programs. The industry complied-fully and rapidly. In the days and months following Sept. 11, quick action was required. Orders that implemented needed changes quickly were necessary. Now, we should return to the orderly process of regulating through regulations. The industry has spent more than $1 billion enhancing security since September 2001. We've identified and fixed vulnerabilities. Today, the industry is at the practical limit of what private industry can do to secure our facilities against the terrorist threat. NRC Chairman Nils Diaz and other commissioners have said that the industry has achieved just about everything that can be reasonably achieved by a civilian force. The industry now needs a transition period to stabilize the new security requirements. We need time to incorporate these dramatic changes into our operations and emergency planning programs and to train our employees to the high standards of our industry-and to the appropriately high expectations of the NRC. Both industry and the NRC need congressional oversight to support and encourage this kind of stability. CONCLUSION Electricity generated by America's nuclear power plants over the past half-century has played a key part in our nation's growth and prosperity. Nuclear power produces over 20 percent of the electricity used in the United States today without producing air pollution. As our energy demands continue to grow in years to come, nuclear power should play an even greater role in meeting our energy and environmental needs. The nuclear energy industry is operating its reactors safely and efficiently. The industry is striving to produce more electricity from existing plants. The industry is also developing more efficient, next-generation reactors and exploring ways to build them more cost-effectively. The public sector, including the oversight committees of the U.S. Congress, can help maintain the conditions that ensure Americans will continue to reap the benefits of our operating plants, and create the conditions that will spur investment in America's energy infrastructure, including new nuclear power plants. One important step is passage of comprehensive energy legislation that recognizes nuclear energy's contributions to meeting our growing energy demands, ensuring our nation's energy security and protecting our environment. Equally important, however, is the need to ensure effective and efficient implementation of existing laws, like the Nuclear Waste Policy Act, and to provide federal agencies with the resources and oversight necessary to discharge their statutory responsibilities in the most efficient way possible. The commercial nuclear power sector was born in the United States, and nations around the world continue to look to this nation for leadership in this technology and in the issues associated with nuclear power. Our ability to influence critical international policies in areas like nuclear nonproliferation, for example, depends on our ability to maintain a leadership role in prudent deployment, use and regulation of nuclear energy technologies here at home, in the United States, and on our ability to manage the technological and policy challenges-like waste management-that arise with all advanced technologies.

#### And, policy through the DOE is essential to create effective international norms and spur tech development

MIT, 10 [Massachusetts Institute of Technology, “Nuclear Energy Research and Development Roadmap: Report to Congress”, April 2010, http://ocw.mit.edu/courses/nuclear-engineering/22-033-nuclear-systems-design-project-fall-2011/readings/MIT22\_033F11\_read\_core\_doe.pdf]

A goal-driven**,** science-based approach is essential to achieving the **stated** objectives while exploring new technologiesand seeking transformationaladvances**.** This science-based approach**, depicted in Figure 1,** combines theory**,** experimentation**,** and high-performance modeling and simulation to developthe fundamental understanding that will lead to new technologies**.** Advanced modeling **and simulation tools** will be used in conjunction with smaller**-**scale, phenomenon-specific experiments informed by theory to reduce the need for large**,** expensive integrated experiments**.** Insights gained by advancedmodeling **and simulation** can lead to new theoretical understandingand**, in turn,** can improve **models and** experimental design**.** This R&D must beinformed by the **basic research** capabilities in the DOE Office **of Science (SC).** NE maintains access to a broad range of facilities to support its research activities**.** Hot cells and test reactors are at the top of the hierarchy, followed by smaller-scale radiological facilities, specialty engineering facilities, and small non-radiological laboratories**.** NE employs a multi-pronged approach to havingthese capabilities available when needed**.** The core capabilities rely on DOE-owned irradiation**,** examination**,** chemical processing and waste formdevelopment facilities**.** These are supplemented by university capabilities **ranging from research reactors to materials science laboratories. In the course of conducting this science-based R&D, viii APRIL 2010 10 NUCLEAR ENERGY RESEARCH AND DEVELOPMENT ROADMAP infrastructure needs will be evaluated and considered through the established planning and budget development processes. There is potential to leverage and amplify effective U.S. R&D through collaboration with other nations via multilateral and bilateral agreements, including the Generation IV International Forum. DOE is also a participant in Organization of Economic Cooperation and Development/Nuclear Energy Agency (OECD/NEA) and International Atomic Energy Agency (IAEA) initiatives that bear directly on the development and deployment of new reactor systems. In addition to these R&D activities, international** interaction supported by NE **and other government agencies** will be essential in establishment of international norms and control regimes to address and mitigate proliferation concerns**.**

#### Only federal action solves worker shortages

**Kammen, 03** - professor of nuclear engineering at Berkeley (Daniel, Federal News Service, Prepared Testimony before the House Committee on Science, 6/12, lexis) //DH

The federal government plays the pivotal role in the encouragement of innovation in the energy sector. Not only are federal funds critical, but as my work and that of others has demonstrated6, private funds generally follow areas of public sector support. One particularly useful metric although certainly not the only measure --. of the relationship between funding and innovation is based on patents. Total public sector funding and the number of patents - across all disciplines in the United States have both increased steadily over at least the past three decades (Figure 5). The situation depicted here, with steadily increasing trends for funding and results (measured imperfectly, but consistently, by patents) is not as rosy when energy R&D alone is considered. In that case the same close correlation exists, but the funding pattern has been one of decreasing resources (Figure 6A). Figure 6A shows energy funding levels (symbol: o) and patents held by the national laboratories (symbol: ). The situation need not be as bleak as it seems. During the 1980s a number of changes in U.S. patent law permitted the national laboratories to engage in patent partnerships with the private sector. This increased both the interest in developing patents, and increased the interest by the private sector in pursuing patents on energy technologies. The squares (l) in figure 6 show that overall patents in the energy sector derived. Figure 6B reveals that patent levels in the nuclear field have declined, but not only that, publicprivate partnerships have taken placed (shaded bars), but have not increased as dramatically as in energy field overall (Figure 6A). There are a number of issues here, so a simple comparison of nuclear R&D to that on for example, fuel cells, is not appropriate. But it is a valid to explore ways to increase both the diversity of the R&D. This is a particularly important message for **federal** policy. Novel approaches are needed to encourage new and innovative modes of research, teaching, and industrial innovation in the nuclear energy field. To spur innovation in nuclear science a concerted effort would be needed to increase the types and levels of cooperation by universities and industries in areas that depart significantly from the current 'Generation III+' and equally, away from the 'Generation IV' designs. Similar conclusions were reached by M. Granger Morgan, head of the Engineering and Public Policy Program at Carnegie Mellon University, in his evaluation of the need for innovative in the organization and sociology of the U. S. nuclear power industrys. A second important issue that this Committee might consider is the degree of **federal** support for nuclear fission relative to other nations. Funding levels in the U.S. are significantly lower than in both Japan and France. Far from recommending higher public sector funding, what is arguably a more successful strategy would be to increase the private sector support for nuclear R&D and student training fellowships. Importantly, this is precisely the sort of expanded publicprivate partnership that has been relatively successful in the energy sector generally. It is incorrect, however, to think that this is a process that can be left to the private sector. There are key issues that inhibit private sector innovation. As one example, many nuclear operating companies have large coal assets, and thus are unlikely to push overly hard, in areas that threaten another core business. This emphasis on industry resources used to support and expanded nuclear program - under careful public sector management - has been echoed by a variety of nuclear engineering faculty members: I believe that if you. were to survey nuclear engineering department heads, most would select a national policy to support new nuclear construction, over a policy to increase direct financial support to nuclear engineering departments. A firm commitment by the federal government, to create incentives sufficient to ensure the construction of a modest number of new nuclear plants, with the incentives reduced for subsequent plants, would be the best thing that could possibly be done for nuclear engineering education and revitalization of the national workforce for nuclear science and technology. - Professor Per Peterson, Chair, Department of Nuclear Engineering, University of California, Berkeley

#### The impact is the case

**BENGELSDORF, 07** – consultant and former director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affair (HAROLD, “THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY”, White Paper prepared for the American Council on Global Nuclear Competitiveness May, [http://www.nuclearcompetitiveness.org/images/COUNCIL\_WHITE\_PAPER\_Final.pdf)//DH](http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf)/DH)

Thus the challenge the U.S. nuclear industry faces today is whether the U.S. civil nuclear infrastructure will be strong enough to support a hoped for nuclear revival in this country, which could entail the construction and commissioning of up to eight nuclear power units during the 2010 to 2017 period. Several studies have been devoted to this question, and the answer is by no means certain. The shortage in skilled labor is expected to double in this country by the year 2020 and the workforce will stop growing as the baby boomers start to retire.

#### Cap and trade is a form of central planning of energy markets that kills innovation

**Smith, 07 –** president of the Competitive Enterprise Institute (Fred, COMMITTEE Hearing on the U.S. Climate Action Partnership Report, 2/13, <http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=9d420df7-802a-23ad-4615-a240504c6347&Witness_ID=0c43573e-35d0-4cd3-b15f-9dcee707e5e6>)

Let us begin by examining the policy at the heart of the Partnership’s plan, the regulatory capping and trading of greenhouse gas emissions. Cap and trade, as it is known, is often described as market-based, because there is buying and selling involved. This is a misnomer. In fact, cap and trade is an ugly combination of two of the greatest ills to affect the market economy over the past two hundred years – cartelization and central planning.

The central planning issue should be obvious. The cap of cap and trade is a target for emissions set by government agencies. The knowledge problem, however, rears its ugly head. Those agencies never have enough information to set the cap at the right level. All economic decisions involve trade-offs and the trade-offs involved in restricting greenhouse gas emissions are mighty indeed.

We have seen an excellent example in the past few weeks. The mandate that every gallon of gasoline sold in this country should have a certain amount of ethanol added to it has caused a massive increase in the amount of the U.S. corn crop used to make ethanol. In turn, this has caused a sharp rise in the price of tortillas in Mexico, leading to all sorts of social problems there. Did the legislators consider this unintended negative consequence when they passed the law? I don’t think so. Did the agencies that administer the program consider it? I very much doubt it. A greenhouse gas cap would have even more negative consequences. To suggest that we can account for all of these is to fall into what the Nobel prize-winning economist Friedrich Hayek termed the fatal conceit. There will be costs to an emissions cap that no one has yet thought of.

Turning to the expected economics, the figure below represents a loss to the economy under a carbon cap that we can predict. It is a deadweight loss, reflecting an unrecoverable reduction in real incomes caused by the cessation of economic activity. That is a cost to the economy that we can measure.

Yet it is the remaining economic activity that reveals the dark secret of cap and trade; it creates a modern-day cartel – a carbon cartel, or what the Wall Street Journal aptly called BigCarbonCap– with all the negative consequences that go with cartelization. When emitters are given permits reflecting their right to emit a certain amount of greenhouse gases, those permits represent a scarcity rent: a new, artificial scarcity has been created in something people previously did without charge. People will pay for this new right, but the money that is used to pay for it is not new money. It represents the capitalized value to existing users of the benefits they get from fossil fuels and the other sources of greenhouse gases. It is already accounted for in balance sheets, investment portfolios, collateral for loans and so on. That value is now extracted from its current use and sent elsewhere instead – into the hands of the carbon cartel.

This is what advocates of this policy refer to as the wealth that such rationing would create. However, transferring wealth from some companies and all consumers to special interests does not create new wealth.

As a result of this cartelization, energy costs rise, consumer prices rise, real wages fall, and output and employment fall. We know those are the effects of cartels, which is why we used to put the people who set up cartels in jail. Yet the Climate Action Partnership wants legal blessing for this new cartel. Any legislation enacting cap and trade would actually ennoble a new generation of robber barons and provide legal protection for their profiteering activities.

### 2ac process cp

#### Permutation do the cp – the aff should get to define the scope and the mandate of the plan – normal means is infinitely regressive and kills aff ground

#### Doesn’t sever should

**Green, 89 – US District Judge (**EMERSON EMORY, Captain, USNR (Ret.), Plaintiff v. SECRETARY OF THE NAVY, Defendant Civil Action No. 83-2494 UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA 708 F. Supp. 1335; 1989 U.S. Dist. LEXIS 2993; 49 Fair Empl. Prac. Cas. (BNA) 677; 51 Empl. Prac. Dec. (CCH) P39,276 March 22, 1989, Decided March 22, 1989, Filed, lexis)

Defendant argues that the "should" and "also desired" is "plainly permissive," [5](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote5) while plaintiff points out that "should" is a past tense of "shall." While "shall" denotes a mandatory action when used in statutes and contracts, "should" does not ordinarily  [\*\*10]  express such certainty. [6](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote6) By examining the context in which "should" is used within the policy statements, this Court concludes that it is not used in a mandatory manner. In setting out the requirements of board membership at that time, the Navy consistently used "will" or "must." The subsection addressing minority officers was the only one in this memorandum that used "should," instead of "will" or "must."

#### OR resolved

Webster’s Guide to Grammar and Writing – 2000

[http://ccc.commnet.edu/grammar/marks/colon.htm]

Use of a colon before a list or an explanation that is preceded by a clause that can stand by itself. Think of the colon as a gate, inviting one to go on… **If the introductory phrase preceding the colon is very brief** and **the clause following the colon represents the real business of the sentence**, begin the clause after the colon with a capital letter.

#### Permutation do both

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of **political will and** government policy is essential**,** it is nuclear power**.** High up front costs for the **private** industry**,** extreme regulatory oversightand public wariness necessitate a committed government partner for private firms investing in nuclear technology**. In a new** [**report**](http://www.thirdway.org/publications/370) **on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy.** The report**, “The Future of Nuclear Energy,”** makes the case for **political** certainty**: “**It is difficult for energy producers **and users** to estimate the **relative** price for nuclear**-generated** energy compared to fossil fuel alternatives **(e.g. natural gas)–**anessential consideration in making the major capital investment decision necessary for new energy production that will be in place for **decades.”** Are our politicians willing to match the level of certainty that the nuclear industry demands**? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to** [**supply-side “push” policies**](http://leadenergy.org/2010/09/supply-demand-energy-innovation/)**, or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill** [**included**](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) **provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times** [**piece**](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) **in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably** [**Lindsey Graham**](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) **and** [**Richard Lugar**](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293)**, would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined** [**“innovation hawks,”**](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) **among them Steven Hayward, David Brooks and George Will. Will has been** [**particularly outspoken**](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) **in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post** [**reports**](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) **that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct** [**Section 48C**](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) **of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one.** The politician with **perhaps** the **single** greatest leverage over the future of nuclear energy is **President** Obama**, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his** [**State of the Union**](http://www.slate.com/id/2281847/) **podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term.** The eagerness of the President tocombine **left and right** agendas can **hopefully** match the hyper-partisan bitterness **that dominates our political culture,** and nuclear power maybe one sector of our economy to benefit from his political leadership**.**

#### Only certainty ensures development of new plants

**Whitefield, 11** [5/4/11, STATEMENT OF THE HONORABLE ED WHITFIELD CHAIRMAN, SUBCOMMITTEE ON ENERGY AND POWER, “The Role of the Nuclear Regulatory Commission in America’s Energy Future, http://republicans.energycommerce.house.gov/Media/file/Hearings/Energy/050411/Whitfield.pdf

While the NRC may not be the direct cause of this uncertainty – the Obama Administration’s policy is - the NRC’s actions will contribute to the uncertainty one way or another. Beyond open adjudicatory issues, the NRC has recently taken administrative action to close down its review of Yucca Mountain, which will deprive the public of the first independent government assessment of the merits of Yucca Mountain’s construction. That doesn’t bode well for a nuclear renaissance. On the front end of nuclear power development, I’m very interested to hear about whether the NRC can develop and provide more regulatory certainty in its licensing and re-licensing programs. As in other energy sectors, regulatory certainty, such as keeping to decision schedules, is essential for ensuring the investments necessary to develop nuclear energy. Additionally, I think it is worth reviewing the Commission’s organizational structure, and whether an agency rightly focused on safety is suitably structured to also facilitate the advancement of new nuclear generation. And connected with regulatory certainty, are clear and well developed safety engineering evaluations. As mentioned, the safety record of NRC is unparalleled. But recent events in Japan have raised questions in the public’s mind about how well the NRC does its job. We need to be confident the NRC is up to the task. I believe the agency is, but scrutiny is helpful to maintain the public trust. We do not want to overreact to events based on poor and faulty information or other political agendas. Nuclear power is critical to this nation. We should recognize its importance for a growing economy and not lose sight of the tremendous value a reliable, affordable power supply will mean for the future health and wealth of the United States.

#### Certainty is super

**Jamal, 12** [March, Renewables and Nuclear: Different Signals from Germany and Britain, [Carbon Clear Blog](http://carbonclear.blogspot.com/)

Carbon management consultants, emission reductions, carbon footprints and carbon offsets. Expert advice for a low-carbon future.

<http://carbonclear.blogspot.com/2012/03/renewable-energy-will-britain-surrender.html>]

On 11 March, one year on from the [Fukushima Daiichi nuclear reactor](http://en.wikipedia.org/wiki/Fukushima_Daiichi_nuclear_disaster) meltdown in Japan, [Germany has reaffirmed its decision](http://www.nytimes.com/2012/03/13/world/europe/merkel-offers-defense-of-her-policy-on-energy.html) to abandon nuclear power. The Germans shut down their eight oldest reactors shortly after the Japanese earthquake, tsunami and reactor core breach, and pledged to shut the remaining reactors by 2022. In the short term, this has meant an increase in greenhouse gas emissions from fossil fuel power stations in Germany and neighboring countries. Over the longer term, however, Germany's leaders want to replace the country's nuclear output with renewables. Critics doubt the nation's electric grid can transport power from new renewable energy generators to power-hungry factories hundreds of miles away, but the initiative has the support of 76% of the public and Chancellor Angela Merkel has pledged to redouble her government's efforts. The very next day, the Guardian newspaper reported that [the British government wants to](http://www.guardian.co.uk/environment/2012/mar/11/uk-renewable-energy-target-nuclear-power?INTCMP=SRCH) reduce the relative priority given to renewables over nuclear. The Guardian reports that the UK has proposed to the European commission that explicit renewable energy targets for 2030 be dropped in favour of targets for "low carbon power". This label would allow countries to choose whether they wish to reach climate change - related power targets with renewables, nuclear power, carbon capture and storage or a combination of the three. While this change doesn't necessarily mean the British government would back away from its support of renewables, it leaves the door open for such a move. In fact, this policy pressure would not make sense otherwise. Just the possibility could have a chilling effect on investment in renewables in the UK. Most renewable energy technologies are characterized by high capital costs and low operational costs. The cost of renewables-based electricity can be cost-competitive or even superior to that from fossil fuels, but only when those up-front costs and long-term savings are averaged over many years. Without certainty that government will maintain its support for years or decades, investors are less likely to provide the millions, or even billions of pounds required to bring renewables to market on a large scale. Nuclear power generates significantly lower carbon emissions than fossil fuel fired power stations and - despite Fukushima - it is a proven technology with a global track record. However, it is by no means certain that the government will be able to overcome long-term opposition to nuclear power and nuclear waste in time to ensure that nuclear can play a significant role in Britain's lower-carbon future.

#### The plan is key to self-sufficient forward operating bases

Ackerman, 11 [Spencer, February 18th, Latest Pentagon Brainstorm: Nuke-Powered War Bases, Wired. Com. http://www.wired.com/dangerroom/2011/02/nuke-bases/]

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.¶ Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the [solar-powered Marine company](http://www.wired.com/dangerroom/2011/01/afghanistans-green-marines-cut-fuel-use-by-90-percent/) in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.¶ To fit on a FOB, which can be anywhere from Bagram Air Field’s [eight square miles](http://www.wired.com/dangerroom/2010/08/u-s-afghan-mega-base/) to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.¶ That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has [partnered with Toshiba](http://news.bbc.co.uk/2/hi/8582692.stm) to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors [suspended its operations](http://www.greentechmedia.com/articles/read/nuclear-startup-nuscale-suspends-operation/) after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.¶ But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hos tile acts may compromise operations.”¶ Sensible, sure. But it limits your options: outside of uranium or plutonium, [thorium](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

Solves effective peacekeeping

Mosher et al., 8 (David E., Senior Policy Analyst @ RAND, Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-Conflict, RAND)

The environment may also be important during the post-conflict phase of an operation,9 or even before combat operations end. Providing clean water, managing sewage, or providing irrigation water can be important for convincing the local populace to support the U.S. mission **and not an insurgency**, according to some commanders.10 Although these are not traditional Army missions, they can have an important effect on the outcome of an operation, from both a military and a political perspective. Addressing legacy problems can also help **a new government develop legitimacy and can enable U.S. forces to withdraw from the country sooner.** Indeed, many of the goals of stability operations defined in the 2006 edition of JP 3.0, Joint Operations, can have environmental components. Operational effectiveness can be hampered by poor environmental practices or helped by good ones. Logistics requirements and costs can be reduced by good practices, for instance, applying technologies to **reduce operational requirements for petroleum, oil,** and lubricants (POL) or field water treatment systems, or reducing acute threats to soldier health. Good environmental practices can also reduce the resources that must be diverted to address environmental issues. Commanders may also want to reduce or prevent liabilities, either financial or diplomatic. Good environmental awareness and practices during contingency operations can reduce the financial liabilities the Army and the United States may face. On more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes. These actions have created cleanup costs for the Army that are many times higher than the original price of the contract. In other cases, the Army has had to spend large sums to remediate serious preexisting environmental contamination at base camps, expenses that could have been avoided if the base camps had been located elsewhere. Financial liabilities can also arise from claims brought by U.S. soldiers who believe they were exposed to hazardous substances, as the Army’s past experiences with Agent Orange and Gulf War Illness illustrate. 11 Members of the local populace may also bring claims against the Army for environmentally related damage, draining funds that could be more effectively used for reconstruction or stabilization activities. Inadequate attention to environmental issues can also create diplomatic liabilities. Illegal dumping by contractors and poor waste management practices by soldiers have caused immediate diplomatic problems with host nations whose support has been critical. Long-term diplomatic problems from environmental problems can also emerge years after an operation is over. Perhaps most important are the environmental issues that can affect U.S. national objectives, those strategic political and economic objectives that U.S. leaders established when they committed forces to the contingency operation in the first place. One such national objective may be winning and maintaining support of the local populace. Although environmental conditions may be poor and national environmental laws may be weak or nonexistent, our research indicates that locals often care deeply about the environment, which can be critical to their survival, livelihood, and well-being. Vital environmental issues can include access to clean drinking water, effective sewage systems, and viable farmland (see Box 1.1). Restoring or building these basic infrastructures is often essential for the economic and social development necessary for stability. To the extent that such projects improve cooperation with locals, they can lower security risks, improve intel- ligence, and speed reconstruction. National objectives that have environmental components also include preserving natural resources that have important economic value (such as oil fields or fisheries) and even preserving cultural resources that are a matter of national, regional, religious, or cultural pride. If long-term stability of a country is a mission objective, sustainability and the long-term health of nbatural systems, including watersheds, forests, ecosystems, biodiversity, and farmlands, are also important. Local customs and practices can take the place of laws, and therefore military leaders, when designing plans and conducting operations, should understand how the local people interact with their environment. The environmental components of national objectives are often seen as falling outside the normal conception of the military mission. Because they have little to do with combat operations or military objectives, they are often not taken into consideration during the Army’s planning, training, or operations. Yet ignoring these broader political objectives **can lead to failure**, as Prussian military writer Carl von Clausewitz warned.12 Thus, the environmental dimensions of national objectives should be carefully considered. The manner in which the military conducts its operations can affect environmental outcomes upon which the success of the overall mission may depend. There is some evidence that national objectives such as stabilizing societies after conflict are now being emphasized at the Army’s combat training centers, but the degree to which environmental considerations are included is unclear.

**Global nuclear war**

Dean 95 [Jonathan, former ambassador to NATO, The Bulletin of Atomic Scientists, p. google]

IN ANY EVENT, in a world of interconnecting COMMUNICATIONS AND ENVIRONMENTAL, TRADE, AND FINANCIAL LINKS, the United States, a leading industrial trading country that needs access to raw materials and markets, usually ends up paying in one way or another when a major regional conflict erupts. IN PRACTICAL TERMS, it is impossible for the United States to avoid some degree of involvement when major regional conflicts break out. FOR 200 YEARS, THE UNITED STATES HAS BEEN URGING LIBERTY, FREEDOM, DEMOCRACY, HUMAN RIGHTS, FREE MARKET VALUES, VOLUNTARY MUTUAL AID AND COLLECTIVE SECURITY ON THE OUTSIDE WORLD. THE UNITED STATES IS THE SOLE SURVIVING WORLD-CLASS POWER, WITH MILITARY STRENGTH AND GNP FAR LARGER THAN ANY OTHER COUNTRY. AS A RESULT, when large-scale conflict erupts, the United States cannot avoid being called on for help, as it was in Somalia, Bosnia, Rwanda, and Haiti. For the United States to seek to stand aside or to respond only weakly in such cases is to risk damage to its credibility AND WORLDWIDE INFLUENCE. PRESIDENT CLINTON JUSTIFIED THE NATO BOMBING OF SERBIAN POSITIONS IN BOSNIA AND THE U.S. INVASION OF HAITI BY SAYING THAT THE CREDIBILITY AND RELIABILITY OF THE U.S. WAS AT STAKE, AS IT WAS. IT IS TRUE THAT PAST ADMINISTRATIONS USED SIMILAR ARGUMENTS TO JUSTIFY CONTINUED U.S. INVOLVEMENT IN VIETNAM LONG AFTER IT WOULD HAVE BEEN WISE TO WITHDRAW. NONETHELESS, WHEN THE COLLECTIVE DISAPPOINTMENT OF WORLD OPINION OVER THE BEHAVIOR OF THE UNITED STATES (OR OF ANY MAJOR COUNTRY) BECOMES INTENSE AND ENDURING, IT BEGINS TO UNDERMINE THE INTERNATIONAL PRESTIGE AND STANDING OF THE ENTIRE NATION CONSIDERABLE DIMINUTION OF U.S. STATURE AND INFLUENCE HAS ALREADY TAKEN PLACE OVER THE PAST FOUR OR FIVE YEARS IN CONNECTION WITH FALTERING U.S. POLICIES TOWARD BOSNIA, SOMALIA, AND RWANDA. FORTUNATELY, AMERICANS ARE NOT SPARTANS, ROMANS OR PRUSSIANS-SELF-DISCIPLINED MILITARISTIC PEOPLES WHO CONSIDERED IT A MATTER OF NATIONAL PRIDE NOT TO RECOIL FROM CONFLICT BECAUSE OF CASUALTIES AMONG THEIR FORCES. HOWEVER, IF THE TRENDS CONTINUE THAT UNDERLIE THE PUBLIC OUTRAGE THAT FOLLOWED THE DEATH OF U.S. SERVICEMEN IN SOMALIA, AND U.S. ADMINISTRATIONS CONTINUE TO ABSTAIN FROM PEACEKEEPING ACTIVITIES BECAUSE THEY COULD ENTAIL CASUALTIES, THE UNITED STATES WILL NOT LONG REMAIN A WORLD POWER. If U.S. national prestige declines further under conditions like these, the U.S. capacity to constructively influence the course of events without the use of force will decrease. And when force must be used, the United States may have to use more of it to be effective. EXPERTS THROUGHOUT THE WORLD EXPECT GROWING POPULATION PRESSURES AND INCREASING ENVIRONMENTAL STRESS TO DEVELOP OVER THE COMING DECADES INTO INTENSE, FAR-REACHING SOCIAL UNREST AND REGIONAL CONFLICT. ECONOMIC DEVELOPMENT IS THE SOLUTION, HOWEVER SLOW AND UNCERTAIN IT MAY BE IN COMING. BUT the world also needs effective regional conflict-prevention procedures. Left on its own, regional violence can lead to **confrontation** and even **war between the great powers**, including the United States, AS MIGHT OCCUR, FOR EXAMPLE, in the event of conflict between Ukraine and Russia or between China and its neighbors. IN THE FINAL ANALYSIS, unchecked regional violence and the fear of further violence will lead **more states to develop nuclear weapons**. IN PAST DECADES, this process occurred in Israel, South Africa, India, Pakistan, IRAQ, and PRESUMABLY, IN North Korea. A world with 20 or 30 nuclear weapon states would not only make a more effective global security system impossible, it would lead the present nuclear weapon states to modernize and increase their weapons-and it would markedly increase the vulnerability of the United States to direct attack. Instead of SHRUGGING AT HUMAN FALLIBILITY, accepting war as inevitable, AND REACTING AFTER IT HAPPENS, U.S. policy should aim at establishing an international peacekeeping system that can head off an increasing number of conflicts. CONSEQUENCES IF THIS REASONING IS ACCEPTED, THE ADMINISTRATION SHOULD DECIDE ON AND PUBLICLY DECLARE AN EXPLICIT LONG-TERM POLICY OF JOINING WITH OTHER COUNTRIES IN SEEKING A GRADUAL LOWERING OF THE LEVEL OF ARMED CONFLICT IN THE WORLD THROUGH PREVENTING A GROWING PROPORTION OF POTENTIAL WARS AND CURTAILING WARS WHEN THEY DO OCCUR. This goal would be achieved by building an increasingly effective worldwide network of regional conflict-prevention and peacekeeping organizations headed by a more effective United Nations.

### 2ac elections

#### Romney wouldn’t start a trade war with China if elected

**Politico, 9-15-12**, p. http://www.politico.com/news/stories/0912/81254.html

Mitt Romney is hoping his tough talk on China policy will win him votes — but few of his big business donors or fellow Republicans support what he’s saying or believe he’d follow through if elected.¶ And if he did, many analysts say, he’d likely spark a disastrous and counter-productive trade war that would hurt both American consumers and the workers he says he’s trying to protect. But Romney advisers say voters shouldn’t expect him to back off the tough talk if he gets elected, and other experts say fears of a “trade war” are overblown since the Chinese need the American market just as much consumers like cheap Chinese imports.

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, **it takes two to wage a “trade war.”** When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), **wiser counsel may well prevail in Beijing**. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

#### Cooperation is hindered by domestic politics and shifting blame

**Czarnezki**, **11** [Jason J. Professor of Law in the Environmental Law Center and Faculty Director of the U.S.-China¶ Partnership for Environmental Law at Vermont

Law School; A.B., J.D, “CLIMATE POLICY &¶ U.S.-CHINA RELATIONs”, Published After April 4th 2011. <http://www.vermontlaw.edu/Documents/Jason%20Czarnezki%20Climate%20Policy%20and%20China.pdf>]

Both the United States and China are hindered by the reality of domestic politics and their ability to blame the other for lack of progress. Professor¶ Cinnamon Carlarne, increasing future political pressure, described the 2010¶ Cancun Climate Change Conference as “a determinative point for both a 2¶ degree world and the continuing validity of the UNFCCC process,”44 but¶ COP-16 in Cancun has come and gone with little fanfare. The Cancun¶ process avoided the high-stakes drama of Copenhagen, successfully set up a¶ fund for adaptation measures in poor countries, created a mechanism for¶ technology transfer, approved a deal to protect tropical forests, and ensured¶ adherence to the goals put forward in the Copenhagen Accord.45 IV. DOMESTIC POLITICS¶ The United States and Chinese governments have significant domestic¶ political pressures that limit their ability and desire to come to a progressive¶ international agreement on climate change, and these pressures create the¶ type of chaos and self-interested behavior seen at Copenhagen.¶ China does not want to limit its amazing and historic economic growth¶ and development. The domestic justifications are sound and¶ understandable. Economic prosperity defines global power, many Chinese¶ still need to be brought out of poverty, and economic success provides the¶ necessary stability for the ruling Communist party to stay in power. As a¶ result, China is happy to become far more energy efficient, but will make¶ no emissions limitations promises that have the potential to limit overall¶ economic growth.¶ To this end, China has developed “carbon intensity” targets in an effort¶ to slow its greenhouse gas emissions and become more energy efficient.¶ China proposes to reduce carbon intensity—the amount of CO2 emitted per¶ unit of economic output—by forty to forty-five percent, compared with¶ 43. Agence France-Presse, China and U.S. Blame Each Other as Climate Talks Conclude,¶ PORTFOLI (Oct. 9, 2010, 7:39PM), http://portfo.li/o/255346-china-and-u-s-blame-each-other-as-climatetalks-¶ conclude.¶ 44. Carlarne, supra note 37, at 149.¶ 45. John M. Broder, Climate Talks End with Modest Deal on Emissions, N.Y. TIMES, Dec. 11,¶ 2010, http://www.nytimes.com/2010/12/12/science/earth/12climate.html.¶ 670 VERMONT JOURNAL OF ENVIRONMENTAL LAW [Vol. 12¶ 2005.46 Unfortunately, under this plan, even though the rate of emissions¶ will slow, overall emissions will continue to rise. This will eventually rub¶ up against “The China Problem”—that even if other countries reduce¶ emissions to zero, China’s growth and emissions alone, despite improving¶ energy intensity, have the potential to push global temperature above the¶ two degree Celsius threshold goal, and potentially further.47¶ Similar to China, the United States has domestic political and economic¶ considerations that have created roadblocks for international climate¶ agreements and domestic initiatives. These roadblocks include concerns¶ about limiting economic growth, a culture and infrastructure that support¶ high levels of driving and energy consumption, strong lobbying by energy¶ and automobile industries against greenhouse gas regulation, dismissal of¶ climate science, and anti-internationalism among both politicians and¶ citizens. As a result, the U.S. government has not enacted a single law¶ explicitly requiring any public or private entity to mitigate its greenhouse¶ gas impact on the global climate.¶

#### Plan doesn’t affect swing states that are key

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Nuke power doesn’t swing the election – both policies are the same

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Romney win now – approval ratings

**Talgo, 9/16/12 –** commentator for Neon Tommy, a Los Angeles-based news source sponsored by the Annenberg School for Communication and Journalism covering breaking news (Tyler, “Why Romney Will Win The Election” <http://www.neontommy.com/news/2012/09/why-romney-will-win-election>)

Given the post-convention polling bounces, some may give Obama the advantage at this stage of the race, although the bounces **are** **subsiding**. For example, new NBC/WSJ polls of three swing states have Obama leading Romney by 49 to 44 percent in Florida and Virginia, and by 50 to 43 percent in Ohio. However, when we take a closer look at the numbers, a different story is revealed. In the Florida and Virginia polls, Democrats were oversampled by 5 percent, and in Ohio they were oversampled by 10 percent. Not convinced? Here’s another fact: recent CBS/NYT/Quinnipiac polls oversampled Democrats by nine percent in Florida and by eight percent in Ohio. The Florida poll had Obama at 51 percent and Romney at 45 percent, and the Ohio poll had Obama at 50 percent and Romney at 44 percent; so, both leads were smaller than the oversampling gap. If you ask me, the advantage here clearly goes to Romney; and, believe me, these are not the only examples.¶ All of this is revealed in the context of a time in which Republicans are much more enthusiastic than Democrats. Last month the number of Americans who consider themselves Republicans was the highest ever recorded since 2002 at 37.6 percent, compared to only 33.3 percent who consider themselves Democrats.¶ So, assuming that all else is equal, what does it mean when a national poll says something like 47 percent for Obama and 44 percent for Romney, or vise versa? The nature of the missing 10 percent is one of the most important factors that come to play in all presidential reelection campaigns. Historically, the final results in an election are almost always worse than polling suggests for an incumbent president. If you took the undecided vote, according to Gallup, from every general election since 1964 that featured an incumbent president seeking reelection, 89 percent of it went to the president’s challenger. You can bet that the Obama camp understands that a 47-44 poll in its favor is not good news at all. This is why it’s virtually unheard-of for an incumbent president to win reelection when he's polling below 50 percent.

#### The plan creates shovel ready jobs – causes Obama win

Korte, 4-27-12

[Gregory, USA Today, “Politics stands in the way of nuclear plant's future,” http://www.usatoday.com/money/industries/energy/story/2012-04-13/usec-centrifuges-loan-guarantees/54560118/1]

. USEC estimates the project at its peak will generate 3,158 jobs in Ohio, and 4,284 elsewhere. Pike County, home to the centrifuges, has a 13% unemployment rate — the highest in Ohio. The median household income is about $40,000. The average job at USEC pays $77,316. Centrifuge parts are stacked up in Piketon. "It's as shovel-ready as they come," says spokeswoman Angela Duduit. Indeed, the project has enjoyed bipartisan support. A USA TODAY review of DOE records shows that no fewer than 46 members of Congress — 32 Republicans and 14 Democrats — have pressured the Obama administration to approve the loan guarantee for USEC. "Quick action is paramount," said one bipartisan letter. "It is imperative that this application move forward now," said another. The congressional support comes from states such as Ohio, Pennsylvania, Tennessee, Kentucky, West Virginia, Missouri, Alabama, Indiana, Maryland, North Carolina and South Carolina— an almost exact overlay of the states that would benefit from the 7,442 jobs the company says would be created.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### The debates and labor statistics will determine the election

**Lombardo, 9/12**/12 - Global CEO, StrategyOne (Steve, “Why This Election Comes Down to Two Days in October,” Huffington Post, <http://www.huffingtonpost.com/steve-lombardo/election-monitor-why-this_b_1877815.html>)

Several national polls released this week show that President Obama received a small but meaningful bounce after the conventions. The bounce -- in the 3-5 point range -- is within the median for convention bounces since 1964. The problem for Republicans is that Romney got no bounce from his convention. In fact, his vote share likely shrunk a point or two in the last two weeks. While the Republican convention may have strengthened Romney's position with the base, it did little to expand his coalition. The momentum from "You didn't build that" has been halted. ¶ However, we see nothing in the data yet to suggest this is anything but a dead heat. For all the hand wringing over the GOP convention and the Romney campaign they are in a dead heat with an incumbent President with 55 days to go. When you look at likely voters in key swing states, this thing is truly 50/50. ¶ Here is our take as of 12 a.m. EST: ¶ The murder of Ambassador Stevens and the unrest in Libya will thrust both candidates into the foreign policy fray. It will be very interesting to see how each handles the coming hours and days and how much the media -- and ultimately voters -- focuses on the issue.¶ Look for a higher level of advertising spend from the Romney campaign in key battleground states over the next two weeks. History has shown that the candidate who is clearly in the lead by mid to late September will likely be the winner in November. That doesn't mean things can't change in October -- they can. But sentiment will start to firm up in the next two weeks. The Romney campaign has a $60 million cash-on-hand advantage, and they should use it now. Team Obama defined Romney in the spring using their cash advantage; the Romney campaign should not wait until October. They need to change the dynamic before October 1.¶ The two biggest dates of the campaign are October 3rd and October 5th. The first debate will be held on Wednesday, October 3rd at the University of Denver at 9 p.m. EST. For three reasons this will be far and away the most important debate:¶ It is the first and therefore, unless there is a major blunder, is likely to be the one that sets the image of Romney in stone.¶ We really do not believe that the other two will matter if Romney has a poor debate performance here. Romney has to win this debate pure and simple.¶ This one is purely on domestic policy, i.e. the economy. If Romney can't win this one, he is unlikely to win the other two, barring a miscue by the President.¶ On October 5th at 8:30 a.m. EST the Bureau of Labor Statistics will release the September unemployment numbers. This will be the most impactful announcement of the campaign. If the unemployment rate goes up it could be devastating for the president's reelection chances. Similarly, if it goes down -- especially if it goes below 8 percent -- it may pretty much secure an Obama victory in November.

#### Energy not key to the election

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: You just mentioned that we don’t know who the next president is going to be and sticking to this topic how big an impact do you see energy prices having on this year's presidential elections? Mish: I don’t think energy prices are what's on people's minds. What's on people's minds right now are jobs. Oil prices have kind of stabilized and in the very short-term they are likely to stay stable unless there are some dramatic results in the Mid-East or a dramatic slowdown in the US economy. Both are possible, but a major US slowdown is arguably more likely. Regardless, I think energy prices are going to be a minor election issue.

#### Public supports nuclear power expansion -- no safety concerns.

Bowman, 4-18-12 [Karlyn, American Enterprise Institute, “Polls on the environment, energy, global warming and nuclear power,” http://www.aei.org/papers/politics-and-public-opinion/polls/polls-on-the-environment-energy-global-warming-and-nuclear-power-april-2012/]

\* President Obama is getting low marks on his handling of gas prices. In a February 2012 AP/GfK-Roper poll, 39 percent approved of the job he is doing in this area. Significant majorities say rising gas prices have caused difficulties in their households. \* The majority of Americans still think nuclear power is safe. In a March 2012 Gallup poll, 57 percent favored using nuclear energy as one way to provide electricity for the United States. But people still wouldn’t want to build a nuclear plant in their backyard. Only 35 percent told CBS pollsters in March 2011 that they would approve of a nuclear power plant in their community, and 62 percent disapproved. \* Americans like an “all-of-the-above” energy strategy that includes more energy production, developing alternative energy sources, more conservation and nuclear power.

## round 7—aff v. georgetown cv

### 1ac

#### CONTENTION ONE IS HEG

#### Nuclear power expansion is inevitable globally

**Amano, 12** [Yukiyo, Director General of the International Atomic Energy Agency, International Status and Prospects for Nuclear Power 2012, <http://www.iaea.org/About/Policy/GC/GC56/GC56InfDocuments/English/gc56inf-6_en.pdf>]

C.2. Prospects in Countries considering the Introduction of Nuclear Power 41. Since the mid-2000s, developing countries have expressed a new or renewed interest in nuclear power. While the Fukushima Daiichi accident caused some countries to change their positions and some to take a ‘wait and see’ approach, interest continued among countries considering or planning for nuclear power introduction. 42. Table C-2 shows the number of countries at different stages of nuclear power consideration or development. Sometimes referred to as ‘nuclear newcomers’, some countries, such as Bangladesh, Egypt and Vietnam, have in fact been planning for nuclear power for some time. Others, such as Poland, are reviving the nuclear power option after plans had been curtailed when governments and public opinion changed. Countries such as Jordan and Uruguay are considering or planning for nuclear power for the first time. What they have in common is that they are all considering, planning or starting nuclear power programmes, and have not connected a first nuclear power plant to the grid. TABLE C-1. Positions of countries with operating nuclear power plants plus Lithuania Category Number of countries New unit(s) under construction with more planned/proposed 11 New unit(s) under construction but the policy for more units is not established 2 No units under construction but with plans/proposals for building new unit(s) 10 No units under construction, and currently no plans/policy for building new units 4 Firm policy not to build new units and/or for closure of existing units 4 TABLE C-2. Positions of countries without operating nuclear power plants8 Description of group Number of Countries 2012 Number of Countries 2010 Number of Countries 2008 Considering a nuclear programme to meet identified energy needs with a strong indication of intention to proceed 14 14 14 Active preparation for a possible nuclear power programme with no final decision 6 7 7 Decided to introduce nuclear power and started preparing the appropriate infrastructure 6 10 5 New nuclear power plant ordered 3 2 0 New nuclear power plant under construction 0 1 1 43. Of the 29 countries considering or planning for nuclear power in 2012, 10 are from the Asia and the Pacific region, 10 are from the Africa region, 7 are in Europe (mostly Eastern Europe) and 2 are in Latin America8 Two additional groups were included in previous editions of this publication but not in this edition because they did not add substantially to an understanding of the rising expectations for nuclear power among developing countries. One group included countries that were not planning to introduce nuclear power but were interested in considering the associated issues, but it proved difficult to characterize trends and there were wide fluctuations in the numbers from year to year. A second group included countries where an invitation to bid to supply a nuclear power plant had been prepared, but this proved problematic because of countries that were choosing to order plants through direct bilateral agreements rather than through bids. GOV/INF/2012/12-GC(56)/INF/6 Page 10 44. Even after the Fukushima Daichii accident, some countries have taken concrete steps toward nuclear power introduction. In the United Arab Emirates (UAE), in 2011, the Emirates Nuclear Energy Corporation invited bids for uranium, conversion and enrichment for the fuel for the UAE’s first reactors. In Turkey, the project company Akkuyu Nukleer Santral Elektrik Uretim filed applications for construction permits and a power generation licence. Belarus signed a contract with the Russian Federation for the construction of two reactors, and Bangladesh signed an intergovernmental agreement with the Russian Federation, also for two reactors. Vietnam signed a loan agreement with the Russian Federation regarding financing of its first nuclear power plant and announced its intention to undertake a similar agreement with Japan. 45. The Islamic Republic of Iran began commissioning of its first nuclear power plant at Bushehr in September 2011, which marked the commissioning of the first nuclear power plant in a ‘newcomer’ country in 15 years. 46. The rate at which new countries joined the list of countries operating nuclear power plants was fairly steady through the early 1980s as shown in Fig. C-1. Until the addition of the Islamic Republic of Iran in 2011, only three countries had connected their first nuclear power plants to the grid in the post-Chernobyl era — China, Mexico and Romania. The countries now planning for their first nuclear power plants are doing so after an experience gap of 15 years. Of the countries considering or planning for their first nuclear plant, 9 have explicitly expressed target dates for the first operation before 2030. FIG. C-1. Number of countries operating, or having operated, nuclear power plants. Source IAEA (PRIS) 47. Overall, Tables C-1 and C-2 are consistent with trends reflected in the Agency’s low and high projections described below, i.e. there remains substantial uncertainty in projections about nuclear power, and the growth in the use of nuclear power is projected to be driven more by expansion in established nuclear power countries than by countries starting nuclear power programmes. The 9 countries that have explicitly expressed target dates for the first operation before 2030 lie between the 7 countries in the Agency’s low projection that would connect their first plant by 2030 and the 16 countries that would do so in the high projection. GOV/INF/2012/12-GC(56)/INF/6 Page 11 C.3. Potential Drivers for the Introduction of Nuclear Power 48. The key factors that have driven rising interest in nuclear power since about 2005, and the increase in construction starts shown in Fig. B-1, have not changed with the Fukushima Daiichi accident: growing energy demand, especially for electricity; volatile fossil fuel prices; environmental pressures and energy security concerns.

#### Thorium expansion inevitable – the only relevant question is who will lead the process

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

IT IS, OF COURSE, NOT THAT SIMPLE. I came to realize fairly soon that the tone of the Energy from Thorium forum—geeky, high minded, theoretical, and naive—characterized the thorium movement as a whole. It seemed clear that a small band group of advocates, however committed, had little chance of influencing national energy policy or turning the giant battleship of the nuclear industry. “The nuclear industry has zero incentive to shift to a new fuel cycle,” Charlie Hess told me. A long-time executive at the architectural engineering firm Burns & Roe, Hess spent 30 years building and operating nuclear plants. Although he is a prototypical member of the nuclearati, he is an advocate of alternative nuclear power, including thorium-based reactors, and a critic of the nuke-power establishment. Fuel costs for uranium reactors are less than half a cent per kilowatthour. “They spend more on security guards than they do on fuel,” Hess told me. “Frankly they don’t care.” That was made clear to me by John Rowe, the CEO of Exelon, the country’s number one producer of nuclear power, when I pulled him aside after a speech at a National Press Club luncheon in Washington, DC. When I asked about the possibility of shifting to thorium as a primary nuclear fuel, he assured me that there “will be alternatives across the entire fuel cycle.” But inexpensive uranium works just fine for Exelon, which has a market capitalization (the total value of its outstanding shares) of $28 billion and made $18.6 billion in revenue in 2010. If it’s not broke, don’t fix it—and nuclear tycoons like John Rowe have convinced themselves that the nuclear power industry is not broken. From the perspective of his office suite, that’s certainly true: Rowe made $10.3 million in 2010, and between 2006 and 2011, his compensation totaled $153.9 million. Uranium reactors have been good to nuclear power executives. Rowe’s dismissive attitude embodies the obstacles that face the thorium movement, which is composed of outsiders. “Look, the nuclear industry in the U.S. is very conservative,” Ambassador Thomas Graham told me. “I can see interest here in the U.S. gradually developing. But it’s not going to happen here first.” Graham, a longtime diplomat and opponent of nuclear proliferation who served as President Bill Clinton’s special representative for arms control, now chairs the board of Lightbridge, a company based in McLean, Virginia, that is developing solid fuel thorium rods for conventional reactors. While Graham foresees the use of thorium in the American nuclear power industry at some point, “the initial deployments,” he said, “are going to be abroad.” Abroad. In the three years I’ve been covering the thorium movement, almost every conversation has at some point included that stipulation. The United States, which dropped the first atomic bomb on Japan at the conclusion of World War II, pioneered nuclear power, built the first commercial power reactors, and invented the liquid-core reactor and first proved that thorium could be used in power-generating reactors, is, barring some unforeseen and unlikely shift in energy policy, almost certainly destined to be a laggard in the worldwide thorium revolution. France is the world’s largest producer of nuclear power and supplier of uranium for reactors. Eighty percent of its electricity comes from nuclear power, and the energy giant Areva has an active thorium R&D program and is investigating the possibility of building Liquid fluoride thorium reactors by 2032. The Laboratoire de Physique Subatomique et de Cosmologie in Grenoble is the only facility in the world that has the resources and backing needed to actually develop a commercial LFTR by 2022. The Rei nuclear research institute in the Czech Republic is a leader in the development of MSRs and is investigating the possibility of fueling MSRs with thorium, according to the institute’s director.6 Norway, which has an estimated 180,000 tons of thorium reserves, is embarking on an ambitious long-term nuclear power program that includes the construction of thorium-fueled reactors. In Brazil, which has the world’s second-largest thorium reserves and began research into thorium power in the 1960s, R&D efforts have recently begun again to develop thorium-fueled solid fuel reactors. By far the most active thorium power programs, however, are in Asia, particularly in the emerging economic superpowers of India and China. In February 2011, China officially announced that it will start a program to develop a thorium-fueled molten salt nuclear reactor, taking a crucial step toward replacing coal with nuclear power as a primary energy source. The program was announced at the annual conference in Shanghai of the Chinese Academy of Sciences and is headed by Jiang Mianheng, son of the former Chinese president Jiang Zemin and the holder of a Ph.D. in electrical engineering from Drexel University. The People’s Republic has no intention of falling behind in the race for the next great energy source. The world’s most ambitious thorium power program, though, is in India, which has the world’s largest thorium reserves. India exploded its first nuclear weapon in 1974 in defiance of the Nuclear Nonproliferation Treaty, and it has always viewed nuclear energy — in both warheads and power reactors, as a key element of national sovereignty. The country has embarked on a three-phase program to build as many as 60 reactors, converting them to run on thorium before 2032. I will detail the Indian and Chinese programs in chapter 7 and the implications for the United States in the conclusion. Here it is enough to quote the 2011 film The Ides of March, in which the progressive presidential candidate, played by George Clooney, declares, “Either we’re going to lead the world or we’re going to bury our heads in the sand.” The question of thorium is not whether it will become a major source of energy—it will—but when—and where and who will lead the way.

#### China is monopolizes thorium reactor tech—large initiatives make LFTR inevitable, but if they develop it first they will control intellectual property

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

GIVEN ALL THIS, I HAD TO ASK, why bother? Blessed with large¶ thorium reserves and an existing nuclear R&D capacity that,¶ operational snafus notwithstanding, is world class, India, rather than¶ taking a laborious three-stage route to thorium-based nuclear power,¶ could start building thorium reactors—most simply and inexpensively,¶ liquid fluoride thorium reactors—tomorrow. The reasons it’s not doing¶ so have to do with institutional inertia, national pride, and supposed¶ national security concerns~such as, for instance, building its nuclear¶ arms stockpile. China, meanwhile, is taking a more catholic approach¶ to its nuclear power program, including investigating LFTRs.¶ In a development heralded by thorium advocates around the world,¶ China officially announced in February 2011 at a Shanghai scientific¶ conference that it will begin a program to develop a thorium-fueled¶ molten salt reactor (MSR), aka an LFTR. The project was first reported¶ on the mainland in the Wen Hui Baa newspaper. I broke the news in¶ the West in a story for Wired.com. I first heard about it at a conference¶ in Oak Ridge with Sorensen and other thorium activists. The phrase¶ “Sputnik moment” was used freely. The world’s most dynamic¶ economyhad **thrown down the thorium gauntlet**. While India chose to¶ slog up the long hill of its three-stage program, China was going straight¶ for the prize.¶ India’s three-stage program calls for gradually phasing in thorium¶ fuel rods in advanced heavy-water reactors. The Chinese program, in¶ contrast, marks the largest national initiative to pursue thorium MSRs¶ to date. One of the world’s largest consumers of coal for electricity, the¶ People’s Republic has embarked on a public campaign to shift toward¶ less noxious energy sources, including nuclear power. The massive¶ Three Gorges dam project, one of the largest public works projects in¶ history, was designed to produce 18.2 gigawatts of electricity and has¶ also engendered fierce criticism and internal protest. Electricity¶ demand is growing at nearly 10 percent a year, and Chinese officials,¶ often willing to ignore international objections to its domestic policies,¶ are committed to using nuclear power as a source of clean, inexpensive¶ energy.¶ The nuclear ambitions of India and China are similarly outsized, but¶ the cultures and capabilities of the two countries are quite different. I¶ used to live in Hong Kong, and I’ve traveled extensively in both¶ northern India and southeastern China. The differences in the¶ countries, for me, can be summed up with a glance at their railways:¶ The Indian rail system, a source of national pride since the days of the¶ raj, is known neither for its modernity nor its efficiency. In September¶ 2011 the passengers on a cross-country journey were surprised to learn¶ that their train had somehow traveled more than 600 miles in the¶ wrong direction. This was treated as a newsworthy but not completely¶ unheard-of experience. The passengers, suitably outraged, stormed the¶ depot.¶ In China the government completed the Beijing-to-Tibet railway in¶ 2006, a dream since the days of Sun Yat-sen. Totaling 2,526 miles, it¶ includes tracks, from Golmud to Lhasa, at the highest altitude of any¶ railway in the world. The two-day journey, which passes through the¶ world’s highest-altitude railway tunnel and uses many sections of¶ elevated track passing over permafrost, costs about $160, or about¶ what it costs to go from Boston to Washington, D.C., on the relatively¶ low-tech Acela train. The new Chinese line has engendered plenty of¶ criticism regarding fears of cultural hegemony and the loss of Tibetan¶ autonomy, but no reports of wrong-way trains have surfaced. In the¶ realm of public infrastructure, India is a great producer of think-tank¶ studies, government reports, and beard-stroking orations. China,¶ unimpeded by the hurly-burly of parliamentary democracy, is a better¶ place for actually accomplishing things. If you are betting on which¶ country will build a thorium power reactor first, the choice is not¶ tough. (A July 2011 crash on a high-speed rail line near Wenzhou, on¶ the southern coast, killed 39 people and sparked a level of public outcry¶ seldom seen under communist rule on the mainland. In public¶ statements after the accident, Chinese premier Wen Jibao vowed to¶ toughen safety standards in China’s rapid industrialization—but the¶ crash did little to slow China’s drive to modernize its energy and¶ transportation infrastructure.)¶ China has 14 nuclear power reactors in operation on the mainland¶ today, with more than 25 under construction and more soon to get¶ under way. For many years a consumer of reactor technology and¶ components from the West, and from Russia, China will soon be¶ building fully homegrown reactors. The development of liquid fluoride¶ thorium reactors would make China the most advanced nuclear power¶ nation on Earth—and could well give it yet another source of high-tech¶ products to **pad its export surplus**.¶ Comparing nuclear reactors to humble kitchen appliances, Xu¶ Hongjie, a research scientist at the Shanghai Institute of Applied¶ Physics, said, “We need a better stove that can burn more fuel.”11 It¶ was a line reminiscent of Chairman Mao’s finest exhortations.¶ Like many nuclear nations, China declared a pause to review and¶ reassess its nuclear development plans after Fukushima. This was only a breather; Chinese officials made it clear that the Japanese accident¶ would not affect their long-range plans. And they scoffed at the German¶ decision to get out of nuclear power altogether. The comments of¶ Chinese officials did not inspire confidence. Dr. Liu Changxin, vice¶ general secretary of the China Nuclear Society, remarked that such¶ natural disasters “don’t happen in China”—a startling claim given the¶ devastation wrought by the 2008 earthquake in Sichuan Province,¶ which killed 69,000 people and left nearly five million homeless.¶ The Chinese thorium program is headed by Jiang Mianheng, an¶ electrical engineer and the son of the former Chinese president Jiang¶ Zemin (see chapter 1). Jiang Mianheng, who is also a vice president of¶ the Chinese Academy of Sciences, headed a Chinese delegation that¶ visited Oak Ridge in the fall of 2010. The Chinese politely listened to the¶ research presentations, and patiently endured the facilities tour, before¶ revealing that what they were really there for was to soak up as much¶ information on thorium MSRs as they could. “They were quite open¶ about it,” a person present at those discussions told me. In early 2012¶ Western observers of the Chinese nuclear effort stated that the¶ Shanghai Institute of Applied Physics, with around 400 people and a¶ budget of $400 million, planned to build two prototype molten salt¶ reactors by 2015.¶ Like India, China needs to shift to nuclear from coal to avoid adding¶ catastrophic levels of carbon to the atmosphere. At the same time¶ many in the U.S. thorium movement regard the development of¶ Chinese LFTRs as a direct threat to U.S. economic competitiveness. The¶ specter of Chinese competitiveness with the United States is often¶ overblown; in general, China’s prosperity and the well-being of its¶ people, are good things for the world, particularly for Americans. That¶ won’t make it feel any better when we are buying LFTRs with “Made in¶ Shanghai” stamped on the side.¶ The alarmist version of China’s next-generation nuclear strategy¶ comes down to this: if you like foreign oil dependency, you’re going to¶ love foreign nuclear dependency.¶ While various international efforts, including the Gen IV nuclear R&D¶ initiative, include a thorium MSR component, China has made clear its¶ intention to go it alone. The announcement from the Chinese Academy¶ of Sciences states explicitly that the People’s Republic plans to develop¶ and control intellectualproperty with regard to thorium for its own¶ benefit. “This will enable China to firmly grasp the lifeline of energy in¶ its own hands,” Wen Hui Baa reported.”¶ The plans for China’s lifeline include not only thorium but also¶ critical materials that have increased in value at a startling rate since¶ 2010 and of which China now has a monopoly: rare earth elements.¶

#### And, that trades off with US market access – collapses economic competitiveness

Wash Post 12 [Washington Post, 3-14, “America Is Letting China Steal Our Valuable Nuclear Innovations,” http://www.washingtonsblog.com/2012/03/america-is-letting-china-steal-our-valuable-nuclear-innovations.html]

The U.S. Is Letting China Steal Its Nuclear Innovations … Just Like Xerox Let Apple and Microsoft Steal Its Valuable Breakthroughs Microsoft and Apple grew rich by using Xerox’s innovation. Xerox’s research arm (called Xerox Parc) invented the “graphical user interface” used by all modern computers. Bill Gates famously admitted to Steve Jobs that both Microsoft and Apple had ripped of Xerox’s GUI. Xerox could have made a fortune on its innovation. But it didn’t realize what it had … and failed to capitalize on its breakthroughs (Xerox tried to sue to protect its invention … but years too late, and the lawsuit was thrown out because Xerox had missed the deadline for suing). The same dynamic is playing out in the nuclear industry. Specifically, the U.S. created a safer, more efficient form of nuclear energy running on thorium. But – like Xerox Parc – America isn’t doing anything with its innovation, and China is running off with prize. The Telegraph’s Ambrose Evans-Pritchard notes: If China’s dash for thorium power succeeds, it will vastly alter the global energy landscape …. China’s Academy of Sciences said it had chosen a “thorium-based molten salt reactor system”. The liquid fuel idea was pioneered by US physicists at Oak Ridge National Lab in the 1960s, but the US has long since dropped the ball. Further evidence of Barack `Obama’s “Sputnik moment”, you could say. Chinese scientists claim that hazardous waste will be a thousand times less than with uranium. The system is inherently less prone to disaster. “The reactor has an amazing safety feature,” said Kirk Sorensen, a former NASA engineer at Teledyne Brown and a thorium expert. “If it begins to overheat, a little plug melts and the salts drain into a pan. There is no need for computers, or the sort of electrical pumps that were crippled by the tsunami. The reactor saves itself,” he said. “They operate at atmospheric pressure so you don’t have the sort of hydrogen explosions we’ve seen in Japan. One of these reactors would have come through the tsunami just fine. There would have been no radiation release.” The Telegraph continues: Professor Robert Cywinksi from Huddersfield University said thorium must be bombarded with neutrons to drive the fission process. “There is no chain reaction. Fission dies the moment you switch off the photon beam. There are not enough neutrons for it continue of its own accord,” he said. Dr Cywinski, who anchors a UK-wide thorium team, said the residual heat left behind in a crisis would be “orders of magnitude less” than in a uranium reactor. The earth’s crust holds 80 years of uranium at expected usage rates, he said. Thorium is as common as lead. America has buried tons as a by-product of rare earth metals mining. Norway has so much that Oslo is planning a post-oil era where thorium might drive the country’s next great phase of wealth. Even Britain has seams in Wales and in the granite cliffs of Cornwall. Almost all the mineral is usable as fuel, compared to 0.7pc of uranium. There is enough to power civilization for thousands of years. \*\*\* US physicists in the late 1940s explored thorium fuel for power. It has a higher neutron yield than uranium, a better fission rating, longer fuel cycles, and does not require the extra cost of isotope separation. The plans were shelved because thorium does not produce plutonium for bombs. As a happy bonus, it can burn up plutonium and toxic waste from old reactors, reducing radio-toxicity and acting as an eco-cleaner. Dr Cywinski is developing an accelerator driven sub-critical reactor for thorium, a cutting-edge project worldwide …. The idea is to make pint-size 600MW reactors. Popular Science reports: It would be based on thorium, a radioactive element that is much more abundant, and much more safe, than traditional sources of nuclear power. Some advocates believe small nuclear reactors powered by thorium could wean the world off coal and natural gas, and do it more safely than traditional nuclear. Thorium is not only abundant, but more efficient than uranium or coal — one ton of the silver metal can produce as much energy as 200 tons of uranium, or 3.5 million tons of coal, as the Mail on Sunday calculates it. \*\*\* Thorium reactors would not melt down, in part because they require an external input to produce fission. Thorium atoms would release energy when bombarded by high-energy neutrons, such as the type supplied in a particle accelerator. Wired points out: “President Obama talked about a Sputnik-type call to action in his [State of the Union] address,” wrote Charles Hart, a a retired semiconductor researcher and frequent commenter on the Energy From Thorium discussion forum. “I think this qualifies.” While nearly all current nuclear reactors run on uranium, the radioactive element thorium is recognized as a safer, cleaner and more abundant alternative fuel. Thorium is particularly well-suited for use in molten-salt reactors, or MSRs. Nuclear reactions take place inside a fluid core rather than solid fuel rods, and there’s no risk of meltdown. In addition to their safety, MSRs can consume various nuclear-fuel types, including existing stocks of nuclear waste. Their byproducts are unsuitable for making weapons of any type. They can also operate as breeders, producing more fuel than they consume. In the 1960s and 70s, the United States carried out extensive research on thorium and MSRs at Oak Ridge National Laboratory. That work was abandoned — partly, believe many, because uranium reactors generated bomb-grade plutonium as a byproduct. Today, with nuclear weapons less in demand and cheap oil’s twilight approaching, several countries — including India, France and Norway — are pursuing thorium-based nuclear-fuel cycles. (The grassroots movement to promote an American thorium power supply was covered in this December 2009 Wired magazine feature.) China’s new program is the largest national thorium-MSR initiative to date. The People’s Republic had already announced plans to build dozens of new nuclear reactors over the next 20 years, increasing its nuclear power supply 20-fold and weaning itself off coal, of which it’s now one of the world’s largest consumers. Designing a thorium-based molten-salt reactor could place China at the forefront of the race to build environmentally safe, cost-effective and politically palatable reactors. \*\*\* A Chinese thorium-based nuclear power supply is seen by many nuclear advocates and analysts as a threat to U.S. economic competitiveness. During a presentation at Oak Ridge on Jan. 31, Jim Kennedy, CEO of St. Louis–based Wings Enterprises (which is trying to win approval to start a mine for rare earths and thorium at Pea Ridge, Missouri) portrayed the Chinese thorium development as potentially crippling. “If we miss the boat on this, how can we possibly compete in the world economy?” Kennedy asked. “What else do we have left to export?” According to thorium advocates, the United States could find itself 20 years from now importing technology originally developed nearly four decades ago at one of America’s premier national R&D facilities. The alarmist version of China’s next-gen nuclear strategy come down to this: If you like foreign-oil dependency, you’re going to love foreign-nuclear dependency. \*\*\* While the international “Generation IV” nuclear R&D initiative includes a working group on thorium MSRs, **China has made clear its intention to go it alone. The Chinese Academy of Sciences announcement explicitly states that the PRC plans to develop and control intellectual property around thorium for its own benefit**. “This will enable China to firmly grasp the lifeline of energy in its own hands,” stated the Wen Hui Bao report. The U.S. is acting just like Xerox Parc, letting others steal its innovations … and losing entire markets in the process. If America fails to capitalize on its breakthrough, and let’s China obtain all of the relevant thorium energy patents, we could lose the entire market. Too bad the U.S. government – instead of developing the thorium concept which it innovated decades ago – is protecting an obsolete uranium model which was chosen only because produced plutonium for nuclear warheads and powered nuclear submarines. Indeed, our government is doubling-down on archaic and unsafe technology: the Nuclear Regulatory Commission has approved construction of new nuclear plants which do not incorporate the safety measures needed to prevent a Fukushima meltdown here … and the same companies which built and operated Fukushima will build and run the U.S. plants as well.

#### The impact is heg

Martino 7 – founder and chairman of the board of Cyber Technology Group, author of numerous books on finance (Rocco, A Strategy for Success: Innovation Will Renew American Leadership, <http://www.fpri.org/orbis/5102/martino.innovationamericanleadership.pdf>,)

The United States of course faced great challenges to its security and economy in the past, most obviously from Germany and Japan in the first half of the twentieth century and from the Soviet Union in the second half. Crucial to America’s ability to prevail over these past challenges was our technological and industrial leadership, and especially our ability to continuously recreate it. Indeed, the United States has been unique among great powers in its ability to keep on creating and recreating new technologies and new industries, generation after generation. Perpetual innovation and technological leadership might even be said to be the American way of maintaining primacy in world affairs. They are almost certainly what America will have to pursue in order to prevail over the contemporary challenges involving economic competitiveness and energy dependence. 

#### Immediate development is key

**Segal 2004** – Senior Fellow in China Studies at the Council on Foreign Relations (Adam, Foreign Affairs, “Is America Losing Its Edge?” November / December 2004, http://www.foreignaffairs.org/20041101facomment83601/adam-segal/is-america-losing-its-edge.html)

The United States' global primacy depends in large part on its ability to develop new technologies and industries faster than anyone else. For the last five decades, U.S. scientific innovation and technological entrepreneurship have ensured the country's economic prosperity and military power. It was Americans who invented and commercialized the semiconductor, the personal computer, and the Internet; other countries merely followed the U.S. lead.

Today, however, this technological edge-so long taken for granted-may be slipping, and the most serious challenge is coming from Asia. Through competitive tax policies, increased investment in research and development (R&D), and preferential policies for science and technology (S&T) personnel, Asian governments are improving the quality of their science and ensuring the exploitation of future innovations. The percentage of patents issued to and science journal articles published by scientists in China, Singapore, South Korea, and Taiwan is rising. Indian companies are quickly becoming the second-largest producers of application services in the world, developing, supplying, and managing database and other types of software for clients around the world. South Korea has rapidly eaten away at the U.S. advantage in the manufacture of computer chips and telecommunications software. And even China has made impressive gains in advanced technologies such as lasers, biotechnology, and advanced materials used in semiconductors, aerospace, and many other types of manufacturing.

Although the United States' technical dominance remains solid, the globalization of research and development is exerting considerable pressures on the American system. Indeed, as the United States is learning, globalization cuts both ways: it is both a potent catalyst of U.S. technological innovation and a significant threat to it. The United States will never be able to prevent rivals from developing new technologies; it can remain dominant only by continuing to innovate faster than everyone else. But this won't be easy; to keep its privileged position in the world, the United States must get better at fostering technological entrepreneurship at home.

#### Technical competitiveness is a strong predictor of primacy—the impact is great power war

**Baru 9** - Visiting Professor at the Lee Kuan Yew School of Public Policy in Singapore (Sanjaya, “Year of the power shift?,”

http://www.india-seminar.com/2009/593/593\_sanjaya\_baru.htm

**T**here is no doubt that economics alone will not determine the balance of global power, but there is no doubt either that economics has come to matter for more.

The management of the economy, and of the treasury, has been a vital aspect of statecraft from time immemorial. Kautilya’s *Arthashastra* says, ‘From the strength of the treasury the army is born. …men without wealth do not attain their objectives even after hundreds of trials… Only through wealth can material gains be acquired, as elephants (wild) can be captured only by elephants (tamed)… A state with depleted resources, even if acquired, becomes only a liability.’4 Hence, economic policies and performance do have strategic consequences.5

In the modern era, the idea that strong economic performance is the foundation of power was argued most persuasively by historian Paul Kennedy. ‘Victory (in war),’ Kennedy claimed, ‘has repeatedly gone to the side with more flourishing productive base.’6 Drawing attention to the interrelationships between economic wealth, technological innovation, and the ability of states to efficiently mobilize economic and technological resources for power projection and national defence, Kennedy argued that nations that were able to better combine military and economic strength scored over others.

‘The fact remains,’ Kennedy argued, ‘that all of the major shifts in the world’s *military-power* balance have followed alterations in the *productive* balances; and further, that the rising and falling of the various empires and states in the international system has been confirmed by the outcomes of the major Great Power wars, where victory has always gone to the side with the greatest material resources.’7

**I**n Kennedy’s view the geopolitical consequences of an economic crisis or even decline would be transmitted through a nation’s inability to find adequate financial resources to simultaneously sustain economic growth and military power – the classic ‘guns vs butter’ dilemma.

#### Heg decline causes great power war and increased balancing

**Zhang and Shi, 1/22**/11 – \*Yuhan Zhang is a researcher at the Carnegie Endowment for International Peace, Washington, D.C.; Lin Shi is from Columbia University. She also serves as an independent consultant for the Eurasia Group and a consultant for the World Bank in Washington, D.C. (America’s decline: A harbinger of conflict and rivalry, http://www.eastasiaforum.org/2011/01/22/americas-decline-a-harbinger-of-conflict-and-rivalry/)

This does not necessarily mean that the US is in systemic decline, but it encompasses a trend that appears to be negative and perhaps alarming. Although the US still possesses incomparable military prowess and its economy remains the world’s largest, the once seemingly indomitable chasm that separated America from anyone else is narrowing. Thus, the global distribution of power is shifting, and the inevitable result will be a world that is less peaceful, liberal and prosperous, burdened by a dearth of effective conflict regulation. Over the past two decades, no other state has had the ability to seriously challenge the US military. Under these circumstances, motivated by both opportunity and fear, many actors have bandwagoned with US hegemony and accepted a subordinate role. Canada, most of Western Europe, India, Japan, South Korea, Australia, Singapore and the Philippines have all joined the US, creating a status quo that has tended to mute great power conflicts. However, as the hegemony that drew these powers together withers, so will the pulling power behind the US alliance. The result will be an international order where power is more diffuse, American interests and influence can be more readily challenged, and conflicts or wars may be harder to avoid. As history attests, power decline and redistribution result in military confrontation. For example, in the late 19th century America’s emergence as a regional power saw it launch its first overseas war of conquest towards Spain. By the turn of the 20th century, accompanying the increase in US power and waning of British power, the American Navy had begun to challenge the notion that Britain ‘rules the waves.’ Such a notion would eventually see the US attain the status of sole guardians of the Western Hemisphere’s security to become the order-creating Leviathan shaping the international system with democracy and rule of law. Defining this US-centred system are three key characteristics: enforcement of property rights, constraints on the actions of powerful individuals and groups and some degree of equal opportunities for broad segments of society. As a result of such political stability, free markets, liberal trade and flexible financial mechanisms have appeared. And, with this, many countries have sought opportunities to enter this system, proliferating stable and cooperative relations. However, what will happen to these advances as America’s influence declines? Given that America’s authority, although sullied at times, has benefited people across much of Latin America, Central and Eastern Europe, the Balkans, as well as parts of Africa and, quite extensively, Asia, the answer to this question could affect global society in a profoundly detrimental way. Public imagination and academia have anticipated that a post-hegemonic world would return to the problems of the 1930s: regional blocs, trade conflicts and strategic rivalry. Furthermore, multilateral institutions such as the IMF, the World Bank or the WTO might give way to regional organisations. For example, Europe and East Asia would each step forward to fill the vacuum left by Washington’s withering leadership to pursue their own visions of regional political and economic orders. Free markets would become more politicised — and, well, less free — and major powers would compete for supremacy. Additionally, such power plays have historically possessed a zero-sum element. In the late 1960s and 1970s, US economic power declined relative to the rise of the Japanese and Western European economies, with the US dollar also becoming less attractive. And, as American power eroded, so did international regimes (such as the Bretton Woods System in 1973). A world without American hegemony is one where great power wars re-emerge, the liberal international system is supplanted by an authoritarian one, and trade protectionism devolves into restrictive, anti-globalisation barriers. This, at least, is one possibility we can forecast in a future that will inevitably be devoid of unrivalled US primacy.

#### Unipolarity decreases power competition—any transition increases war

**Wolforth et. al2011** (William is the Daniel Webster Professor at Dartmouth College, where he teaches in the Department of Government. Edited by Michael Mastanduno, Professor of Government and Dean of Faculty at Dartmouth College, and G. John Ikenberry, Professor of Politics and International Affairs at Princeton University, “Unipolarity, status competition, and great power war” *International Relations Theory and the Consequences of Unipolarity* pg. 65-66)

Conclusion

The evidence suggests that narrow and asymmetrical capabilities gaps foster status competition even among states relatively confident of their basic territorial security for the reasons identified in social identity theory and theories of status competition. Broad patterns of evidence are consistent with this expectation, suggesting that unipolarity shapes strategies of identity maintenance in ways that dampen status conflict. The implication is that unipoalrity helps explain low levels of military competition and conflict among major powers after 1991 and that a return to bipolarity or multipolairty would increase the likelihood of such conflict.

This has been a preliminary exercise. The evidence for the hypothesis explored here is hardly conclusive, but is sufficiently suggestive to warrant further refinement and testing, all the more so given importance of the questions at stake. If status matters in the way the theory discussed here suggests, then the widespread view that the rise of a peer competitor and the shift back to bipolar or multipolar structure present readily surmountable policy challenges is suspect. Most scholars agree with Jacek Kugler and Douglass Lemke’s argument: “[S]hould a satisfied state undergo a power transition and catch up with dominant power, there is little or no expectation of war. Given that today’s rising powers have every material reason to like the status quo, many observers are optimistic that the rise of peer competitors can be readily managed by fashioning an order that accommodates their material interests.

Yet it is harder to manage competition for status than for most material things. While diplomatic efforts to manage status competition seems easy under unipolarity, theory and evidence suggest that it could present much greater challenges as the system moves back to bipolarity or multipolairty. When status is seen as a positional good, efforts to craft negotiated bargains about status contests face long odds. And this positionality problem is particularly acute concerning the very issue unipolarity solves: primacy. The route back to bipolarity or multipolarity is thus fraught with danger. With two or more plausible claimants to primacy, positional competition and the potential for major power war could once again form the backdrop of world politics.

#### Even if primacy is unsustainable, decline in the short term causes a hard landing that leads to global war

**Walton, 7** (Dale C, Lecturer in International Relations and Strategic Studies at the University of Reading in Reading, England, *Geopolitics and Great Powers in the Twenty-First Century*, pg. 64-65)

Although international political conditions will differ enormously in the coming decades from those of the middle 1940’s, it would be grossly irresponsible for the United States to shrug off its burdens of great power status and return to the slumber that it once enjoyed. Almost certainly, if the United States had refused to take an active role in European politics in the middle of the twentieth century, a world would have emerged in which American values would not have flourished and even their survival on the North American continent would have been profoundly threatened. America’s refusal to play a substantial role in the great power struggles of this century would have similarly deleterious effects. Importantly, if the United States withdraws to its hemisphere **a third world war is far more likely**. In a meta region full of young rising powers the presence of a strategically mature superpower can be expected to have a **stabilizing effect**; the enormous military resources possessed by America compels would be aggressors to consider carefully before launching a strategic adventure. Even more chillingly, as noted above, it is possible that the multipolar system could become sufficiently unbalanced that it would collapse, with a power such as China building a coalition that would allow it ultimately to emerge as the master of eastern Eurasia and the greatest power in the world. The United States is the “court of last resort” protecting against such an eventuality. The latter possibility does not contradict the above argument that U.S. unipolarity is unsustainable - as an extra Eurasian power lacking the ruthlessness to destroy potential great power competitors preventatively, Washington simply cannot sustain unipolarity indefinitely. Nonetheless, while the emerging multipolar system appears robust it should receive “care and feeding” – otherwise it is vulnerable to grossly unbalanced events such as the creation of a very aggressive coalition dedicated to achieving Eurasian hegemony and willing if necessary to fight a third world war to achieve it. Most likely such a coalition would not be able to simply bully its way to hegemony; it probably would have to fight, the results being a war enormously costly in blood, perhaps even one that would **dwarf World War II** in its price. If the aggressive coalition won, in turn, the multipolar system would be destroyed and the United States would face a competitor far more powerful than itself , and in all **likelihood a world in which democracy and personal liberty would be in eclipse.** In any case it is a geopolitical imperative for the United States that no power or coalition attains hegemony in Eastern Eurasia, much less that an explicitly hostile state or coalition succeeds in doing so. If the United States is to guard its national interests in this century, it **is vital that it ensures the transition from unipolarity to multipolarity occurs in as gentle a manner as possible.** In this capacity, it is important to understand that the United States is in long term relative decline, but, at the same time to acknowledge that it has very great military, financial and diplomatic resources at its disposal. If Washington deploys these resources wisely it can maximize its security over the long term and minimize the probability of a great power war.

#### The transition causes backlash and overreaction that causes war

**Beckley, 12** [“China’s Century Why America’s Edge Will Endure” research fellow in the International Security Program at Harvard Kennedy School’s

Belfer Center for Science and International Affairs He will become an assistant professor of political science at Tufts University in the fall of 2012, http://belfercenter.ksg.harvard.edu/files/Chinas\_Century.pdf]

Change is inevitable, but it is often incremental and nonlinear. In the coming decades, China may surge out of its unimpressive condition and close the gap with the United States. Or China might continue to rise in place—steadily im-proving its capabilities in absolute terms while stagnating, or even declining, relative to the United States. At the time of this writing, the United States remains mired in the worst economic crisis since the Great Depression and carries the largest debt in its history. Moreover, the recent partisan standoff over raising the debt ceiling suggests the American political system is losing the capacity for compromise on basic issues, let alone on large-scale problems. It is impossible to say whether the current malaise is the beginning of the end of the unipolar era or simply an aberration. The best that can be done is to make plans for the future on the basis of long-term trends; and the trends suggest that the United States’ economic, technological, and military lead over China will be an enduring feature of international relations, not a passing moment in time, but a deeply embedded condition that will persist well into this century. In recent years, scholars’ main message to policymakers has been to prepare for the rise of China and the end of unipolarity. This conclusion is probably wrong, but it is not necessarily bad for Americans to believe it is true. Fear can be harnessed in the service of virtuous policies. Fear of the Soviet Union spurred the construction of the interstate highway system. Perhaps unjustiªed fears about the decline of the United States and the rise of China can similarly be used in good cause. What could go wrong? One danger is that declinism could prompt trade conflicts and immigration restrictions. The results of this study suggest that the United States beneªts immensely from the free ºow of goods, services, and people around the globe; this is what allows American corporations to specialize in high-value activities, exploit innovations created elsewhere, and lure the brightest minds to the United States, all while reducing the price of goods for U.S. consumers. Characterizing China’s export expansion as a loss for the United States is not just bad economics; it blazes a trail for jingoistic and protectionist policies. It would be tragically ironic if Americans reacted to false prophecies of decline by cutting themselves off from a potentially vital source of American power. Another danger is that declinism may impair foreign policy decisionmaking. If top government officials come to believe that China is overtaking the United States, they are likely to react in one of two ways, both of which are potentially disastrous. The first is that policymakers may imagine the United States faces a closing “window of opportunity” and should take action “while it still enjoys preponderance and not wait until the diffusion of power has already made international politics more competitive and unpredictable.”158 This belief may spurpositive action, but it also invites parochial thinking, reckless behavior, and preventive war.159 As Robert Gilpin and others have shown, “[H]egemonic struggles have most frequently been triggered by fears of ultimate decline and the perceived erosion of power.”160 By fanning such fears, declinists may inadvertently promote the type of violent overreaction that they seek to prevent. The other potential reaction is retrenchment—the divestment of all foreign policy obligations save those linked to vital interests, deªned in a narrow and national manner. Advocates of retrenchment assume, or hope, that the world will sort itself out on its own; that whatever replaces American hegemony, whether it be a return to balance of power politics or a transition to a postpower paradise, will naturally maintain international order and prosperity. Order and prosperity, however, are unnatural. They can never be presumed. When achieved, they are the result of determined action by powerful actors and, in particular, by the most powerful actor, which is, and will be for some time, the United States. Arms buildups, insecure sea-lanes, and closed markets are only the most obvious risks of U.S. retrenchment. Less obvious are transnational problems, such as global warming, water scarcity, and disease, which may fester without a leader to rally collective action. Hegemony, of course, carries its own risks and costs. In particular, America’s global military presence might tempt policymakers to use force when they should choose diplomacy or inaction. If the United States abuses its power, however, it is not because it is too engaged with the world, but because its engagement lacks strategic vision. The solution is better strategy, not retrenchment. The ªrst step toward sound strategy is to recognize that the status quo for the United States is pretty good: it does not face a hegemonic rival, and the trends favor continued U.S. dominance. The overarching goal of American foreign policy should be to preserve this state of affairs. Declinists claim the United States should “adopt a neomercantilist international economic policy” and “disengage from current alliance commitments in East Asia and Europe.”161 But the fact that the United States rose relative to China while propping up the world economy and maintaining a hegemonic presence abroad casts doubt on the wisdom of such calls for radical policy change.

#### Aggregate violence declining because of heg

**Owen 11** [John M. Owen Professor of Politics at University of Virginia PhD from Harvard "DON’T DISCOUNT HEGEMONY" Feb 11 [www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/](http://www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/)]

Andrew Mack and his colleagues at the Human Security Report Project are to be congratulated. Not only do they present a study with a striking conclusion, driven by data, free of theoretical or ideological bias, but they also do something quite unfashionable: they bear good news. Social scientists really are not supposed to do that. Our job is, if not to be Malthusians, then at least to point out disturbing trends, looming catastrophes, and the imbecility and mendacity of policy makers. And then it is to say why, if people listen to us, things will get better. We do this as if our careers depended upon it, and perhaps they do; for if all is going to be well, what need then for us?

Our colleagues at Simon Fraser University are brave indeed. That may sound like a setup, but it is not. I shall challenge neither the data nor the general conclusion that **violent conflict around the world has been decreasing** in fits and starts since the Second World War. When it comes to violent conflict among and within countries, things have been getting better. (The trends have not been linear—Figure 1.1 actually shows that the frequency of interstate wars peaked in the 1980s—but the 65-year movement is clear.) Instead I shall accept that Mack et al. are correct on the macro-trends, and focus on their explanations they advance for these remarkable trends. With apologies to any readers of this forum who recoil from academic debates, this might get mildly theoretical and even more mildly methodological.

Concerning international wars, one version of the “nuclear-peace” theory is not in fact laid to rest by the data. It is certainly true that nuclear-armed states have been involved in many wars. They have even been attacked (think of Israel), which falsifies the simple claim of “assured destruction”—that any nuclear country A will deter any kind of attack by any country B because B fears a retaliatory nuclear strike from A.

But the most important “nuclear-peace” claim has been about *mutually* assured destruction, which obtains between two robustly nuclear-armed states. The claim is that (1) rational states having second-strike capabilities—enough deliverable nuclear weaponry to survive a nuclear first strike by an enemy—will have an overwhelming incentive not to attack one another; and (2) we can safely assume that nuclear-armed states are rational. It follows that states with a second-strike capability will not fight one another.

Their colossal atomic arsenals neither kept the United States at peace with North Vietnam during the Cold War nor the Soviet Union at peace with Afghanistan. But the argument remains strong that those arsenals did help keep the United States and Soviet Union at peace with each other. Why non-nuclear states are not deterred from fighting nuclear states is an important and open question. But in a time when calls to ban the Bomb are being heard from more and more quarters, we must be clear about precisely what the broad trends toward peace can and cannot tell us. They may tell us nothing about why we have had no World War III, and little about the wisdom of banning the Bomb now.

Regarding the downward trend in *international* war, Professor Mack is friendlier to more palatable theories such as the “democratic peace” (democracies do not fight one another, and the proportion of democracies has increased, hence less war); the interdependence or “commercial peace” (states with extensive economic ties find it irrational to fight one another, and interdependence has increased, hence less war); and the notion that people around the world are more anti-war than their forebears were. Concerning the downward trend in *civil* wars, he favors theories of economic growth (where commerce is enriching enough people, violence is less appealing—a logic similar to that of the “commercial peace” thesis that applies among nations) and the end of the Cold War (which end reduced superpower support for rival rebel factions in so many Third-World countries).

These are all **plausible mechanisms** for peace. What is more, none of them excludes any other; all could be working toward the same end. That would be somewhat puzzling, however. Is the world just lucky these days? How is it that an array of peace-inducing factors happens to be working coincidentally in our time, when such a magical array was absent in the past? The answer may be that one or more of these mechanisms reinforces some of the others, or perhaps some of them are mutually reinforcing. Some scholars, for example, have been focusing on whether economic growth might support democracy and vice versa, and whether both might support international cooperation, including to end civil wars.

We would still need to explain how this charmed circle of causes got started, however. And here let me raise another factor, perhaps even less appealing than the “nuclear peace” thesis, at least outside of the United States. That factor is what international relations scholars call hegemony—specifically American hegemony.

A theory that many regard as discredited, but that refuses to go away, is called hegemonic stability theory. The theory emerged in the 1970s in the realm of international political economy. It asserts that for the global economy to remain open—for countries to keep barriers to trade and investment low—one powerful country must take the lead. Depending on the theorist we consult, “taking the lead” entails paying for global public goods (keeping the sea lanes open, providing liquidity to the international economy), coercion (threatening to raise trade barriers or withdraw military protection from countries that cheat on the rules), or both. The theory is skeptical that international cooperation in economic matters can emerge or endure absent a hegemon. The distastefulness of such claims is self-evident: they imply that it is good for everyone the world over if one country has more wealth and power than others. More precisely, they imply that it has been good for the world that the United States has been so predominant.

There is no obvious reason why hegemonic stability theory could not apply to other areas of international cooperation, including in security affairs, human rights, international law, peacekeeping (UN or otherwise), and so on. What I want to suggest here—suggest, not test—is that American hegemony might just be a deep cause of the steady decline of political deaths in the world.

How could that be? After all, the report states that United States is the third most war-prone country since 1945. Many of the deaths depicted in Figure 10.4 were in wars that involved the United States (the Vietnam War being the leading one). Notwithstanding politicians’ claims to the contrary, a candid look at U.S. foreign policy reveals that the country is as ruthlessly self-interested as any other great power in history.

The answer is that U.S. hegemony might just be a **deeper cause of the proximate causes outlined by** Professor Mack. Consider economic growth and openness to foreign trade and investment, which (so say some theories) **render violence irrational**. American power and policies may be responsible for these in two related ways. First, at least since the 1940s Washington has prodded other countries to embrace the market capitalism that entails economic openness and produces **sustainable** economic growth. The United States promotes capitalism for selfish reasons, of course: its own domestic system depends upon growth, which in turn depends upon the efficiency gains from economic interaction with foreign countries, and the more the better. During the Cold War most of its allies accepted some degree of market-driven growth.

Second, the U.S.-led western victory in the Cold War damaged the credibility of alternative paths to development—communism and import-substituting industrialization being the two leading ones—and left market capitalism the best model. The end of the Cold War also involved an end to the billions of rubles in Soviet material support for regimes that tried to make these alternative models work. (It also, as Professor Mack notes, eliminated the superpowers’ incentives to feed civil violence in the Third World.) What we call globalization is caused in part by the emergence of the United States as the global hegemon.

The same case can be made, with somewhat more difficulty, concerning the spread of democracy. Washington has supported democracy only under certain conditions—the chief one being the absence of a popular anti-American movement in the target state—but those conditions have become much more widespread following the collapse of communism. Thus in the 1980s the Reagan administration—the most anti-communist government America ever had—began to dump America’s old dictator friends, starting in the Philippines. Today Islamists tend to be anti-American, and so the Obama administration is skittish about democracy in Egypt and other authoritarian Muslim countries. But general U.S. material and moral support for liberal democracy remains strong.

The trouble with hegemonic stability theory is that it is difficult to test. The difficulty lies in the unobservable qualities of hegemony: it is about not simply material power—guns and money—but “soft power,” persuasion, ideas, things difficult to quantify and measure. Still, many scholars of international relations continue to think that there is much to the theory. The implications are large. If American hegemony does indeed underpin, at least indirectly, the virtuous macro-trends outlined in Professor Mack’s essay—the overall downward trend in wars and political deaths—then the decline in American hegemony many analysts are now seeing is about much more than the humbling of a superpower.

#### History proves hegemony is on better for global peace

**Gobry 11** [Pascal—Emmanuel Gobry, *Paris based entrepreneur with a degree in political science,* August 23, 2011, “Hey Ron Paul Fans: hope you know that if America stopped being the world’s leader, America’s economy would collapse”, <http://www.businessinsider.com/america-world-police-2011-8>]

Well, maybe no one country can replace the United States, but maybe everyone could chip in: Europe and the U.S. would ensure the security of the Atlantic, India of South Asia, China that of East Asia (which will certainly go down well in Taiwan and Japan) and so forth. Except that history teaches us that these "multipolar" zones of influences lead to one thing: war. In the 17th century, Britain, France and Spain fought endlessly for naval superiority. Only when Britain became most powerful did peace arrive and global trade begin in earnest. Same thing with the Punic Wars between Rome and Carthage. And so on. But let's imagine an ideal libertarian scenario. Let's imagine that instead of a specific country, or even set of countries, global security is provided by private actors through some combination of mercenaries and insurance. By definition this would still raise the cost of global trade dramatically. Those mercenaries and insurance providers would still have to be paid, and those costs would still be reflected in the price of shipping. So it would still amount to a huge global tariff. All but the most hardcore libertarians realize that government has a role in providing for the public good, things that benefit everyone but that it doesn't make sense for any individual actor to pay for. Like it or not, global American military hegemony is a public good. The fact that the U.S. military is so much more powerful than anyone else (indeed, everyone else combined) means that global trade is safer, and thereby cheaper, than it's ever been before, which benefits the global economy and the U.S. directly and tremendously.

#### Alt fails—they don’t have a workable replacement for hegemony. Primacy solves the impact best

Kagan, 11 – PhD, graduate of Yale and Harvard’s Kennedy School of Government, CFR member, US ambassador to NATO, Senior Associate at the Carnegie Endowment for International Peace (1/24, Robert, Weekly Standard, “The price of power”, http://www.weeklystandard.com/articles/price-power\_533696.html?page=1, WEA)

The only way to find substantial savings in the defense budget, therefore, is to change American strategy fundamentally. The Simpson-Bowles commission suggests as much, by calling for a reexamination of America’s “21st century role,” although it doesn’t begin to define what that new role might be.

Others have. For decades “realist” analysts have called for a strategy of “offshore balancing.” Instead of the United States providing security in East Asia and the Persian Gulf, it would withdraw its forces from Japan, South Korea, and the Middle East and let the nations in those regions balance one another. If the balance broke down and war erupted, the United States would then intervene militarily until balance was restored. In the Middle East and Persian Gulf, for instance, Christopher Layne has long proposed “passing the mantle of regional stabilizer” to a consortium of “Russia, China, Iran, and India.” In East Asia offshore balancing would mean letting China, Japan, South Korea, Australia, and others manage their own problems, without U.S. involvement—again, until the balance broke down and war erupted, at which point the United States would provide assistance to restore the balance and then, if necessary, intervene with its own forces to restore peace and stability.

Before examining whether this would be a wise strategy, it is important to understand that this really is the only genuine alternative to the one the United States has pursued for the past 65 years. To their credit, Layne and others who support the concept of offshore balancing have eschewed halfway measures and airy assurances that we can do more with less, which are likely recipes for disaster. They recognize that either the United States is actively involved in providing security and stability in regions beyond the Western Hemisphere, which means maintaining a robust presence in those regions, or it is not. Layne and others are frank in calling for an end to the global security strategy developed in the aftermath of World War II, perpetuated through the Cold War, and continued by four successive post-Cold War administrations.

At the same time, it is not surprising that none of those administrations embraced offshore balancing as a strategy. The idea of relying on Russia, China, and Iran to jointly “stabilize” the Middle East and Persian Gulf will not strike many as an attractive proposition. Nor is U.S. withdrawal from East Asia and the Pacific likely to have a stabilizing effect on that region. The prospects of a war on the Korean Peninsula would increase. Japan and other nations in the region would face the choice of succumbing to Chinese hegemony or taking unilateral steps for self-defense, which in Japan’s case would mean the rapid creation of a formidable nuclear arsenal.

Layne and other offshore balancing enthusiasts, like John Mearsheimer, point to two notable occasions when the United States allegedly practiced this strategy. One was the Iran-Iraq war, where the United States supported Iraq for years against Iran in the hope that the two would balance and weaken each other. The other was American policy in the 1920s and 1930s, when the United States allowed the great European powers to balance one another, occasionally providing economic aid, or military aid, as in the Lend-Lease program of assistance to Great Britain once war broke out. Whether this was really American strategy in that era is open for debate—most would argue the United States in this era was trying to stay out of war not as part of a considered strategic judgment but as an end in itself. Even if the United States had been pursuing offshore balancing in the first decades of the 20th century, however, would we really call that strategy a success? The United States wound up intervening with millions of troops, first in Europe, and then in Asia and Europe simultaneously, in the two most dreadful wars in human history.

It was with the memory of those two wars in mind, and in the belief that American strategy in those interwar years had been mistaken, that American statesmen during and after World War II determined on the new global strategy that the United States has pursued ever since. Under Franklin Roosevelt, and then under the leadership of Harry Truman and Dean Acheson, American leaders determined that the safest course was to build “situations of strength” (Acheson’s phrase) in strategic locations around the world, to build a “preponderance of power,” and to create an international system with American power at its center. They left substantial numbers of troops in East Asia and in Europe and built a globe-girdling system of naval and air bases to enable the rapid projection of force to strategically important parts of the world. They did not do this on a lark or out of a yearning for global dominion. They simply rejected the offshore balancing strategy, and they did so because they believed it had led to great, destructive wars in the past and would likely do so again. They believed their new global strategy was more likely to deter major war and therefore be less destructive and less expensive in the long run. Subsequent administrations, from both parties and with often differing perspectives on the proper course in many areas of foreign policy, have all agreed on this core strategic approach.

From the beginning this strategy was assailed as too ambitious and too expensive. At the dawn of the Cold War, Walter Lippmann railed against Truman’s containment strategy as suffering from an unsustainable gap between ends and means that would bankrupt the United States and exhaust its power. Decades later, in the waning years of the Cold War, Paul Kennedy warned of “imperial overstretch,” arguing that American decline was inevitable “if the trends in national indebtedness, low productivity increases, [etc.]” were allowed to continue at the same time as “massive American commitments of men, money and materials are made in different parts of the globe.” Today, we are once again being told that this global strategy needs to give way to a more restrained and modest approach, even though the indebtedness crisis that we face in coming years is not caused by the present, largely successful global strategy.

Of course it is precisely the success of that strategy that is taken for granted. The enormous benefits that this strategy has provided, including the financial benefits, somehow never appear on the ledger. They should. We might begin by asking about the global security order that the United States has sustained since Word War II—the prevention of major war, the support of an open trading system, and promotion of the liberal principles of free markets and free government. How much is that order worth? What would be the cost of its collapse or transformation into another type of order?

Whatever the nature of the current economic difficulties, the past six decades have seen a greater increase in global prosperity than any time in human history. Hundreds of millions have been lifted out of poverty. Once-backward nations have become economic dynamos. And the American economy, though suffering ups and downs throughout this period, has on the whole benefited immensely from this international order. One price of this success has been maintaining a sufficient military capacity to provide the essential security underpinnings of this order. But has the price not been worth it? In the first half of the 20th century, the United States found itself engaged in two world wars. In the second half, this global American strategy helped produce a peaceful end to the great-power struggle of the Cold War and then 20 more years of great-power peace. Looked at coldly, simply in terms of dollars and cents, the benefits of that strategy far outweigh the costs.

The danger, as always, is that we don’t even realize the benefits our strategic choices have provided. Many assume that the world has simply become more peaceful, that great-power conflict has become impossible, that nations have learned that military force has little utility, that economic power is what counts. This belief in progress and the perfectibility of humankind and the institutions of international order is always alluring to Americans and Europeans and other children of the Enlightenment. It was the prevalent belief in the decade before World War I, in the first years after World War II, and in those heady days after the Cold War when people spoke of the “end of history.” It is always tempting to believe that the international order the United States built and sustained with its power can exist in the absence of that power, or at least with much less of it. This is the hidden assumption of those who call for a change in American strategy: that the United States can stop playing its role and yet all the benefits that came from that role will keep pouring in. This is a great if recurring illusion, the idea that you can pull a leg out from under a table and the table will not fall over.

Much of the present debate, it should be acknowledged, is not about the defense budget or the fiscal crisis at all. It is only the latest round in a long-running debate over the nature and purposes of American foreign policy. At the tactical level, some use the fiscal crisis as a justification for a different approach to, say, Afghanistan. Richard Haass, for instance, who has long favored a change of strategy from “counterinsurgency” to “counterterrorism,” now uses the budget crisis to bolster his case—although he leaves unclear how much money would be saved by such a shift in strategy.

At the broader level of grand strategy, the current debate, though revived by the budget crisis, can be traced back a century or more, but its most recent expression came with the end of the Cold War. In the early 1990s, some critics, often calling themselves “realists,” expressed their unhappiness with a foreign policy—first under George H.W. Bush and then under Bill Clinton—that cast the United States as leader of a “new world order,” the “indispensable nation.” As early as 1992, Robert W. Tucker and David C. Hendrickson assailed President Bush for launching the first Persian Gulf war in response to Saddam Hussein’s invasion and occupation of Kuwait. They charged him with pursuing “a new world role . . . required neither by security need nor by traditional conceptions of the nation’s purpose,” a role that gave “military force” an “excessive and disproportionate . . . position in our statecraft.”

Tucker and Hendrickson were frank enough to acknowledge that, *pace* Paul Kennedy, the “peril” was not actually “to the nation’s purse” or even to “our interests” but to the nation’s “soul.” This has always been the core critique of expansive American foreign policy doctrines, from the time of the Founders to the present—not that a policy of extensive global involvement is necessarily impractical but that it is immoral and contrary to the nation’s true ideals.

Today this alleged profligacy in the use of force is variously attributed to the influence of “neoconservatives” or to those Mearsheimer calls the “liberal imperialists” of the Clinton administration, who have presumably now taken hold of the Obama administration as well. But the critics share a common premise: that if only the United States would return to a more “normal” approach to the world, intervening abroad far less frequently and eschewing efforts at “nation-building,” then this would allow the United States to cut back on the resources it expends on foreign policy.

Thanks to Haass’s clever formulation, there has been a great deal of talk lately about “wars of choice” as opposed to “wars of necessity.” Haass labels both the war in Iraq and the war in Afghanistan “wars of choice.” Today, many ask whether the United States can simply avoid such allegedly optional interventions in the future, as well as the occupations and exercises in “nation-building” that often seem to follow.

Although the idea of eliminating “wars of choice” appears sensible, the historical record suggests it will not be as simple as many think. The problem is, almost every war or intervention the United States has engaged in throughout its history has been optional—and not just the Bosnias, Haitis, Somalias, or Vietnams, but the Korean War, the Spanish-American War, World War I, and even World War II (at least the war in Europe), not to mention the many armed interventions throughout Latin America and the Caribbean over the course of the past century, from Cuba in 1898 to Panama in 1989. A case can be made, and has been made by serious historians, that every one of these wars and interventions was avoidable and unnecessary. To note that our most recent wars have also been wars of choice, therefore, is not as useful as it seems.

In theory, the United States could refrain from intervening abroad. But, in practice, will it? Many assume today that the American public has had it with interventions, and Alice Rivlin certainly reflects a strong current of opinion when she says that “much of the public does not believe that we need to go in and take over other people’s countries.” That sentiment has often been heard after interventions, especially those with mixed or dubious results. It was heard after the four-year-long war in the Philippines, which cost 4,000 American lives and untold Filipino casualties. It was heard after Korea and after Vietnam. It was heard after Somalia. Yet the reality has been that after each intervention, the sentiment against foreign involvement has faded, and the United States has intervened again.

Depending on how one chooses to count, the United States has undertaken roughly 25 overseas interventions since 1898:

Cuba, 1898

The Philippines, 1898-1902

China, 1900

Cuba, 1906

Nicaragua, 1910 & 1912

Mexico, 1914

Haiti, 1915

Dominican Republic, 1916

Mexico, 1917

World War I, 1917-1918

Nicaragua, 1927

World War II, 1941-1945

Korea, 1950-1953

Lebanon, 1958

Vietnam, 1963-1973

Dominican Republic, 1965

Grenada, 1983

Panama, 1989

First Persian Gulf war, 1991

Somalia, 1992

Haiti, 1994

Bosnia, 1995

Kosovo, 1999

Afghanistan, 2001-present

Iraq, 2003-present

That is one intervention every 4.5 years on average. Overall, the United States has intervened or been engaged in combat somewhere in 52 out of the last 112 years, or roughly 47 percent of the time. Since the end of the Cold War, it is true, the rate of U.S. interventions has increased, with an intervention roughly once every 2.5 years and American troops intervening or engaged in combat in 16 out of 22 years, or over 70 percent of the time, since the fall of the Berlin Wall.

The argument for returning to “normal” begs the question: What is normal for the United States? The historical record of the last century suggests that it is not a policy of nonintervention. This record ought to raise doubts about the theory that American behavior these past two decades is the product of certain unique ideological or doctrinal movements, whether “liberal imperialism” or “neoconservatism.” Allegedly “realist” presidents in this era have been just as likely to order interventions as their more idealistic colleagues. George H.W. Bush was as profligate an intervener as Bill Clinton. He invaded Panama in 1989, intervened in Somalia in 1992—both on primarily idealistic and humanitarian grounds—which along with the first Persian Gulf war in 1991 made for three interventions in a single four-year term. Since 1898 the list of presidents who ordered armed interventions abroad has included William McKinley, Theodore Roose-velt, William Howard Taft, Woodrow Wilson, Franklin Roosevelt, Harry Truman, Dwight Eisenhower, John F. Kennedy, Ronald Reagan, George H.W. Bush, Bill Clinton, and George W. Bush. One would be hard-pressed to find a common ideological or doctrinal thread among them—unless it is the doctrine and ideology of a mainstream American foreign policy that leans more toward intervention than many imagine or would care to admit.

Many don’t want to admit it, and the only thing as consistent as this pattern of American behavior has been the claim by contemporary critics that it is abnormal and a departure from American traditions. The anti-imperialists of the late 1890s, the isolationists of the 1920s and 1930s, the critics of Korea and Vietnam, and the critics of the first Persian Gulf war, the interventions in the Balkans, and the more recent wars of the Bush years have all insisted that the nation had in those instances behaved unusually or irrationally. And yet the behavior has continued.

To note this consistency is not the same as justifying it. The United States may have been wrong for much of the past 112 years. Some critics would endorse the sentiment expressed by the historian Howard K. Beale in the 1950s, that “the men of 1900” had steered the United States onto a disastrous course of world power which for the subsequent half-century had done the United States and the world no end of harm. But whether one lauds or condemns this past century of American foreign policy—and one can find reasons to do both—the fact of this consistency remains. It would require not just a modest reshaping of American foreign policy priorities but a sharp departure from this tradition to bring about the kinds of changes that would allow the United States to make do with a substantially smaller force structure.

Is such a sharp departure in the offing? It is no doubt true that many Americans are unhappy with the on-going warfare in Afghanistan and to a lesser extent in Iraq, and that, if asked, a majority would say the United States should intervene less frequently in foreign nations, or perhaps not at all. It may also be true that the effect of long military involvements in Iraq and Afghanistan may cause Americans and their leaders to shun further interventions at least for a few years—as they did for nine years after World War I, five years after World War II, and a decade after Vietnam. This may be further reinforced by the difficult economic times in which Americans are currently suffering. The longest period of nonintervention in the past century was during the 1930s, when unhappy memories of World War I combined with the economic catastrophe of the Great Depression to constrain American interventionism to an unusual degree and produce the first and perhaps only genuinely isolationist period in American history.

So are we back to the mentality of the 1930s? It wouldn’t appear so. There is no great wave of isolationism sweeping the country. There is not even the equivalent of a Patrick Buchanan, who received 3 million votes in the 1992 Republican primaries. Any isolationist tendencies that might exist are severely tempered by continuing fears of terrorist attacks that might be launched from overseas. Nor are the vast majority of Americans suffering from economic calamity to nearly the degree that they did in the Great Depression.

Even if we were to repeat the policies of the 1930s, however, it is worth recalling that the unusual restraint of those years was not sufficient to keep the United States out of war. On the contrary, the United States took actions which ultimately led to the greatest and most costly foreign intervention in its history. Even the most determined and in those years powerful isolationists could not prevent it.

Today there are a number of obvious possible contingencies that might lead the United States to substantial interventions overseas, notwithstanding the preference of the public and its political leaders to avoid them. Few Americans want a war with Iran, for instance. But it is not implausible that a president—indeed, this president—might find himself in a situation where military conflict at some level is hard to avoid. The continued success of the international sanctions regime that the Obama administration has so skillfully put into place, for instance, might eventually cause the Iranian government to lash out in some way—perhaps by attempting to close the Strait of Hormuz. Recall that Japan launched its attack on Pearl Harbor in no small part as a response to oil sanctions imposed by a Roosevelt administration that had not the slightest interest or intention of fighting a war against Japan but was merely expressing moral outrage at Japanese behavior on the Chinese mainland. Perhaps in an Iranian contingency, the military actions would stay limited. But perhaps, too, they would escalate. One could well imagine an American public, now so eager to avoid intervention, suddenly demanding that their president retaliate. Then there is the possibility that a military exchange between Israel and Iran, initiated by Israel, could drag the United States into conflict with Iran. Are such scenarios so farfetched that they can be ruled out by Pentagon planners?

Other possible contingencies include a war on the Korean Peninsula, where the United States is bound by treaty to come to the aid of its South Korean ally; and possible interventions in Yemen or Somalia, should those states fail even more than they already have and become even more fertile ground for al Qaeda and other terrorist groups. And what about those “humanitarian” interventions that are first on everyone’s list to be avoided? Should another earthquake or some other natural or man-made catastrophe strike, say, Haiti and present the looming prospect of mass starvation and disease and political anarchy just a few hundred miles off U.S. shores, with the possibility of thousands if not hundreds of thousands of refugees, can anyone be confident that an American president will not feel compelled to send an intervention force to help?

Some may hope that a smaller U.S. military, compelled by the necessity of budget constraints, would prevent a president from intervening. More likely, however, it would simply prevent a president from intervening effectively. This, after all, was the experience of the Bush administration in Iraq and Afghanistan. Both because of constraints and as a conscious strategic choice, the Bush administration sent too few troops to both countries. The results were lengthy, unsuccessful conflicts, burgeoning counterinsurgencies, and loss of confidence in American will and capacity, as well as large annual expenditures. Would it not have been better, and also cheaper, to have sent larger numbers of forces initially to both places and brought about a more rapid conclusion to the fighting? The point is, it may prove cheaper in the long run to have larger forces that can fight wars quickly and conclusively, as Colin Powell long ago suggested, than to have smaller forces that can’t. Would a defense planner trying to anticipate future American actions be wise to base planned force structure on the assumption that the United States is out of the intervention business? Or would that be the kind of penny-wise, pound-foolish calculation that, in matters of national security, can prove so unfortunate?

**Studies prove conflicts have been decreasing – primacy is THE reason.**

**Drezner, 2005**

[Daniel, Gregg Easterbrook, Associate Professor of International Politics at the Fletcher School of Law and Diplomacy at Tufts University, “War, and the dangers of extrapolation,” may 25]

Daily explosions in Iraq, massacres in Sudan, the Koreas smakestaring at each other through artillery barrels, a Hobbesian war of all against all in eastern Congo--combat plagues human society as it has, perhaps, since our distant forebears realized that a tree limb could be used as a club. But here is something you would never guess from watching the news: War has entered a cycle of decline. Combat in Iraq and in a few other places is an exception to a significant global trend that has gone nearly unnoticed--namely that, for about 15 years, there have been steadily fewer armed conflicts worldwide. In fact, it is possible that a person's chance of dying because of war has, in the last decade or more, become the lowest in human history.  Is Easterbrook right? He has a few more paragraphs on the numbers:  The University of Maryland studies find the number of wars and armed conflicts worldwide peaked in 1991 at 51, which may represent the most wars happening simultaneously at any point in history. Since 1991, the number has fallen steadily. There were 26 armed conflicts in 2000 and 25 in 2002, even after the Al Qaeda attack on the United States and the U.S. counterattack against Afghanistan. By 2004, Marshall and Gurr's latest study shows, the number of armed conflicts in the world had declined to 20, even after the invasion of Iraq. All told, there were less than half as many wars in 2004 as there were in 1991.  Marshall and Gurr also have a second ranking, gauging the magnitude of fighting. This section of the report is more subjective. Everyone agrees that the worst moment for human conflict was World War II; but how to rank, say, the current separatist fighting in Indonesia versus, say, the Algerian war of independence is more speculative. Nevertheless, the Peace and Conflict studies name 1991 as the peak post-World War II year for totality of global fighting, giving that year a ranking of 179 on a scale that rates the extent and destructiveness of combat. By 2000, in spite of war in the Balkans and genocide in Rwanda, the number had fallen to 97; by 2002 to 81; and, at the end of 2004, it stood at 65. This suggests the extent and intensity of global combat is now less than half what it was 15 years ago.  Easterbrook spends the rest of the essay postulating the causes of this -- the decline in great power war, the spread of democracies, the growth of economic interdependence, and even the peacekeeping capabilities of the United Nations.  Easterbrook makes a lot of good points -- most people are genuinely shocked when they are told that even in a post-9/11 climate, there has been a steady and persistent decline in wars and deaths from wars. That said, what bothers me in the piece is what Easterbrook leaves out.  First, he neglects to mention the biggest reason for why war is on the decline -- there's a global hegemon called the United States right now. Easterbrook acknowledges that "the most powerful factor must be the end of the cold war" but he doesn't understand *why*it's the most powerful factor. Elsewhere in the piece he talks about the growing comity among the great powers, without discussing the elephant in the room: the reason the "great powers" get along is that the United States is much, much more powerful than anyone else. If you quantify power only by relative military capabilities, the U.S. is a great power, there are maybe ten or so middle powers, and then there are a lot of mosquitoes.[*If the U.S. is so powerful, why can't it subdue the Iraqi insurgency?--ed*. Power is a relative measure -- the U.S. might be having difficulties, but no other country in the world would have fewer problems.] Joshua Goldstein, who knows a thing or two about this phenomenon, made this clear in a Christian Science Monitor op-ed three years ago:  We probably owe this lull to the end of the cold war, and to a unipolar world order with a single superpower to impose its will in places like Kuwait, Serbia, and Afghanistan. The emerging world order is not exactly benign – Sept. 11 comes to mind – and Pax Americana delivers neither justice nor harmony to the corners of the earth. But a unipolar world is inherently more peaceful than the bipolar one where two superpowers fueled rival armies around the world. The long-delayed "peace dividend" has arrived, like a tax refund check long lost in the mail. The difference in language between Goldstein and Easterbrook highlights my second problem with "The End of War?" Goldstein rightly refers to the past fifteen years as a "lull" -- a temporary reduction in war and war-related death. The flip side of U.S. hegemony being responsible for the reduction of armed conflict is what would happen if U.S. hegemony were to ever fade away. Easterbrook focuses on the trends that suggest an ever-decreasing amount of armed conflict -- and I hope he's right. But I'm enough of a realist to know that if the U.S. should find its primacy challenged by, say, a really populous non-democratic country on the other side of the Pacific Ocean, all best about the utility of economic interdependence, U.N. peacekeeping, and the spread ofdemocracy are right out the window.  UPDATE: To respond to a few thoughts posted by the commenters:  1) To spell things out a bit more clearly -- U.S. hegemony important to the reduction of conflict in two ways. First, U.S. power can act as a powerful if imperfect constraint on pairs of enduring rivals (Greece-Turkey, India-Pakistan) that contemplate war on a regular basis. It can't stop every conflict, but it can blunt a lot of them. Second, and more important to Easterbrook's thesis, U.S. supremacy in conventional military affairs prevents other middle-range states -- China, Russia, India, Great Britain, France, etc. -- from challenging theU.S. or each other in a war. It would be suicide for anyone to fight a war with the U.S., and if any of thesecountries waged a war with each other, the

#### The United States Federal Government should establish a matching funds program, increase research and development funding, and reduce licensing restrictions for thorium power production in the United States.

#### Contention two is Solvency –

#### The tech is feasible but federal action via all three planks of the plan must happen

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

WHILE A NEW MANHATTAN PROIECT is not going to happen, some¶ form of government support is necessary. Transforming the energy¶ sector is too large a project for the private sector alone. That’s the¶ fundamental dilemma that faces the thorium movement. However,¶ there is a middle way, involving higher levels of federal support, a¶ conscious industrial policy to foster advanced nuclear power, and¶ broad incentives to harness the entrepreneurial energy of the private¶ sector.¶ Congress and the White House should establish a matching funds¶ program**,** aimed exclusively at two or three technologies, including¶ thorium power, to drive the creation of a Generation IV reactor¶ industry that would swiftly within this decade—build prototypes and¶ then small commercial versions, first to supplement and later replace¶ the current collection of outmoded plants, then to replace existing coal¶ plants. The government should overhaul the NRC to streamline the¶ licensing process and favor Generation IV designs over incremental,¶ halfhearted advances. It should explicitly benefit start-ups, like¶ TerraPower and Flibe Energy, not just established vendors and¶ manufacturers like GE, and it should promote homegrown technologies¶ like the LFTR. And it should be conditional on not just submitting new¶ designs for licensing but bringing reactors into commercial production¶ in the shortest time possible. With matching investments coming from¶ the private sector, the program should provide at least $2 billion a year¶ and no more than $5 billion, for a total of $4 billion to $10 billion a¶ year.¶ Many conservatives and liberals alike scoff at the notion of¶ significant funding for new nuclear power—or, indeed, for renewable¶ energy projects such as wind farms and solar arrays. In September¶ 2011 Solyndra, the California-based maker of solar panels, filed for¶ bankruptcy protection after receiving a loan guarantee for more than¶ half a billion dollars from the federal government. Critics of¶ renewables funding, such as Robert Bryce, seized on the Solyndra¶ affair, which threatened to turn into a major political landmine for the¶ Obama administration, as evidence of why the federal government¶ should never “pick winners” in the energy sector.¶ Here it’s important to recall that, as of late 2011, investment by the¶ United States in new energy sources was paltry compared with that of¶ the countries of Western Europe, to say nothing of China. The Solyndra¶ debacle represented less than 3 percent of a loan program that had¶ delivered $19 billion in private capital for reshaping the energy¶ economy, creating thousands of jobs in the worst employment¶ environment since the Great Depression.¶ For further perspective, keep in mind that, according to the Nobel¶ Prize— winning economist ]oseph Stiglitz, in 2007 the Iraq War was¶ costing $720 million per day.“ Big Oil subsidies are also huge in¶ comparison with investment in alternative energy. In 2010 the¶ Government Accountability Office found that the oil industry’s waiver¶ for royalties for deep-water drilling in the Gulf of Mexico—originally¶ passed by Congress in 1995, when oil was selling for $18 a barrel¶ —“could cost the Treasury $55 billion or more in lost revenue over the¶ life of the leases.” The federal government is already picking winners—¶ it’s just backing the wrong horse. Simply requiring big oil companies¶ operating in the Gulf to pay half the usual royalties for extracting oil¶ from U.S. territorial waters would fully fund a nuclear power¶ transformation program through 2020, at no cost to U.S. taxpayers. The¶ tobacco industry has funded billions of dollars in health-care and¶ prevention programs to move toward a smoke-free society. Let the¶ fossil fuel industry take a large role in funding the movement toward a¶ carbon-free society based on thorium power.¶ ----¶ SO, LET US ASSUME THAT A NUCLEAR POWER transformation¶ program is fully funded. The goals are to:¶ - Build a prototype LFTR within five years¶ - Commercialize LFTRs starting in 2020¶ - Bring LFTRs on line at a rate sufficient to replace fossil fuel plants¶ with clean energy sources by 2050¶ How much power would that be? The United States consumed about¶ 3.8 million gigawatt-hours of electricity in 2010. Coal accounted for 44¶ percent of that, nuclear for 20 percent. Total U.S. electricity-generating¶ capacity is about 1,000 gigawatts. Under an optimistic scenario for¶ renewable energy production from wind, solar, biomass, geothermal,¶ and so on, let’s say that, to reduce carbon emissions enough to stave off¶ catastrophic climate change, by 2050 we must increase the portion of¶ our electricity generated by nuclear power to 50 percent. One half of¶ 1,000 gigawatts is 500 gigawatts, or 500,000 megawatts.¶ Electricity demand will grow in the next four decades, of course, by¶ as much as 50 to 60 percent in some forecasts. But I’m being optimistic.¶ So let us say that improved conservation technology and changing¶ consumer habits will limit the increase in demand, and we must build¶ enough new nuclear power plants to generate 500 gigawatts by 2050.¶ That’s the equivalent of 500 thousand-megawatt nuclear reactors.¶ Between 2020 and 2050 that means building about 17 LFTRs a year.¶ Let’s be ambitious and call it 20 new thousand-megawatt thorium¶ plants a year, for a total of 600.¶ One of the beauties of LFTRs is that they can be mass-produced.¶ Small, modular LFTRs can be built as 250 megawatt machines and¶ assembled into larger plants. Boeing builds about one $200 million jet a¶ day. A modern airliner has many, many more moving parts and¶ greater overall complexity than a 250-megawatt LFTR. If we build, say,¶ four LFTR manufacturing plants a year with each plant producing 20¶ 250-megawatt reactors (five 1,000-megawatt plants) a year (think of the¶ jobs and spillover technological benefits each plant would bring to the¶ state in which it’s located), that would just about do it. And from 2050 to¶ 2100 we can build another 400 plants, until we have created 1,000¶ gigawatts of thorium power. By the end of the century, we will have¶ built a safe, clean energy infrastructure based on a mix of offshore and¶ land-based wind farms, big solar arrays in the West, geothermal, and¶ natural gas plants, layered on top of a baseload power-generating¶ sector of thorium reactors. Particularly in the Southwest, these plants¶ will use excess heat energy to desalinate seawater.¶ How much will this cost? Technology advances will bring the cost of¶ thorium reactors down **rapidly** after commercialization, potentially to¶ the cost of a new jet. Call it $1 billion per thousand-megawatt plant. The¶ cost of building 600 thousand-megawatt LFTRs (or twenty-four hundred¶ 250-megawatt machines) would come to $600 billion. Add 15 percent¶ for start-up costs and financing and round up: $700 billion. In¶ comparison, the 2010 budget for the U.S. Department of Defense was¶ $685 billion. In other words, for about what we spend in one year on¶ defense in wartime (which, by the way, is almost as much as all other¶ countries spend on defense combined), we can lay the foundation for a¶ thorium-based, carbon-free energy economy that could last a¶ millennium. And most of that construction cost will be borne by private¶ industry, which, thanks to the expedited licensing and speedy¶ construction of LFTRs, will generate profits from this construction¶ boom in a short timeframe. Consider the costs, direct and indirect, of¶ building any other thousand-megawatt power plant (coal, conventional¶ nuclear, solar, natural gas)—or of doing nothing and allowing climate¶ change to run rampant by midcentury. Building a couple dozen LFTRs¶ a year starts to sound like a bargain.¶ Alvin Weinberg’s vision of a nuclear-powered world running on¶ molten salt reactors will become a reality a couple of generations later¶ than he foresaw.¶ These are ambitious goals. What, then, must we do to pull them off?¶ To create a thorium energy economy in the next decade, **three things**¶ **must happen at once**: funding, licensing reform, and R&D. I have¶ already described the funding mechanism that must be put in place¶ quickly, by the end of 2013. Licensing reform and R&D—including the¶ development and procurement of the needed materials and fuel—must¶ occur in parallel. The president should order the NRC to expedite its¶ licensing process so that the period from application to final approval¶ is no more than five years. That means that by 2015, while a prototype¶ LFTR is being built (at the Savannah River Site, Idaho National¶ Laboratory, or Oak Ridge), companies will begin submitting¶ applications.¶ At the same time, you must have fuel to start up all those reactors.¶ Two kinds are required: fissile fuel to ignite the chain reaction and¶ transmute thorium into uranium-233, plus the thorium itself. Luckily¶ we have plenty of both. The Department of Energy (DOE) has more¶ than a ton of U-233, produced by past thorium reactor experiments, on¶ hand. Foolishly, the DOE is planning to spend half a billion dollars to¶ blend the U-233 with U-238 and throw it away in the desert. That plan¶ must be scrapped and the U-233 put to good use as starter fuel for¶ LFTRs.¶ As for thorium, the U.S. Geological Survey estimates that total¶ thorium reserves in the United States are about 440,000 tons, mostly in¶ Montana and Idaho. If we assume that future LFTRs will achieve an¶ energy efficiency of 50 percent (half the available energy in a given¶ unit of thorium is actually converted to electricity), then a single ton of¶ thorium would produce about 12.1 billion kilowatt-hours (or 12.1¶ million megawatt-hours) of electricity. About 1,650 tons of thorium¶ would satisfy all the electricity needs of the entire world for a single¶ year. Since LFTRs can he run as breeder reactors, producing more fuel¶ than they consume, 440,000 tons is effectively a limitless supply of¶ nuclear fuel.¶ ----¶ THE NEXT STEP, once a prototype reactor has been built and tested, is¶ to build a series of liquid fuel reactors to burn up the plutonium and¶ fission products from existing spent uranium fuel. Kirk Sorensen has¶ proposed a type of liquid chloride thorium reactor, a cousin to LFTRs,¶ that will consume transuranic fission products and use plutonium to¶ create uranium-233. The U-233 will be used to start up new LFTRs.¶ Next we must create the infrastructure to manufacture LFTRs. The¶ expertise to build these machines is dispersed among a cadre of startups¶ described in chapter 9, including Elibe Energy, DBI, and so on, as¶ well as among the big nuclear suppliers like GE and Westinghouse,¶ which already, in some cases, have R&D programs for liquid-core¶ reactors. As has happened in the electric vehicle market, the actual¶ manufacturers would likely include established companies (GE), startups¶ (Flibe), and joint ventures combining the two. States will compete¶ to host the new plants with tax incentives, university-based R&D¶ support, and training programs to provide the skilled workers. (Here¶ it’s worth noting that the Navy has for years been training recruits with¶ only high school educations to be shipboard nuclear engineers. The¶ new thorium power industry will create thousands of skilled, highpaying¶ jobs that do not require a Ph.D. in nuclear physics.)¶ It does no good to build carbon-free thorium reactors if you don’t get¶ rid of the existing nuclear and coal-fired plants. Decommissioning¶ nuclear reactors is a long, involved, and costly process. A typical decom¶ costs $300 million and takes a decade; an extreme case, like the¶ Hartford Weapons Reactor, can cost billions and take many decades.¶ Ways must be found to bring down that cost. One way would be to¶ build new LFTRs on the sites of old nuclear plants and use the new¶ thorium reactors to consume the fission products from the old¶ machines.¶ As for coal plants, new regulations from the Environmental¶ Protection Agency (EPA) will lead to the retirement of dozens of aging¶ facilities in the next few decades, regardless of what type of new plants¶ come on line. In July 2011 the consulting firm ICP released a report¶ saying that, while shutting down existing coal plants will take longer¶ than foreseen in the EPA deadlines, 30 to 50 gigawatts of coal-fired¶ electricity production will be retired in the coming decade.” Total coalfired¶ generating capacity in the United States is about 314 gigawatts.¶ Shutting down 50 gigawatts of that every decade, and replacing it with¶ safe, clean thorium power, will eliminate coal from the U.S. electrical¶ portfolio by 2070.¶ These are achievable goals. Remember: the obstacles to creating a¶ thorium power economy in the next 40 years are not technological or¶ even economic. They are political and perceptual. If we don’t do it, it ¶ will be because we chose not to—not because it was impossible.¶ ----¶ HERE IS WHERE THE CURRENT nuclear power establishment—the¶ nuclearati— guffaw and roll their eyes. There are a hundred reasons¶ why the scenario I’ve laid out will not happen, they say. Uranium is¶ inexpensive (for now), the existing reactor population is safe (except¶ when it’s not—see Fukushima), plenty of new reactor designs are less¶ radical than LFTRs (which is why they won’t make enough of a¶ difference), and so forth. We can’t do it because we’ve never done it¶ before.¶ They are right about one thing: the United States is not likely to be at¶ the center of the thorium power revolution. Here’s a more likely¶ scenario.¶ Discovering the advantages of thorium technology, the Chinese¶ accelerate their program to build a dozen LFTRs in the next 15 years.¶ They recruit the top thorium talent in the world and co-opt the nascent¶ Japanese program, signing lucrative contracts with the top nuclear¶ suppliers in Japan and South Korea, thus compressing further the R&D¶ timeline. By 2030 China is the leading source of LFTR technology—and¶ of raw thorium fuel—in the world.¶ India, watching its Asian rival move rapidly to the fore in advanced¶ nuclear power, shifts its three-stage program to a more accelerated¶ development schedule based on solid fuel technology from TerraPower¶ and Lightbridge. Using its huge reserves of thorium as leverage with¶ other emerging thorium power nations, such as the United Arab¶ Emirates, India builds a thriving thorium power sector, building¶ reactors at a slower pace than China but, by 2030, becoming a leader in¶ its own right. Enhanced energy security, and the economic power and¶ diplomatic prestige that come with it, allow India to reach a lasting¶ détente with its perennial foe, Pakistan.¶ Farther east, on the Pacific Rim, both Japan and South Korea rapidly¶ build thorium reactor technology sectors, supplying China and India¶ with the advanced materials and components they need while starting¶ to build thorium reactors of their own. By 2030 the fastest-growing¶ source of electricity in Asia is thorium power; by 2050 liquid fluoride¶ thorium reactors are supplying a significant fraction of the power not¶ only in China, India, Japan, and Korea but also in secondary,¶ technology-importing countries like Vietnam, Taiwan, Singapore, and¶ Indonesia.¶ Watching this transformation unfold in Asia, the nations of Western¶ Europe -- led by France, Norway, and the Czech Republic, already in¶ 2012 the home of significant thorium R&D efforts -- belatedly¶ underwrite their own thorium power programs. While the European¶ Union attempts to establish its own thorium power technology sector,¶ low-cost equipment and fuel from Asia prove irresistible, and China¶ becomes the Saudi Arabia of the new nuclear-powered world.¶ And the United States? Saddled with debt, paralyzed by woodenheaded¶ political opposition to taking action to reverse climate change,¶ and bound to powerful fossil fuel and nuclear power sectors and their¶ well-funded lobbyists, the United States enters an irreversible cycle of¶ declining living standards, diminishing international stature, and¶ ravaged cities. Civil unrest ensues, and the collapse of our political¶ institutions accelerates. Our top graduates, unfulfilled by their¶ professional prospects at home, emigrate to booming technological¶ centers like Shanghai, Singapore, and Seoul. Our vaunted military,¶ unable to procure energy for its far-flung overseas missions, contracts.¶ As in fourth-century Rome, the roads decay, harbors silt up, the legions¶ become disaffected, and the elite retreat into their marble palaces. All¶ because we failed to capitalize on a technology that we once held in¶ our hands.¶ THAT’S A WORST-CASE SCENARIO. And it’s hardly inevitable. So what¶ are the chances that Congress will back a technology that, though¶ proven and tested decades ago by American scientists, is seen today as¶ a radical new system? What is the likelihood that the American public¶ will support a new form of nuclear power so soon after Fukushima?¶ How plausible is it that Silicon Valley venture capital funds will¶ provide billions to thorium power start-ups?¶ One answer to all those questions is: no more likely than it was, in¶ August 1939, when Albeit Einstein wrote President Roosevelt to urge¶ development of atomic weapons, that the United States would design,¶ build, test, and detonate a nuclear warhead within six years. The¶ Manhattan Project, which mobilized vast intellectual, material, and¶ technical resources in a short amount of time, is often cited as the¶ paradigm for solving big and complex problems. General Groves’s list¶ of essential requirements, born out of his Manhattan Project¶ experience, has become famous in management theory circles: “Put¶ one man in charge, give him absolute authority, keep the chief outside¶ the bureaucracy, use existing government organizations whenever¶ possible, create a small advisory committee,” and so on. To that list,¶ based on the experience of the nuclear power industry, I would add,¶ “Keep military concerns separate from economic and energy-related¶ goals.” One main lesson of the thorium power debacle is that for too¶ long we have polluted nuclear power policy with rationales and¶ missions produced in the Pentagon. What a disgrace it would be if the¶ United States—the cradle of nuclear physics, the country that first¶ designed and built liquid-fuel thorium reactors, the greatest source of¶ technological innovation the world has ever known—failed to muster¶ the resources and the will to create the energy source for the twentyfirst¶ century and beyond.¶ Forests have been consumed to produce books wondering whether¶ we, as a nation and as a people, are still capable of Manhattan Project—¶ sized achievements and, if not, why not. The declinist school, it must be¶ said, is in ascendance, exemplified most clearly in books like The End¶ of Influence by the Berkeley economists J. Bradford DeLong and¶ Stephen Cohen: “The American standard of living will decline relative¶ to the rest of the industrialized and industrializing world. . . . The¶ United States will lose power and influence.”13¶ My middle-aged, well-educated American friends unquestionably¶ have a waning confidence that they will pass on to their children and¶ their grandchildren a world as clean, safe, peaceful, and full of promise¶ as the one we grew up in. Unimaginable budget deficits; rising¶ competition from populous and dynamic Asian countries; declining¶ educational, moral, and cultural standards; the rise of seemingly¶ insurmountable environmental crises; the coarsening of public¶ discourse; and the disappearance of inspirational, admirable¶ leadership have all contributed to our sense that we now live in a¶ Spenglerian era of Western decline. A New York magazine cover line¶ actually referred to this as the era of “Post-Hope America,” the same¶ week Foreign Policy magazine’s cover headline asked, plaintively,¶ “What Ails America?”¶ So, when I think about what I’ve seen reflected in thorium’s glossy¶ surface in my three years of research, it’s simple: hope. Hope that¶ technology can lead us out of the mess into which technology has¶ gotten us. Hope that through divine Providence or intelligent design or¶ the random workings of quantum mechanics, Earth has been granted¶ an inexhaustible energy source that will not destroy the systems and¶ balances that sustain life. Hope that my son, now 12 and a gifted¶ mathematician, may help engineer a thorium power revolution that¶ will solve the energy crisis, dissipate the threat of nuclear annihilation,¶ restore a sense of higher purpose and collective endeavor, and keep¶ the lights on for another few millennia at least. In about a century and¶ a half, the Age of Hydrocarbons delivered us a world of shrinking ice¶ caps, resource wars, mass extinctions, and creeping drought. It could¶ take us less than a century to reverse those trends and usher in the Age¶ of Thorium.¶ For millions of years, thorium has been there, awaiting the right¶ time, the right circumstances, and the right minds to bring it to light¶ and enable it to provide thousands of years of clean, safe, affordable¶ energy. Alvin Weinberg was right. The time is now. The technology¶ exists, the economics are favorable, and the need is urgent. The choice¶ is ours.

#### Current support is insufficient—appropriations fast-track development

Cannarra, 5/5/11 [Engineering and Environmental Consultant Member: AAAS, IEEE, Sierra Club Supporter: EDF, Greenpeace, NAPF, Nature Conservancy, NRDC, RAN, UCS, WWF… Affiliated with the Thorium Energy Alliance Thorium – A Safe, Abundant and ‘Fertile’ Power Source Dr. Alexander Cannara,http://cybercemetery.unt.edu/archive/brc/20120627230324/http://brc.gov/sites/default/files/comments/attachments/thoriumarticle\_a\_cannara\_0.pdf]

Today, for example, we in the US have limited support for better reactor Designs. We even have little interest in utility-funded, standard reactor construction. It’s not that alternate nuclear-power paths were never opened. It’s that Cold War policies dampened our own research, leaving the world with few developed options now that they’re essential. There is no source of power as dense and environmentally friendly as properly-chosen nuclear power. There’s no fission source as cheap or as lasting as the Thorium breeder. Yet, we in the US also have a regulatory agency, the NRC, holding just a few basic LWR power-plant designs for prospective builders to choose from, with some mix and match of components. And, each of those designs requires about $10 billion and many years to complete. No utility can invest that, which is why our present administration has promoted loan guarantees to get new plants built. Yet, even that hasn’t worked. Furthermore, the US NRC reports to Congress and can do only what that body mandates and funds**.** No work on alternative reactor designs, fuel cycles and rules can be expected from the NRC itself without new appropriations. Even a 1977 EPRI report(8) on the usefulness of Thorium in LWRs gained no industry action. Some new work has been funded by DoE (7), but not yet near the level needed, even if it continued from the excellent decades of work funded by the AEC and DoD at ORNL(5). Similarly, private investors see no near-term return, but great risk, because nuclear reactors require extensive design for safety and regulation – the function of government agencies andresearch**.** The present situation is odd, yet with some hope, as will be explained. “Nowadays [1994] I often hear arguments about whether the decision to concentrate on the LWR was correct. I must say that at the time I did not think it was; and 40 years later we realize, more clearly than we did then, that safety must take precedence even over economics—that no reactor system can be accepted unless it is first of all safe. However, in those earliest days we almost never compared the intrinsic safety of the LWR with the intrinsic safety of its competitors. We used to say that every reactor would be made safe by engineering interventions. We never systematically compared the complexity and scale of the necessary interventions for [different] reactors. So in this respect I would say that [AEC head] Ken Davis’ insistence on a single line, the LWR, was premature.” (Weinberg (5)) In this light, consider the reality all peoples of the world now share, though disproportioned by wealth. To meet just the internationally-estimated need to reduce greenhouse-gas (GHG) emissions now (January 2011) by a modest 4% per year, 2050 must see our (then) 9 billion souls emitting just 1 ton of CO2 per capita per year(1). And, with sea acidification and rise (see Rignot)(1) soon threatening over 100 million people, we need to be building and running one new, 1GWe emissions-free power plant each week for decades. A city-bound New Yorker currently causes emissions of 10 tons/year. A car-using Denver-ite 5/6/2011 Page 7 causes twice that. And, an average California home causes 7 tons of CO2 per year to be emitted, just from its internal energy use (see CEC reports). Only in remote, poor communities in Africa does any person now cause just 1 ton of CO2 to be added to Earth’s atmosphere each year. Sustainability, even at 1-ton per capita per year, is far from our reach. Regardless of pro/con debates on climate change, we are collectively making a Pascal Wager against already evident climate change growing worse due to our emissions – we’re “betting the farm” despite good hints as early as Nobel Laureate S. Arrhenius’ 1896 and 1905 papers on possible effects of unnatural CO2 emissions(1). Later, we didn’t listen to post-WWII analytical reports to governments; and our governments didn’t even follow up on research we’d paid for that pointed the way to safe, non-emitting nuclear power -- 50 years before this writing. Some Generation IV (8) efforts are finally in motion, but another decade will pass before any demonstration system will run. The emissions-free power debt will then be 1GWe x 10 x 52 (a plant a week unbuilt) or more, just for US needs. Perhaps the new Chinese commitment(4) will be speedier, but the shortfall will remain stupendous, worldwide. We need serious efforts today, if we wish to leave a future to our descendants. This article will explain why what has long been known about Thorium as a fertile nuclear fuel leads us to a viable future for Earth’s power and water needs. And, it will use as example the complementary reactor architecture designed by the same people who gave us the LWR, but who knew better was needed. Thus, this article is dedicated to Alvin Weinberg, H. MacPherson and their ORNL teams, who were aware of global warming before Wikipedia and spent 20 years (1954-1974) designing and operating MSRs. They led the way to safely fuelling our future via Thorium (3,4).

#### No tech obstacles to thorium reactors -- government support overcomes any issues.

#### Kazimi, ‘2

[Mujid, American Scientist, “Thorium Fuel for Nuclear Energy,”

http://www.americanscientist.org/issues/id.884,y.0,no.,content.true,page.1,css.print/issue.aspx]

Even with a whole-assembly seed-and-blanket core, where each type of fuel assembly is of homogenous construction, it is clear that the manufacture of the fuel and its management within the reactor would be more complicated than usual. In a typical power reactor, the fuel assemblies are shuffled at intervals so that each will be exposed, on average, to the same conditions of heat and radiation. In a seed-and-blanket core, the seeds must sustain power levels that are significantly above average, while the blanket assemblies experience far less stressful conditions. Thus the fuel in the seed rods reaches higher temperatures, releases more of the gaseous fission products into the limited space allowed for them within the fuel rods and requires more cooling than does the fuel used in the blanket regions. These demands can be accommodated in various ways—for example, by allowing more coolant to flow through the seeds and by making the fuel materials less resistant to the flow of heat. In the Radkowsky-Kurchatov approach, the seed rods are made from a metallic uranium alloy (following designs that have been tested in Russian submarines), which improves their thermal conductivity. In the MIT-Brookhaven scheme, the uranium oxide pellets within the seed rods are hollow, which lowers their temperature. Although the blanket rods are less problematic in this regard, they too must be carefully engineered so that the exterior cladding holds up well, the working lifetime of these rods being in some designs as long as 13 or 14 years. In addition to examining these various engineering concerns, investigators at CANES have also quantified the advantages of the seed-and-blanket designs in terms of their contribution to averting the proliferation of bomb- making materials, and we have also tried to evaluate their economics. We found that the seed-and-blanket arrangements produce less plutonium than competing schemes in which uranium and thorium are mixed at finer scales. But our results are not quite as optimistic as Radkowsky's earlier work had indicated: We calculate a reduction of only 60 percent (for the whole-assembly system) or 70 percent (if both seed and blanket rods are used within each assembly), compared with Radkowsky's estimate of an 80-percent reduction for the latter. Our calculations of plutonium production do, however, support Radkowsky's assertions that the spent fuel would contain appreciable amounts of plutonium-238, a highly radioactive isotope, which thus produces a lot of heat. Indeed, the plutonium-238 content would be three to four times higher than with conventional uranium fuels. As Radkowsky pointed out, the heat given off by this isotope would make it quite difficult if not impossible to fabricate and maintain a nuclear weapon. The production of such large amounts of plutonium-238 comes about because more of the fuel is consumed (or "burned up," in the lingo of nuclear engineers) than is the case in conventional uranium-fueled reactors. An equivalent amount of plutonium-238 could be created using an all- uranium fuel, but this would require a higher initial amount of fissile uranium (235U) than is typical in today's practice, and the economic projections for that are discouraging. Thus our recent work amply confirms that the various engineering concerns can be met and that running reactors on thorium could indeed forestall clandestine efforts to use the spent fuel for making bombs. But the results of our investigation into the economics of thorium are less clear-cut. We estimate that thorium-based fuels could cost anywhere from 10 percent less to about 10 percent more than conventional nuclear fuels. The wide range stems from fundamental uncertainties about the cost of the seed uranium (which must be four times more enriched in uranium-235 than is the case with typical nuclear fuels), the cost of fabricating the fuel assemblies and the savings that might accrue in the future as a result of the reduction in the amount of spent fuel in need of disposal. Although it seems unlikely that economics alone could drive the adoption of thorium fuels, there are no technical "show-stoppers" here. Modifications to the existing commercial infrastructure would clearly be needed, but no fundamentally new technology is required. And the fact that the relevant materials (thorium and enriched uranium) have a long record of experimental use in reactors lends credibility to the notion that this scheme could one day find widespread application, should policymakers push the nuclear industry in that direction.

#### We would export the tech – mechanism of the plan is key

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Export LFTR nuclear power plants. Simply generating inexpensive, nonpolluting LFTR power within the US is not enough to solve the global energy and environmental crises. The US should encourage exporting these small nuclear power plants because they can help the developing world end energy poverty, cut CO2 emissions globally, and become a $70 billion export industry to help the US economy. Russia, China, South Korea, and India all plan nuclear power plant exports. Lead! Who will lead? A transnational organization such as the United Nations? One nation such as the United States? Multiple state or provincial governments? Corporations? Leadership individuals? The United Nations can not solve our energy/climate crises. Dozens of IPCC-sponsored meetings only end in promises to agree and contention between rich and poor nations. Few nations will sacrifice national energy sovereignty for global good. The United States can lead in developing LFTR and thorium energy cheaper than coal. The US has the DOE national labs, the best university nuclear engineering programs, and the government/university/business tradition of entrepreneurism and commercialization. Political leadership is lacking. At the executive, congressional, and state levels elected officials fail to grasp the realities of economics, energy, environmental pollution, and global resource contention. Instead these politicians capitalize on the crowd-sourced fears of all things nuclear, and they attract feel good voters by promoting natural wind and solar energy sources, hiding the true social costs in grants, subsidies, and tax preferences that only benefit select, savvy businessmen. Yet there is an immense political opportunity for a leader to satisfy liberals and environmentalists by checking global warming and ending energy poverty, and also satisfy conservatives and businesses by avoiding carbon taxes, decreasing energy costs, and creating a new Boeing-size export industry. Governments have an opportunity to incentivize corporations to undertake LFTR research and development. Once power-plant- scale LFTRs are successfully demonstrated, and once the legal system permits, corporations can then lead in mass production of LFTRs. We can then rely on economic self-interest of corporations to produce and install LFTRs as fast as Boeing sells airplanes. The corporations will succeed because they can rely on the economic self-interest of 7 billion people in 250 nations to choose the cheapest source of clean, safe energy. This will end C02-emitting energy from coal and reduce demand for energy from other fossil fuels.

#### And, the plan accelerates development

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### R and D directly ensures LFTR development

Lollis, 11 [October 10th, Ms. Tina, Funding for Liquid-Fluoride Thorium Reactor, Online Petition Request to the Obama Administration done via an independent third party, <http://www.thepetitionsite.com/2/Green-Energy/>]

We the undersigned petition you, the Obama Administration for a cleaner, more stable and sustainable energy source. During the years of the Johnson Administration they experimented with Molten-Salt Reactors using the natural element of Thorium, which we have have an abundance of buried in the Nevada desert. With use of the Liquid-Fluoride Thorium Reactors (LFTR), you will not only provide a cleaner, sustainable energy source to the United States, but to the world, as well. Using thorium has many advantages: -Research has already been conducted (reactor active from 1965-1969 Molten Salt Reactor Experiment). -One hundred grams of Thorium meets the current US citizen's lifetime energy needs. -LFTR 'burns' nearly all of its fuel. -Current Light Water Reactors burn only 3.4% of fuel, the rest is introduced into the waste stream. -LFTR generates much less waste. -LFTR burns existing nuclear waste as a fuel source. -The Thorium decay chain produces medical isotopes including Bi-213 (Distributed Cancers). -Thorium is abundant enough in the United States to achieve Energy Independence. -LFTR is passively safe, in a full power loss, LFTR cools naturally (No chance of meltdown via power-loss/natural disaster). -LFTR is perfect for Desalinization. -LFTR could completely replace fossil fuels as our grids energy source. -Thorium is 120x more abundant naturally than fissile uranium. -Known US Thorium reserves represent well over 500 years our current TOTAL power consumption. -Thorium fuel cycles does NOT produce weapons grade waste. -Kirk Sorenson has been invited to speak to Google about this tech multiple times. -Energy Independence has massive implications on our federal budget deficit. This, and many other benefits could be found by funding further research and development of a Thorium LFTR reactors. China, France, and other countries are currently working on this technology. It would be a great travesty to allow technology we developed 50 years ago, to be commercialized by the other great nations on this earth and fall behind with a 50 year head start. Thorium LFTR technology, is Green and Sustainable Technology. The resource is sufficiently large to be inexhaustible on a large scale time frame (500-5000 years in proven reserves per current energy usage). The resource is Green because of its lack of airborne greenhouse gasses, along with its ability to completely replace dirty fossil fuels. Kirk Sorenson projects 2-5 years for a prototype, 300-400million dollars, 5-10 years for commercial production.

#### The plan precipitates widespread investment – solves US leadership

Caruso, 10 [The Columbus Dispatch Sunday March 7, 2010 8:40 AM, “The Mighty Thorium”, http://www.dispatch.com/content/stories/science/2010/03/07/thorium-art-gc67nvgb-1.html]

So why aren't there thorium reactors all over the country? Several nuclear scientists said the nation was simply too wedded to uranium when the Department of Energy cut funding to the Oak Ridge reactor research. "It was demonstrated in a couple of test reactors here that it works and it works well," said Dan Ingersoll, senior program manager for nuclear technology programs at Oak Ridge National Laboratory. "It was abandoned not because it was a bad idea. It was a matter of having limited resources at the national level and choosing a single technology." In other words, given the investment the nation had already made in uranium enrichment and power plants, the government backed research into the next generation of more-efficient uranium reactors and took thorium off the menu. Weapons had nothing to do with the decision, Ingersoll said. But at the height of the Cold War, uranium had another advantage over thorium: Uranium reactors produce plutonium, which makes much better bomb fuel. India is pursuing thorium. Both uranium and thorium are mined as ore and then separated from the rock. But thorium is four times more prevalent in Earth's crust than uranium. "They have tons of thorium and almost no uranium resources," Ingersoll said. "To me, that's the compelling argument. We've already made the investment and we have no shortage of uranium." Richard Denning, a professor of mechanical engineering at Ohio State University who studies the safety of nuclear reactor designs, agreed that uranium is a proven technology that is here to stay. "Right now, we're so into the fuel cycle," he said. "There is enough uranium to fuel the next generation of plants, which will look much like the last generation." Sorensen and others warn that if we don't invest in thorium, others will beat us to it. In addition to India, which is pursuing less-efficient, water-cooled thorium reactors, he said, the Czech Republic is exploring liquid fluoride thorium reactors similar to reactors tested at Oak Ridge.

#### The tech is realistic – basis is robust

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n346)

#### Comprehensive international data proves the plan is feasible

Allen, 09 [Leslie Allen is a writer in Washington for the Washington Post, If Nuclear Power Has a More Promising Future ... Seth Grae Wants to Be the One Leading the Charge, http://www.washingtonpost.com/wp-dyn/content/article/2009/07/24/AR2009072401847\_5.html

And what if the technology had already gotten positive reviews from the American Nuclear Society, the World Nuclear Association and, in particular, from the International Atomic Energy Agency (IAEA), the world's nuclear watchdog, which, in a 2005 report titled Thorium Fuel Cycle -- Potential Benefits and Challenges, called it "an attractive way to produce long-term nuclear energy with low radiotoxicity waste?" You'd have the nuclear equivalent of unleaded gas, in Grae's analogy. Glancing around the room with a small smile, Grae is more than ready for skepticism. He's heard it many times over the years while explaining the new nuclear fuel that his company, the Northern Virginia-based Thorium Power Ltd., has been testing in Russia for several years and that he says will be ready to license for commercial use within a decade. One banker says flatly that many investors believe nuclear power, any nuclear power, is an "outdated technology." Grae, 46, who holds both law and business degrees, answers smoothly, occasionally deferring to Thomas Graham Jr., a courtly Kentuckian who is the company's executive chairman of the board and a retired ambassador. During his long State Department career, Graham participated in the negotiation of every major arms control and nonproliferation agreement drawn up over about three decades. (Hans Blix, who was director general of the IAEA and the United Nations' chief weapons inspector for Iraq from 2000 to 2003, is a senior adviser to the company.) By the time Graham excuses himself to attend another meeting, almost every question has been put to rest, it seems, but one: How come no one's heard of this technology?

### 2ac t

#### Counter interp – R&D is topical and the following laundry list

US Energy Information Administration, 1 (Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, “Incentives, Mandates, and Government Programs for Promoting Renewable Energy”, http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels.1 This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and develop- ment (R&D),2, 3 and (2) their effectiveness in promoting renewables. A financial incentive is defined in this report as providing one or more of the following benefits: • A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; • Reducing the cost of production of the good or service; or, • Creating or expanding a market for producers. The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.4 Regulatory mandates include both actions required by legislation and regulatory agencies (Federal or State). Examples of regulatory mandates are: requiring utilities to purchase power from nonutilities and requiring the incorporation of environmental impacts and other social costs in energy planning (full cost pricing). Another example is a requirement for a minimum percentage of generation from renewable energy sources (viz., a “renewable portfolio standard,” or, RPS). Regulatory mandates and financial incentives can produce similar results, but regulatory mandates generally require no expenditures or loss of revenue by the Government.

Batelle (the world’s largest nonprofit research and development organization, specializing in global science and technology) 1980 “An Analysis of Federal Incentives Used to Stimulate Energy Production” p 22 http://www.scribd.com/doc/67538352/Federal-Incentives-for-Energy-Production-1980

Discussing governmental actions in a field that lacks consistent Policy is difficult, since boundaries defining energy actions are unclear. All governmental actions probably have at least some indirect relevance to energy. if a consistent Policy did exist, the discussion could focus on those actions that are part of the planned and consistent program. For this analysis, however, boundaries must be somewhat arbitrarily defined. First, this discussion will include only those actions taken by the Federal Government; relevant actions of state and local governments are not considered. Second, the discussion covers only those Federal Government actions In which major causes include to influence energy or major effects included some Influence on energy. Within those limits, the discussion considers actions related to both production arid consumption, although production receives the most emphasis. It also includes actions relating to both increases and decreases in energy consumption or production. Energy production is defined as the transformation of natural resources into commonly used forms of energy such as heat, light, and electricity. By this definition, the shining of the sun or the running of a river are not examples of energy production, but the installation of solar panels or the construction of a hydroelectric dam are. Energy consumption is defined is the use of one of these common, manufactured forms of energy. Under this definition sunbathing Is not energy consumption, but heating water by means of a solar panel is In both definitions, the crucial ingredient is the application of technology and resources to change a natural resource into a useful energy form.

### 2ac k

#### Framework – the k must prove the whole plan is a bad idea – our framework translates knowledge into action

Barzowski, 12 [April, Samantha, University of Pittsburgh Department of Mechanical Engineering “THORIUM REACTORS AS AN ALTERNATIVE ENERGY SOURCE”, <http://136.142.82.187/eng12/history/spring2012/pdf/2145.pdf>]

The United States government and **the public** need to be educated **about thorium** energy, especially the fact that thorium reactors are much safer than the existing nuclear reactors. The biggest fear the public has about nuclear energy is a nuclear meltdown. As discussed in the sections above, thorium reactors have a self-shutdown system, and have a considerably lesser chance of meltdown than uranium reactors. The waste from liquid fluoride thorium reactors is less likely to be turned into bombs, is less in quantity and takes a shorter period of time to decompose. Also, by realizing that uranium reactors pose a threat to the surrounding civilians and environment in the event of a nuclear meltdown, and that LFTRs are meltdown proof, then the United States government may consider that option of building reactors that run on thorium.

#### And, their k doesn’t deny that the whole plan is bad – vote aff for another justification

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

New technology makes clean energy, cheaper than coal. New energy technology solves more problems than just global warming. Some people are still skeptical that man-made CO2 emissions are responsible for global warming. They are concerned that increasing energy costs will harm the US economy. Moreover they are concerned that international treaties might disadvantage the US and other OECD nations, by exempting developing nations from emissions constraints and by paying them to avoid CO2 emissions. There are multiple reasons to develop an energy source cheaper than coal. Any one of these reasons can justify the investment in developing a solution such as the liquid fluoride thorium reactor. **Stopping** particulate **air pollution will save million of lives**. Lowering energy costs will increase economic productivity. 9 Ending energy poverty leads to a sustainable population. Reducing CO2 emissions will check global warming. Even climate skeptics should support advanced energy technology for improved economic productivity, population sustainability, and improved human health. In the US conservative Republicans and liberal Democrats bicker over impairing economic growth by imposing taxes to address global warming. Both sides should agree to an energy technology that both improves both the environment and productivity.

#### Prefer util

Cummiskey 90 – Professor of Philosophy, Bates (David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor, AG)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. **Persons** may **have "dignity**, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), **but**, as rational beings, persons **also** have **a fundamental equality which dictates that some must** sometimes **give way for the sake of others.** The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

#### Permutation do the plan and engage in melancholic mourning – the plan is a better engagement with the history of dropping the bomb

Puplava, 11 [President, Chief Investment Strategist at PFS Group,” Kirk Sorensen States Thorium a Million Times More Energy Dense than Fossil Fuels“ <http://www.financialsense.com/contributors/james-j-puplava/kirk-sorensen-thorium-a-million-times-more-energy-dense-than-fossil-fuels>]

Kirk: (2:14) Yeah, I’d be happy to talk about that, and forgive me for maybe getting into a little bit of history, I love history, but it helps tounderstand why these things happened**.** You know, thorium and uranium were both discovered as elements in the late 1800s. And nobody really thought there was anything special out them until Marie Curie discovered that they were radioactive. And again, nobody understood what that meant. But in 1939, as you mentioned, the process of nuclear fission was first discovered by a chemist named Otto Hahn in Germany. And it was a totally new idea that you could actually split an atom release all this energy. And because this was discovered right at the beginning of World War II the obvious question was, can we use this to make an explosive? And that was the origin of the Manhattan project. They looked at uranium and uranium has two isotopes. One of which is uranium 235 and that is naturally fissile, you don’t have to do anything to it to make it fission. So that was the beginning of one kind of effort in the Manhattan project to manufacture a weapon. And then uranium 238, which was much more common, they found that they could bombarded it with neutrons and create a new element, plutonium, that was also fissile, and you could potentially use it for a nuclear explosive. So that was another line that was taken. And then they looked to thorium and said well could we try the same technique with thorium, and found that, yes, you could bombard thorium with a neutron and create uranium 233 and it was also fissile and could potentially form explosives. But there were certain severe drawbacks in the practicality of trying to use uranium 233 as a weapon. And so the attention focused overwhelmingly on separating the uranium isotopes and on converting some of that uranium into plutonium. Those were two directions that were taken during the Manhattan Project. And they resulted in the Hiroshima bomb, which was a uranium 235 bomb and the Nagasaki bomb, which was a plutonium bomb. After the war was over, the overwhelming concern of the US Atomic Energy Commission was to replenish our stockpile of nuclear weapons, which after Nagasaki, was depleted. We didn't have any more weapons, and that was one of the biggest security secrets in the United States at that time. We had to replenish that supply and so all the effort was put into creating materials intended for weapons. And because uranium and plutonium had shown themselves to be more amenable to that type of work than thorium, the work on thorium was neglected. It was only as we moved into the ‘50s that the idea of making electrical power from nuclear energy began to take prominence, and so because the uranium plutonium technologies were more understood, and considered a safer bet, that was where the bulk of the effort in the earlier atomic power program went, was to uranium and plutonium. Although at that time there was a small and beginning effort to investigate thorium, which as in turns out, has some very superior properties when your goal is to make nuclear power rather than to make nuclear weapons.

#### Psychoanalysis is reductive and ignores difference

--means not root cause, their theory is not predictive and we should look at different places (culture, biology, sociology, etc.) to determine policy

Sharpe 10 – lecturer, philosophy and psychoanalytic studies, and Goucher, senior lecturer, literary and psychoanalytic studies – Deakin University

Matthew and Geoff, Žižek and Politics: An Introduction, p. 231 – 233

We realise that this argument, which we propose as a new ‘quilting’ framework to explain Žižek’s theoretical oscillations and political prescriptions, raises some large issues of its own. While this is not the place to further that discussion, we think its analytic force leads into a much wider critique of ‘Theory’ in parts of the latertwentieth- century academy, which emerged following the ‘cultural turn’ of the 1960s and 1970s in the wake of the collapse of Marxism. Žižek’s paradigm to try to generate all his theory of culture, subjectivity, ideology, politics and religion is psychoanalysis. But a similar criticism would apply, for instance, to theorists who feel that the method Jacques Derrida developed for criticising philosophical texts can meaningfully supplant the methodologies of political science, philosophy, economics, sociology and so forth, when it comes to thinking about ‘the political’. Or, differently, thinkers who opt for Deleuze (or Deleuze’s and Guattari’s) Nietzschean Spinozism as a new metaphysics to explain ethics, politics, aesthetics, ontology and so forth, seem to us candidates for the same type of criticism, as a reductive passing over the empirical and analytic distinctness of the different object fields in complex societies**.** In truth, we feel that Theory, and the continuing line of ‘master thinkers’ who regularly appear particularly in the English- speaking world, is the last gasp of what used to be called First Philosophy. The philosopher ascends out of the city, Plato tells us, from whence she can espie the Higher Truth, which she must then bring back down to political earth. From outside the city, we can well imagine that she can see much more widely than her benighted political contemporaries. But from these philosophical heights, we can equally suspect that the ‘master thinker’ is also **a**lways in danger of passing over the salient differences and features of political life – differences only too evident to people ‘on the ground’. Political life, after all, is always a more complex affair than a bunch of ideologically duped fools staring at and enacting a wall (or ‘politically correct screen’) of ideologically produced illusions, from Plato’s timeless cave allegory to Žižek’s theory of ideology. We know that Theory largely understands itself as avowedly ‘post- metaphysical’. It aims to erect its new claims on the gravestone of First Philosophy as the West has known it. But it also tells us that people very often do not know what they do. And so it seems to us that too many of its proponents and their followers are mourners who remain in the graveyard, propping up the gravestone of Western philosophy under the sign of some totalising account of absolutely everything – enjoyment, différance, biopower . . . Perhaps the time has come, we would argue, less for one more would- be global, allpurpose existential and political Theory than for a multi- dimensional and interdisciplinary critical theory that would challenge the chaotic specialisation neoliberalism speeds up in academe, which mirrors and accelerates the splintering of the Left over the last four decades. This would mean that we would have to shun the hope that one method, one perspective, or one master thinker could single- handedly decipher all the complexity of socio- political life, the concerns of really existing social movements – which specifi cally does not mean mindlessly celebrating difference, marginalisation and multiplicity as if they could be suffi cient ends for a new politics. It would be to reopen critical theory and non- analytic philosophy to the other intellectual disciplines, most of whom today pointedly reject Theory’s legitimacy, neither reading it nor taking it seriously.

#### Predictions and scenario building are valuable for decision-making, even if they’re not perfect

Garrett 12

Banning, In Search of Sand Piles and Butterflies, director of the Asia Program and Strategic Foresight Initiative at the Atlantic Council.

http://www.acus.org/disruptive\_change/search-sand-piles-and-butterflies

“Disruptive change” that produces “strategic shocks” has become an increasing concern for policymakers, shaken by momentous events of the last couple of decades that were not on their radar screens – from the fall of the Berlin Wall and the 9/11 terrorist attacks to the 2008 financial crisis and the “Arab Spring.” These were all shocks to the international system, predictable perhaps in retrospect but predicted by very few experts or officials on the eve of their occurrence. This “failure” to predict specific strategic shocks does not mean we should abandon efforts to foresee disruptive change or look at all possible shocks as equally plausible. Most strategic shocks do not “come out of the blue.” We can understand and project long-term global trends and foresee at least some of their potential effects, including potential shocks and disruptive change. We can construct alternative futures scenarios to envision potential change, including strategic shocks. Based on trends and scenarios, we can take actions to avert possible undesirable outcomes or limit the damage should they occur. We can also identify potential opportunities or at least more desirable futures that we seek to seize through policy course corrections. We should distinguish “strategic shocks” that are developments that could happen at any time and yet may never occur. This would include such plausible possibilities as use of a nuclear device by terrorists or the emergence of an airborne human-to-human virus that could kill millions. Such possible but not inevitable developments would not necessarily be the result of worsening long-term trends. Like possible terrorist attacks, governments need to try to prepare for such possible catastrophes though they may never happen. But there are other potential disruptive changes, including those that create strategic shocks to the international system, that can result from identifiable trends that make them more likely in the future—for example, growing demand for food, water, energy and other resources with supplies failing to keep pace. We need to look for the “sand piles” that the trends are building and are subject to collapse at some point with an additional but indeterminable additional “grain of sand” and identify the potential for the sudden appearance of “butterflies” that might flap their wings and set off hurricanes. Mohamed Bouazizi, who immolated himself December 17, 2010 in Sidi Bouzid, Tunisia, was the butterfly who flapped his wings and (with the “force multiplier” of social media) set off a hurricane that is still blowing throughout the Middle East. Perhaps the metaphors are mixed, but the butterfly’s delicate flapping destabilized the sand piles (of rising food prices, unemployed students, corrupt government, etc.) that had been building in Tunisia, Egypt, and much of the region. The result was a sudden collapse and disruptive change that has created a strategic shock that is still producing tremors throughout the region. But the collapse was due to cumulative effects of identifiable and converging trends. When and what form change will take may be difficult if not impossible to foresee, but the likelihood of a tipping point being reached—that linear continuation of the present into the future is increasingly unlikely—can be foreseen. Foreseeing the direction of change and the likelihood of discontinuities, both sudden and protracted, is thus not beyond our capabilities. While efforts to understand and project long-term global trends cannot provide accurate predictions, for example, of the GDPs of China, India, and the United States in 2030, looking at economic and GDP growth trends, can provide insights into a wide range of possible outcomes. For example, it is a useful to assess the implications if the GDPs of these three countries each grew at currently projected average rates – even if one understands that there are many factors that can and likely will alter their trajectories. The projected growth trends of the three countries suggest that at some point in the next few decades, perhaps between 2015 and 2030, China’s GDP will surpass that of the United States. And by adding consideration of the economic impact of demographic trends (China’s aging and India’s youth bulge), there is a possibility that India will surpass both China and the US, perhaps by 2040 or 2050, to become the world’s largest economy. These potential shifts of economic power from the United States to China then to India would likely prove strategically disruptive on a global scale. Although slowly developing, such disruptive change would likely have an even greater strategic impact than the Arab Spring. The “rise” of China has already proved strategically disruptive, creating a potential China-United States regional rivalry in Asia two decades after Americans fretted about an emerging US conflict with a then-rising Japan challenging American economic supremacy. Despite uncertainty surrounding projections, foreseeing the possibility (some would say high likelihood) that China and then India will replace the United States as the largest global economy has near-term policy implications for the US and Europe. The potential long-term shift in economic clout and concomitant shift in political power and strategic position away from the US and the West and toward the East has implications for near-term policy choices. Policymakers could conclude, for example, that the West should make greater efforts to bring the emerging (or re-emerging) great powers into close consultation on the “rules of the game” and global governance as the West’s influence in shaping institutions and behavior is likely to significantly diminish over the next few decades. The alternative to finding such a near-term accommodation could be increasing mutual suspicions and hostility rather than trust and growing cooperation between rising and established powers—especially between China and the United States—leading to a fragmented, zero-sum world in which major global challenges like climate change and resource scarcities are not addressed and conflict over dwindling resources and markets intensifies and even bleeds into the military realm among the major actors. Neither of these scenarios may play out, of course. Other global trends suggest that sometime in the next several decades, the world could encounter a “hard ceiling” on resources availability and that climate change could throw the global economy into a tailspin, harming China and India even more than the United States. In this case, perhaps India and China would falter economically leading to internal instability and crises of governance, significantly reducing their rates of economic growth and their ability to project power and play a significant international role than might otherwise have been expected. But this scenario has other implications for policymakers, including dangers posed to Western interests from “failure” of China and/or India, which could produce huge strategic shocks to the global system, including a prolonged economic downturn in the West as well as the East. Thus, looking at relatively slowly developing trends can provide foresight for necessary course corrections now to avert catastrophic disruptive change or prepare to be more resilient if foreseeable but unavoidable shocks occur. Policymakers and the public will press for predictions and criticize government officials and intelligence agencies when momentous events “catch us by surprise.” But unfortunately, as both Yogi Berra and Neils Bohr are credited with saying, “prediction is very hard, especially about the future.” One can predict with great accuracy many natural events such as sunrise and the boiling point of water at sea level. We can rely on the infallible predictability of the laws of physics to build airplanes and automobiles and iPhones. And we can calculate with great precision the destruction footprint of a given nuclear weapon. Yet even physical systems like the weather as they become more complex, become increasingly difficult and even inherently impossible to predict with precision. With human behavior, specific predictions are not just hard, but impossible as uncertainty is inherent in the human universe. As futurist Paul Saffo wrote in the Harvard Business Review in 2007, “prediction is possible only in a world in which events are preordained and no amount of actions in the present can influence the future outcome.” One cannot know for certain what actions he or she will take in the future much less the actions of another person, a group of people or a nation state. This obvious point is made to dismiss any idea of trying to “predict” what will occur in the future with accuracy, especially the outcomes of the interplay of many complex factors, including the interaction of human and natural systems. More broadly, the human future is not predetermined but rather depends on human choices at every turning point, cumulatively leading to different alternative outcomes. This uncertainty about the future also means the future is amenable to human choice and leadership. Trends analyses—including foreseeing trends leading to disruptive change—are thus essential to provide individuals, organizations and political leaders with the strategic foresight to take steps mitigate the dangers ahead and seize the opportunities for shaping the human destiny. Peter Schwartz nearly a decade ago characterized the convergence of trends and disruptive change as “inevitable surprises.” He wrote in Inevitable Surprises that “in the coming decades we face many more inevitable surprises: major discontinuities in the economic, political and social spheres of our world, each one changing the ‘rules of the game’ as its played today. If anything, there will be more, no fewer, surprises in the future, and they will all be interconnected. Together, they will lead us into a world, ten to fifteen years hence, that is fundamentally different from the one we know today. Understanding these inevitable surprises in our future is critical for the decisions we have to make today …. We may not be able to prevent catastrophe (although sometimes we can), but we can certainly increase our ability to respond, and our ability to see opportunities that we would otherwise miss.

### 2ac exports da

#### Regional trading blocs ensure no rapid change in imports/exports

MIT (Massachusetts Institute of Technology, Interdisciplinary group including: Study Co-chairs Ernes t J. Moniz — Chair Cecil and Ida Green Professor of Physics and Engineering Systems, MIT Director, MIT Energy Initiative (MITEI) He nry D. Jacoby — Co-Chair Professor of Management, MIT Co-director, Joint Program on the Science and Policy of Global Change (JP) Anthony J. M. Meggs — Co-Chair Visiting Engineer, MITEI Study Group Robert C. Arms trong Chevron Professor, Department of Chemical Engineering, MIT Deputy Director, MITEI Daniel R. Cohn Senior Research Scientist, Plasma Science and Fusion Center, MIT Executive Director, Natural Gas Study John M. Deutch Institute Professor, Department of Chemistry, MIT Gordon M. Kaufman Morris A. Adelman Professor of Management (Emeritus), MIT Melanie A. Kenderdine Executive Director, MITEI Francis O’Sullivan Research Engineer, MITEI Sergey Paltse v Principal Research Scientist, MITEI and JP John E. Parsons Senior Lecturer, Sloan School of Management, MIT Executive Director, JP and Center for Energy and Environmental Policy Research Ignacio Pe rez-Arriaga Professor of Electrical Engineering, Comillas University, Spain Visiting Professor, Engineering Systems Division, MIT John M. Re illy Senior Lecturer, Sloan School of Management, MIT Associate Director for Research, JP Mort D. Webster Assistant Professor, Engineering Systems Division, MIT) 2010 “The Future of Natural Gas” <http://web.mit.edu/mitei/research/studies/report-natural-gas.pdf>

Given the continued existence of regional trading blocs for gas, there is little change in the role played by imports and exports of gas. Imports (mainly from Canada) are roughly constant over time, though they increase when U.S. resources are Low. Exports (principally to Mexico) also are maintained over the period and grow somewhat if U.S. gas resources are at the High estimate.

#### No link—LNG in the U.S. is inevitable and the link is linear at best

**Weeks, 5** (Jennifer, E: The Environmental Magazine, “Highly combustible: debating the risks and benefits of LNG,” Nov-Dec 2005, http://findarticles.com/p/articles/mi\_m1594/is\_6\_16/ai\_n15947809)

"Given the enormity of our energy needs, a segment of our supply has to come from LNG," says former U.S. Representative Philip Sharp, who served as Congressional chair of the National Commission on Energy Policy and is now president of Resources for the Future, an environmental think tank in Washington, D.C. "There's no way that cleaner sources add up to what we need, and gas is much cleaner than coal or oil. LNG should not become an excuse for failing to press forward on energy efficiency and renewable fuels, but we have to deal within the confines of our political and economic institutions, and changes in the energy system are incremental," says Sharp.

#### 2. No link—nuclear base load power generation is distinct from natural gas peak generation

**CEEG**, Consumer Energy Education Group, **2006**

(“Managing Your Energy Costs”, http://manageenergycosts.com/ManagingCosts.html)

Electricity and Peak Demand

Since electricity cannot be effectively stored, electrical networks must instantaneously balance generation and load, i.e., supply must always equal demand. Therefore, there is a need to build for the peak because sufficient generation capacity must meet maximum instantaneous demand whenever it happens. Meeting varying demands requires a mix of generation capacity including base-load and peak-load generation.

Base-Load Generation vs. Peak-Load Generation

A base load generation unit is one that provides a steady flow of power regardless of total power demand by the grid. This unit runs all seasons except during the time when repairs or scheduled maintenance occur. Base-load plants usually run on low-cost fuels such as nuclear or coal and are massive enough to provide a majority of the power used by a grid. Therefore, these plants have high capital costs to build but low operating costs to run.

In contrast, peak-load units (also known as peakers) are power plants that generally run only when there is a high demand, known as peak demand, for electricity. In the U.S., this occurs in the afternoon, especially during the summer months when the air conditioning load is high. The time a peaker operates may be several hours a day to as little as a few hours per year. If a peaker is only going to be run for a short and variable time, it does not make economic sense to make it as efficient as a base-load power plant. Peak-load units are generally gas turbines that burn natural gas, which are more expensive than coal and nuclear. Therefore, peak-load systems tend to have low capital costs (so it is OK if it lying idle for most of the year) but high operating costs (but then, you don’t run it that often).

### 2ac cp

#### jumpstarting development of LFTR reactors averts runway warming – reliance on uranium is counterproductive and doesn’t achieve sufficient levels of reduction

**Hansen, 08** [heads the NASA Goddard Institute for Space Studies in New York City, a part of the Goddard Space Flight Center in Greenbelt, Maryland. He has held this position since 1981Letter to Obama, <http://www.columbia.edu/~jeh1/mailings/2008/20081121_Obama.pdf>]

The Liquid-Fluoride Thorium Reactor (LFTR) is a thorium reactor concept that uses a chemically-stable fluoride salt for the medium in which nuclear reactions take place. This fuel form yields flexibility of operation and eliminates the need to fabricate fuel elements. 7 This feature solves most concerns that have prevented thorium from being used in solidfueled reactors. The fluid fuel in LFTR is also easy to process and to separate useful fission products, both stable and radioactive. LFTR also has the potential to destroy existing nuclear waste, albeit with less efficiency than in a fast reactor such as IFR. Both IFR and LFTR operate at low pressure and high temperatures, unlike today’s LWR’s. Operation at low pressures alleviates much of the accident risk with LWR. Higher temperatures enable more of the reactor heat to be converted to electricity (40% in IFR, 50% in LFTR vs 35% in LWR). Both IFR and LFTR have the potential to be air-cooled and to use waste heat for desalinating water. Both IFR and LFTR are 100-300 times more fuel efficient than LWRs. In addition to solving the nuclear waste problem, they can operate for several centuries using only uranium and thorium that has already been mined. Thus they eliminate the criticism that mining for nuclear fuel **will use fossil fuels and add to the greenhouse effect**. The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. **That is a safe assumption under ‘business-as-usual**”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables? China and India have strong incentives to achieve pollution-free skies as well as avert dangerous climate change. The United States, even if efficiency and renewables can satisfy its energy needs (considered unlikely be many energy experts), needs to deal with its large piles of nuclear waste, which have lifetime exceeding 10,000 years. Development of the first large 4th generation nuclear plants may proceed most rapidly if carried out in China or India (or South Korea, which has a significant R&D program), with the full technical cooperation of the United States and/or Europe. Such cooperation would make it much easier to achieve agreements for reducing greenhouse gases. Implications. We have already overshot the safe level of greenhouse gases. Things are beginning to crumble – Arctic ice is melting, methane is bubbling from permafrost, mountain glaciers are disappearing. We must move onto a different course within the next few years to avoid committing the planet to **accelerating climate changes out of our control.** The time has passed for ‘goals’, half-measures, greenwashing, and compromises with special interests.

#### And, uranium mining independently ensures devastating warming

Rincon, 08 [Paul, BBC Broadcasting, “Nuclear's CO2 cost 'will climb'”, <http://news.bbc.co.uk/2/hi/science/nature/7371645.stm>]

The case for nuclear power as a low carbon energy source to replace fossil fuels has been challenged in a new report by Australian academics. It suggests **greenhouse emissions from the mining of uranium** - on which nuclear power relies - are on the rise. Availability of high-grade uranium ore is set **to decline** with time, it says, making the fuel less environmentally friendly and more costly to extract. The findings appear in the journal Environmental Science & Technology. A significant proportion of greenhouse emissions from nuclear power stem from the fuel supply stage, which includes uranium mining, milling, enrichment and fuel manufacturing. Others sources of carbon include construction of the plant - including the manufacturing of steel and concrete materials - and decomissioning. The authors based their analysis on **historical records**, contemporary financial and technical reports, and analyses of CO2 emissions. Experts say it is the first such report to draw together such detailed information on the environmental costs incurred at this point in the nuclear energy chain. Nuclear impact The report is likely to come under close scrutiny at a time when governments around the world are considering the nuclear option to meet future energy demands and reduce greenhouse gas emissions. Lead author Gavin Mudd, from Monash University in Australia, told BBC News: "Yes, we can probably find new uranium deposits, but to me that's not the real issue. The real issue is: 'what are the environmental and sustainability costs?' New uranium deposits are likely to be deeper underground and therefore more difficult to extract than at currently exploited sites, said Dr Mudd. In addition, he said, the average grade of uranium ore - a measure of its uranium oxide content and a key economic factor in mining - is likely to fall. Getting uranium from lower-quality deposits involves digging up and refining more ore. Transporting a greater amount of ore will in turn require more diesel-powered vehicles - a principal source of greenhouse emissions in uranium mining. "The rate at which [the average grade of uranium ore] goes down depends on demand, technology, exploration and other factors. But, especially if there is going to be a nuclear resurgence, it will go down and that will entail a higher CO2 cost," Dr Mudd explained. Overall, the report suggests that uranium mining could require more energy and water in future, **releasing greenhouse gases in greater quantities**. New technology Thierry Dujardin, deputy director for science and development at the Nuclear Energy Agency (NEA), said the analysis made an important contribution to clarifying the impact of nuclear energy on CO2 emissions.

#### The plan reinvigorates growth

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

With some concept tests thorium used as a nuclear fuel could end energy as a problem issue and shift the economy into a new growth phase. All the conversation in the media, politics and the economy could be moved to building the next centuries energy production with thorium and the various ways to use the metal as a fission power source. Nobel laureate Carlo Rubbia at the European Organization for Nuclear Research points out the use of thorium as a cheap, clean and safe alternative to uranium in reactors may be the magic bullet we have all been hoping for. It’s an idea well worth much more attention. The math on thorium is impressive. Dr Rubbia says a metric ton of the silvery metal produces as much energy as 200 tons of uranium, or 3,500,000 ton of coal. A handful would power a major city for a week.

**They are prolif resistant and spur elimination of global plutonium stockpiles – r and d key**

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “[What about thorium?](http://www.fas.org/blogs/sciencewonk/2012/08/what-about-thorium/)” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into **uranium in the form of U-233**. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was [used](http://www.neimagazine.com/story.asp?storyCode=2054564) to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a [process](http://nuclearweaponarchive.org/Library/Plutonium/index.html) of decay whereby **plutonium in the form of Pu-239** is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly **13 kilograms** (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly [70](http://www.world-nuclear.org/info/inf15.html) tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would [realize](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf) a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, [featuring](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf.) a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, **thus making the thorium process less suitable for the development of plutonium for a nuclear weapon.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would [require](http://www.ltbridge.com/assets/Thorium_Fuel_Fact_Sheet.pdf) uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have [detonated](http://en.wikipedia.org/wiki/Nuclear_weapons_testing) nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “[in situ](http://hdl.handle.net/1721.1/29956).” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an [article](http://www.wired.com/magazine/2009/12/ff_new_nukes/) by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further research and development of thorium needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### We solve meltdowns

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n346)

### 1ar

#### Simulating policy in the debate sense is good because it’s a safe, competitive game space—this also justifies fiat

**Hanghoj 2008** – PhD, assistant professor, School of Education, University of Aarhus, also affiliated with the Danish Research Centre on Education and Advanced Media Materials, located at the Institute of Literature, Media and Cultural Studies at the University of Southern Denmark (Thorkild, http://static.sdu.dk/mediafiles/Files/Information\_til/Studerende\_ved\_SDU/Din\_uddannelse/phd\_hum/afhandlinger/2009/ThorkilHanghoej.pdf)

Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, debate games differ from textbooks and **everyday classroom instruction** as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually **endless possibilities for researching**, preparing, presenting, debating and evaluating a variety of key political issues. Consequently, **the actual process** of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation **requires a balance** between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which the teacher never learns anything new from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth instructs someone who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

**Scenario planning is key in the nuclear context**

Han 10 – Dong-ho Han, Ph.D. Candidate in Political Science at the University of Nebraska-Lincoln, January 26, 2010, “Scenario Construction and Implications for IR Research: Connecting Theory to a Real World of Policy Making,” online: http://www.allacademic.com/one/isa/isa10/index.php?cmd=Download+Document&key=unpublished\_manuscript&file\_index=1&pop\_up=true&no\_click\_key=true&attachment\_style=attachment&PHPSESSID=3e890fb59257a0ca9bad2e2327d8a24f

How do we assess future possibilities with existing data and information? Do we have a systematic approach to analyze the future events of world politics? If the problem of uncertainty in future world politics is increasing and future international relations are hard to predict, then it is necessary to devise a useful tool to effectively deal with upcoming events so that policy makers can reduce the risks of future uncertainties. In this paper, I argue that the scenario methodology is one of the most effective methods to connect theory to practice, thereby leading to a better understanding of future world events. The purpose of this paper is to introduce the scenario methodology to the field of IR in a more acceptable fashion and to explore its implications for a real policy world. To achieve this goal, I will explain the scenario methodology and why it is adequate to provide a better understanding of future world events. More specifically, I will clarify what the scenario method is and what its core components are and explain the importance and implications of the scenario method in IR by analyzing existing IR literature with an emphasis on security studies that primarily provide the prospect of future security issues. 1. Introduction How do we assess future possibilities with existing data and information? Do we have a systematic approach to analyze the future events of world politics? Given various theoretical ideas for predicting and analyzing future events in the field of international relations (IR), to understand these events properly it is important both to cast out all plausible outcomes and to think through a relevant theory, or a combination of each major theory, in connection with those outcomes. This paper aims to explain the scenario methodology and why it is adequate to provide a better understanding of future world events. After clarifying the scenario methodology, its core components, and its processes and purposes, I will explore other field’s use of this methodology. Then I will explain the importance and implications of the scenario method in the field of IR. I will conclude with summarizing the advantage of the scenario method in a real world of policy making. 2. What is the Scenario Methodology? This section begins with one major question – what is the scenario methodology? To answer this, some history regarding the development of this method should be mentioned.1 Herman Kahn, a pioneer of the scenario method, in his famous 1962 book Thinking about the Unthinkable, argued that the decision makers in the United States should think of and prepare for all possible sequences of events with regard to nuclear war with the Soviet Union.2 Using scenarios and connecting them with various war games, Kahn showed the importance of thinking ahead in time and using the scenario method based upon imagination for the future.3 According to Kahn and his colleagues, scenarios are “attempts to describe in some detail a hypothetical sequence of events that could lead plausibly to the situation envisaged.”4 Similarly, Peter Schwartz defines scenarios as “stories about the way the world might turn out tomorrow, stories that can help us recognize and adapt to changing aspects of our present environment.”5 Given a variety of definitions of scenarios,6 for the purpose of this research, I refer to the scenario-building methodology as a means by which people can articulate different futures with trends, uncertainties, and rules over a certain amount of time. Showing all plausible future stories and clarifying important trends, scenario thinking enables decision makers to make an important decision at the present time. Key Terms in the Scenario Methodology The core of the scenario method lies in enabling policy makers to reach a critical decision at the present time based on thinking about all plausible future possibilities. Key concepts in the scenario method include: driving forces, predetermined elements, critical uncertainties, wild cards and scenario plot lines.7 Driving forces are defined as “the causal elements that surround a problem, event or decision,” which could be many factors, including those “that can be the basis, in different combinations, for diverse chains of connections and outcomes.”8 Schwartz defines driving forces as “the elements that move the plot of a scenario, that determine the story’s outcome.”9 In a word, driving forces constitute the basic structure of each scenario plot line in the scenario-making process. Predetermined elements refer to “events that have already occurred or that almost certainly will occur but whose consequences have not yet unfolded.”10 Predetermined elements are “givens” which could be safely assumed and understood in the scenario-building process. Although predetermined elements impact outcomes, they do not have a direct causal impact on a given outcome. Critical uncertainties “describe important determinants of events whose character, magnitude or consequences are unknown.”11 Exploring critical uncertainties lies at the heart of scenario construction in the sense that the most important task of scenario anaysts is to discover the elements that are most uncertain and most important to a specific decision or event.12 Wild cards are “conceivable, if low probability, events or actions that might undermine or modify radically the chains of logic or narrative plot lines.”13 In John Peterson’s terms, wild cards are “not simple trends, nor are they byproducts of anything else. They are events on their own. They are characterized by their scope, and a speed of change that challenges the outermost capabilities of today’s human capabilities.”14 Wild cards might be extremely important in that in the process of scenario planning their emergence could change the entire direction of each scenario plot line. A scenario plot line is “a compelling story about how things happen” and it describes “how driving forces might plausibly behave as they interact with predetermined elements and different combinations of critical uncertainties.”15 Narratives and/or stories are an essential part of the scenario method due to the identical structure of analytical narratives and scenarios: “both are sequential descriptions of a situation with the passage of time and explain the process of events from the base situation into the situation questioned.”16 Process and Purpose of Scenario Analysis Scenario analysis begins with the exploration of driving forces including some uncertainties. However, scenario building is more than just organizing future uncertainties; rather, it is a thorough understanding of uncertainties, thereby distinguishing between something clear and unclear in the process of decision making.17 As Pierre Wack has pointed out, “By carefully studying some uncertainties, we gained a deeper understanding of their interplay, which, paradoxically, led us to learn what was certain and inevitable and what was not.” In other words, a careful investigation of raw uncertainties helps people figure out more “critical uncertainties” by showing that “what may appear in some cases to be uncertain might actually be predetermined – that many outcomes were simply not possible.”18 Exploring future uncertainties thoroughly is one of the most important factors in scenario analysis. Kees van der Heijden argues that in the process of separating “knowns” from “unknowns” analysts could clarify driving forces because the process of separation between “predetermineds” and uncertainties demands a fair amount of knowledge of causal relationships surrounding the issue at stake.19 Thus, in scenario analysis a thorough understanding of critical uncertainties leads to a well-established knowledge of driving forces and causal relations.20 Robert Lempert succinctly summarized the scenario-construction process as follows: “scenario practice begins with the challenge facing the decisionmakers, ranks the most significant driving forces according to their level of uncertainty and their impact on trends seemingly relevant to that decision, and then creates a handful of scenarios that explore different manifestations of those driving forces.”21

#### The alt causes paralysis – responses overcome numbing and stops extinction

**Sandman** **and** **Valenti 86**,Peter M., Professor of Public Health @ Rutgers, Founder and Director of the Environmental Communication Research Program, and Communications Counsel for Environmental Defense Fund, JoAnn M. Professor of Communications @ BYU, January 19 (“Scared Stiff – or Scared into Action” – Bulletin of Atomic Scientists, the Article Won the 86/87 Olive Branch Award for Outstanding Coverage of the Nuclear Arms Issue, [www.psandman.com/articles/scarstif.htm](http://www.psandman.com/articles/scarstif.htm))

Hope “The main obstacle to action,” writes Frank, “is neither apathy nor terror but simply a feeling of helplessness. To combat it, I have perhaps overemphasized the small signs that antinuclear activities are at last beginning to influence the political process.”(19) Helplessness, hopelessness, futility, and despair are words one hears even more often than fear from the barely active and the formerly active. And like fear, these emotions can easily lead to psychic numbing. Those who feel powerless to prevent nuclear war try not to think about it; and it serves the needs of those who do not wish to think about nuclear war to feel powerless to prevent it. **Messages of hope** and empowerment, however, **break this vicious circle**. The label “hope,” as we use it, subsumes a wide range of overlapping concepts: for example, optimism, a sense of personal control and efficacy, confidence in methods and solutions, a sense of moral responsibility, and a vision of the world one is aiming for. It is well established (and hardly surprising) that hope is closely associated with willingness to act. Activism appeals most to people who feel positive about both the proposed solution and their personal contribution to its achievement. Over the long term, this means that antinuclear organizers must communicate a credible vision of a nuclear-free world. Meanwhile, they must offer people things to do that seem achievable and worthwhile. The nuclear-weapons-freeze campaign attracted millions of new activists in 1982 because it offered credible hope. By 1985 many of those millions could no longer ground their hope in the freeze; some found other approaches and some returned to inactivity. Most social psychologists today see the relationship between hope and action as independent of fear or other feelings. For example, Kenneth H. Beck and Arthur Frankel conclude that three cognitions (not emotions) determine whether people will do something about a health risk: recognizing the danger as real, believing the recommended plan of action will reduce the danger, and having confidence in their ability to carry out the plan.(20) Similarly, Sutton’s review of the fear-appeal literature finds inconsistent support for the notion that people can accept higher levels of fear if they feel the proposed solution will remedy the problem, but strong evidence that, regardless of fear, people are more inclined to act on solutions they see as more effective.(21) In a 1983 study, Tom R. Tyler and Kathleen M. McGraw found that, compared to the general public, antinuclear activists were more likely to think nuclear war could be prevented, even though they considered nuclear war itself more likely and said they worried about it more. The activists scored higher than other citizens on measures of general personal and political efficacy, and they were more likely to believe that citizen action would make the difference in preventing nuclear war. Finally, the activists tended to believe that citizens have a moral obligation to work against nuclear war, even though they blamed governments, not citizens, for causing the threat. Interpreting this mix of hope and anger, the authors quote Jesse Jackson: “You are not responsible for being down, but you are responsible for getting up.”(22) The least studied aspect of hope is the need for an affirmative vision. People require short-term achievable goals as benchmarks along the way to build confidence that progress is being made. But progress toward what? While the movement has done an excellent job of articulating visions of nuclear apocalypse, it has only just begun the much harder job of envisioning a plausible world that has renounced nuclear weapons. It is in that vision that new activists will find their hope, and against that vision that they will measure their efficacy. Constructing it should be a top-priority task.

## round 8—neg v. harvard nz

### 1nc elections

#### Obama is winning but it’s reversible – popularity is key

Brownstein, 9/21/12- a two-time finalist for the Pulitzer Prize for his coverage of presidential campaigns, is National Journal Group's Editorial Director, in charge of long-term editorial strategy.(Ronald, National Journal, “Heartland Monitor Poll: Obama Leads 50 Percent to 43 Percent” http://www.nationaljournal.com/2012-presidential-campaign/heartland-monitor-poll-obama-leads-50-percent-to-43-percent-20120921?page=1)¶ President Obama has opened a solid lead over Mitt Romney by largely reassembling the “coalition of the ascendant” that powered the Democrat to his landmark 2008 victory, the latest Allstate/National Journal Heartland Monitor Poll has found.¶ The survey found Obama leading Romney by 50 percent to 43 percent among likely voters, with key groups in the president’s coalition such as minorities, young people, and upscale white women providing him support comparable to their levels in 2008.¶ The survey, conducted by Ed Reilly and Jeremy Ruch of FTI Communications, a communications and strategic consulting firm, surveyed 1,055 likely voters by landline and cell phone from Sept. 15-19. It has a margin of error of plus or minus 3 percentage points. Full results from the survey, including a detailed look at Americans’ attitudes about opportunity and upward mobility, will be released in the Sept. 22 National Journal.¶ The Heartland Monitor’s results are in line with most other national surveys in recent days showing Obama establishing a measurable lead, including this week’s new Pew Research Center and NBC/Wall Street Journal polls. The saving grace for Republicans is that even as these surveys show Obama opening a consistent advantage, the president has not been able to push his support much past the critical 50 percent level, even after several difficult weeks for Romney that began with a poorly reviewed GOP convention. That suggests the president faces continued skepticism from many voters that could allow Romney to draw a second wind if he can stabilize his tempest-tossed campaign.¶ The poll found Obama benefiting from a small increase in optimism about the country’s direction. Among likely voters, 37 percent said the country was moving in the right direction. Even looking at all adults, the "right track" number now stands at 35 percent, its best showing since the April 2010 Heartland Monitor.¶ Obama’s approval rating in the new survey also ticked up to 50 percent, with 46 percent disapproving. That’s a slight improvement from May, when the survey of all adults found 47 percent approving and 48 percent disapproving. Among all adults, Obama’s rating improved to 49 percent approving and 45 percent disapproving, also one of his best showings since January 2010.¶ Those gains are critical, because as always with an incumbent president, **attitudes toward Obama**’s performance **powerfully shape the race.** Among likely voters who approve of Obama’s job performance, he leads Romney in the ballot test by 93 percent to 3 percent; those who disapprove prefer Romney by 87 percent to 5 percent.

#### The plan is unpopular swings the election

**Schirach, 12** (Paolo von Schirach, The global society monitor, “Grim prospects for renewable energy in the US subsidies politically unpopular- natural gas a much cheaper alternative USG should focus on R&D”, http://schirachreport.com/index.php/2012/05/11/grim-prospects-for-renewable-energy-in-the-us-subsidies-politically-unpopular-natural-gas-a-much-cheaper-alternative-usg-should-focus-on-rd/)

American enthusiasm for renewable energy, **not** too **deep to begin with, has gone** away. In part this has to do with loss of interest in “climate change” and its dire consequences. Unfortunately, climate change has been and is mostly an issue of political belief, rather than upholding science. And as the intensity of the political fervor somehow waned, in large part replaced by more immediate economic fears, so did political support for all the renewable energy technologies that were supposed to create, relatively quickly it was thought, workable alternatives to carbon based energy.

Unpopular subsidies

An additional reason for waning support is that keeping renewable energy alive means also subsidizing it for a few more years. And this is less and less politically palatable at a time of budgetary constraints at every level. Paying more for electricity simply because this kind is clean looks like an unaffordable luxury, **whatever the consequences of** burning more (cheaper) **fossil fuels** may be.

#### New financial incentives for Native Americans are perceived as wasteful spending

**Sullivan, 10** – JD, University of Arizona (Bethany, “Changing Winds: Reconfiguring the Legal Framework for Renewable-Energy Development in Indian Country,” 52 Ariz. L. Rev. 823, Fall, lexis)

Aside from reforming the existing tax credit system, the federal government could also create new tax credits aimed at private businesses engaged in renewable-energy projects on reservations. n166 One possible financial incentive would be a special employment tax credit. Under this type of approach, employers receive a credit for wages paid to qualified employees, i.e., employees who are members of the tribe or otherwise classify as Indian. n167 Not only would this incentivize outside businesses to operate on the reservation, it would also encourage them to hire locally. This has the dual benefits of contributing to the tribal economy and increasing tribal involvement with renewable-energy projects. In joint-ownership arrangements, this type of tax credit would give tribes [\*847] substantial leverage in demanding that a certain percentage of the project's employees be tribe members. The disadvantage with this approach is that it fails to get to the heart of the problem. It only indirectly attempts to level the tax-credit-based disparity and it is questionable, at best, whether the benefits of new tax credits would be proportional to the benefits of existing renewable tax credits.¶ Another approach would be to increase the grant money available to tribally owned or jointly owned renewable-energy projects. Under this plan, rather than allocating several hundred thousand dollars to each tribal project for preliminary studies, the DOE and/or DOI would provide the bulk of necessary investment funding. n168 Since the construction and installation costs of renewable-energy generation from wind turbines, solar panels, and other renewable technologies are quite costly, this could require a budget of hundreds of millions of dollars. n169 Considering the current economic climate and constraints on federal spending, a proposal such as this is unlikely to get far in Congress.

#### Romney win leads to Iran strikes

Robert W. Merry 8-1-2012; editor of The National Interest and the author of books on American history and foreign policyRomney Edges U.S. toward War with Iran http://nationalinterest.org/commentary/romney-edges-us-toward-war-iran-7275

The major newspapers all understood that GOP presidential candidate Mitt Romney’s expressions in Jerusalem last weekend were important, which is why they played the story on page one. But only the New York Times captured the subtle significance of what he said. The paper’s coverage, by Jodi Rudoren and Ashley Parker, reported that Romney sought to adhere to the code that says candidates shouldn’t criticize the president on foreign soil. “But,” they added, “there were subtle differences between what he said—and how he said it—and the positions of his opponent.” Most significantly, while Obama talks about stopping Iran from obtaining nuclear weapons, Israel insists Tehran should be prevented from having even the capacity to develop nuclear weapons. This means no nuclear development even for peaceful purposes. Romney **embraced** the **Israeli language**. In doing so, he nudged his nation closer to war with Iran. Based on Israeli prime minister Benjamin Netanyahu’s oft-repeated expressions, he clearly seems **bent on attacking Iran** to destroy or delay its nuclear program and, if possible, undermine the Iranian regime. And he wants America at his side when he does it. Obama has been seeking to dissuade Israel from contemplating such an assault in order to give the president’s austere sanctions regimen a chance to work. But what does he mean by “a chance to work?” If he means a complete capitulation by Iran, he’s dreaming, of course. History tells us that nations don’t respond to this kind of pressure by accepting humiliation. That’s the lesson of Pearl Harbor, as described in my commentary in these spaces. Many close observers of the Iran drama believe there may be an opportunity for a negotiated outcome that allows Iran to enrich uranium to a limited extent—say, 5 percent—for peaceful purposes. Iran insists, and most experts agree, that the Non-Proliferation Treaty allows such enrichment for energy production. In any event, numerous signatories to the NPT do in fact maintain limited enrichment programs for peaceful ends. Obama seems torn between pursuing such an outcome and embracing the Israeli position, which demands that Iran foreswear all enrichment and any peaceful nuclear development. In last spring’s Istanbul meeting between Iran and the so-called P5+1 group (the United States, Britain, France, China, Russia and Germany), there seemed to be a genuine interest on the part of those six nations to explore an outcome that would allow for some enrichment by Iran. Five weeks later in Baghdad, the P5+1 group seemed to backtrack and insist upon zero enrichment. Talks are ongoing but only among low-level technical people; any serious negotiations are on hold pending the election. Thus Obama has managed to maintain his flexibility during the delicate campaign period. But now we have Romney in Israel essentially telling the people there that they need fear no ambivalence on his part. If elected, he will embrace the Netanyahu position, which is designed to ensure the collapse of any negotiations attending anti-Iran sanctions, which Netanyahu already has labeled a failure. “We have to be honest,” he said over the weekend, during Romney’s visit, “and say that the sanctions and diplomacy so far have not set back the Iranian program by one iota.” That’s the view that Romney subtly embraced in Jerusalem.

#### Great power war

Trabanco 2009 – Independent researcher of geopolitical and military affairs (1/13/09, José Miguel Alonso Trabanco, “The Middle Eastern Powder Keg Can Explode at Anytime,” http://www.globalresearch.ca/index.php?context=va&aid=11762)

In case of an Israeli and/or American attack against Iran, Ahmadinejad's government will certainly respond. A possible countermeasure would be to fire Persian ballistic missiles against Israel and maybe even against American military bases in the regions. Teheran will unquestionably resort to its proxies like Hamas or Hezbollah (or even some of its Shiite allies it has in Lebanon or Saudi Arabia) to carry out attacks against Israel, America and their allies, effectively setting in flames a large portion of the Middle East. The ultimate weapon at Iranian disposal is to block the Strait of Hormuz. If such chokepoint is indeed asphyxiated, that would dramatically increase the price of oil, this a very threatening retaliation because it will bring intense financial and economic havoc upon the West, which is already facing significant trouble in those respects. In short, the necessary conditions for a major war in the Middle East are given. Such conflict could rapidly spiral out of control and thus a relatively minor clash could quickly and dangerously escalate by engulfing the whole region and perhaps even beyond. There are many key players: the Israelis, the Palestinians, the Arabs, the Persians and their respective allies and some great powers could become involved in one way or another (America, Russia, Europe, China). Therefore, any miscalculation by any of the main protagonists can trigger something no one can stop. Taking into consideration that the stakes are too high, perhaps it is not wise to be playing with fire right in the middle of a powder keg.

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from **promiscuous intervention** in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he **is not qualified to be president**. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

### 1nc topicality

#### Substantial is meaningful

**WordNet, 6** (WordNet® 3.0, © 2006 by Princeton University.

[Dictionary.reference.com/ browse/substantial](http://dictionary.reference.com/browse/substantial)

Substantial, adjective

 2. having a firm basis in reality and being therefore important, meaningful, or considerable; "substantial equivalents"

#### Increase requires specification

**OED, 89** (Oxford English Dictionary, 2nd edition, Online through Emory)

increase, v.

3. To become greater in some specified quality or respect; to grow or advance in.

#### Incentive implies a particular mechanism

**Marbek Resource Consultants, 06** (Report prepared for the Canadian Council of Ministers of the Environment “NATIONAL EXTENDED PRODUCER RESPONSIBILITY (EPR) WORKSHOP,” 9/27, http://www.ccme.ca/assets/pdf/epr\_wkshp\_rpt\_1376\_e.pdf

There were numerous suggestions for specific changes to the sixteen principles presented. The following list captures each suggestion (each number in parentheses corresponds to a principle presented):

􀁹 The suggestion was made, and supported by others, that the word “incentives” for producers be replaced with the word “encourage”, since the term “incentive” usually implies a particular mechanism (#1).

#### This is distinct from actions with incentive effects

**Webb, 93** – lecturer in the Faculty of Law at the University of Ottawa (Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993)  Hein Online)

In this paper, "financial incentives" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired behaviour may **vary with the type of incentive** in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the **conditions attached** to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration.

By limiting the definition of financial incentives to initiatives where *public* funds are *either disbursed or* contingently committed, a large number of regulatory programs with incentive effectswhich exist, but in which no money is forthcoming,23 are excluded from direct examination in this paper. Such programs might be referred to as *indirect* incentives. Through elimination of indirect incentives from the scope of discussion, thedefinition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and *ad hoc* industry bailout initiatives because such programs are not designed primarily to *encourage* behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

#### Violation: they’re not topical because they don’t specify the incentives they provide

#### C. Voting issue

#### 1. Negative ground – “incentives” is the direct object of resolutional action, ALL negative strategies are premised off of it, not specifying makes the aff a conditional moving target

#### 2. Kills topic education, generic incentives don’t exist, they must be tailored

**Arvizu, 7** - Director National Renewable Energy Laboratory (Dan, CQ Congressional Testimony, “ENCOURAGING SOLAR ENERGY,” 6/19, lexis

We applaud the Committee for its continuing examination of solar and other sources of renewable electricity and fuels. If we are to ensure the nation receives the full range of benefits that renewable energy technologies can provide, we will need a carefully balanced blend of new technology, market acceptance and government policies. It is not a question of whether to rely solely on the market, or on new research, or on government action, as we work to solve our energy problems. To accelerate deployment of renewable energy technologies, we need to effectively combine all three. It's also crucial that this mix of technology, markets and policies be crafted so that each works in conjunction with the others. The reality is that distinct renewable energy technologies - be they solar photovoltaic, solar thermal, wind, biomass power, biofuels or geothermal - are in different places in terms of their economics, technological maturity and market acceptance. While a broad range of policies are needed to spur on these varied technologies, the specifics of policies and incentives to be enacted ideally must be tailored to fit the unique requirements of each of the systems and devices we are seeking to deploy.

### 1nc pic

#### The United States Federal Government should offer substantially increased financial incentives for energy production on lands defined by 18 United States Code section 1151 for solar power.

#### Wind increases environmental degradation – intermittence

**Rosenbloom, 06** - science editor living in Vermont (Eric, “A Problem With Wind Power”, <http://www.aweo.org/ProblemWithWind.html>)

The DOE says there are 18,000 square miles of good wind sites in the U.S., which with current technology could produce 20% of the country’s electricity. This rosy plan, based on the wind industry’s sales brochures, as well as on a claim of electricity use that is only threequarters of the actual use in 2002, would require “only” 142,060 1.5-MW towers. They also explain, “If the wind resource is well matched to peak loads, wind energy can effectively contribute to system capacity.” That’s a big if—counting on the wind to blow exactly when demand rises—especially if you expect the wind to cover 20% (or even 5%) of that demand. As in Denmark and Germany, you would quickly learn that the prudent thing to do is to look elsewhere first in meeting the load demand. And we’d be stuck with a lot of generally unhelpful hardware covering every windy spot in the U.S., while the developers would be looking to put up yet more to make up for and deny their failings.

As in Denmark and Germany, the electricity from those towers—no matter how many—would be too variable to provide the predictable supply that the grid demands. They would have no effect on established electricity generation, energy use, or continuing pollution. Christopher Dutton, the CEO of Green Mountain Power, a partner in the Searsburg wind farm in Vermont and an advocate of alternative energy sources, has said (in an interview with Montpelier’s The Bridge) that there is no way that wind power can replace more traditional sources, that its value is only as a supplemental source that has no impact on the base load supply. “By its very nature, it’s unreliable,” says Jay Morrison, senior regulatory counsel for the National Rural Electric Cooperative Association.

As Country Guardian, a U.K. conservation group, puts it, wind farms constitute an increase in energy supply, not a replacement. They do not reduce the costs—environmental, economic, and political—of other means of energy production. If wind towers do not reduce conventional power use, then their manufacture, transport, and construction only increases the use of dirty energy. The presence of “free and green” wind power may even give people license to use more energy.

#### The plan undermines Chinese wind competitiveness

**Chhabara 8** (Rajesh, Climate Change Corp, “Who’ll Solve the Wind Turbine Supply Crisis?” 4/29/8, http://www.climatechangecorp.com/content.asp?contentid=5344)

In April this year, China set a massive target of expanding wind power capacity to 100,000MW by 2020, from the current 5,600MW. Previously, in 2006, China passed the Renewable Energy Law, which requires power grid companies to buy the entire output of registered renewable energy producers in their areas. The National Development and Reform Commission (NDRC), China’s top industry planning body, sets the purchase price.

CLSA Research estimates that the US, Europe and China will be spending about $150 billion on wind projects in the next five years.

US dithers, China surges ahead

In the US, an unstable regulatory regime is one factor hindering turbine production.

Sporadic tax breaks for renewable energy projects, usually on a year-to-year basis, have discouraged US manufacturers from scaling up. Congress, for example, has stalled the extension of PTCs beyond the end of 2008.

In the past, when tax credits lapsed the demand for wind turbines came crashing down the following year. If the trend is repeated this time, it may actually result in overcapacity of turbine manufacturing in the US, at least for the domestic market.

Yet energy analysts say that if the US market slows down due to lack of tax breaks, **China will more than compensate.**

In the short term, massive demand from China may further tighten turbine supply, but expanding local production should ease the global crunch within a couple of years. Today, the Chinese market is dominated by the top three foreign manufacturers, Vestas, GE Wind and Gamesa, who enjoy a combined market share of 47%. However, this is set to change.  
Zhang Guobao, vice president of China’s NDRC, says: “We are planning several measures to support the wind power industry including localisation of equipment production.” According to the Global Wind Energy Council (www.worldenergy.org), China will become the top wind turbine manufacturer by 2009.

To encourage production, China increased tariffs on imported wind turbines in May, while slashing import taxes on components. The latter incentive, to help Chinese firms compete internationally for scarce parts, will put pressure on the industry in the rest of the world. But, again, this is a short-term problem. Government rules already require that turbines have at least 70% domestically produced components. As a result, leading manufacturers have been setting up factories in China.

As things presently stand, most Chinese manufacturers can produce only smaller turbines, up to 1MW. Chinese firms are trying to overcome this weakness by licensing agreements and joint ventures with western companies.

Goldwind, China’s largest wind turbine maker, raised $245 million through an Initial Public Offer (IPO) early this year to fund a huge expansion. LM Glassfiber of Denmark, which has a cooperation agreement with Goldwind, opened its second turbine blade factory in China in October last year.  
Other major Chinese turbine makers – Sinovel, Windey, Dongfang, MingYang and HEC – are also expanding capacities and shopping for joint ventures and licensing agreements with global players.

China High, the country’s largest manufacturer of gearboxes – the most critical and complex part in a wind turbine – plans a four-fold increase in production in the next two years. The company is aiming to become one of the top three global manufacturers of gearboxes, with half of revenue coming from exports.   
China High, which already supplies to GE, REpower, Nordex and Goldwind, raised $272 million through an IPO to fund massive expansion. The company is raising another $250 million through convertible bonds and plans to buy a special-steel plant to secure supplies and reduce costs. Special steel accounts for half the cost of gearboxes.  
Among the foreign players, Germany’s Nordex – the fourth largest wind turbine maker in China – announced in November that it would quadruple production capacity to 800MW by 2011 to meet growing demand.  
Currently, MingYang is China’s only turbine exporter. But in the next three to five years, the number of exporters is likely to grow as other firms aggressively expand and acquire technology. Foreign manufacturers may be scaling up their production in China, but in the longer term it is the emergence of Chinese turbine and component manufacturers that will probably change the global landscape of wind power.

Response from the big players

With over 8,000 parts required to make a wind turbine, requiring a large network of reliable suppliers, component supply is creating the most problematic bottleneck for turbine makers. In order to meet increasing demand, leading players are rushing to beef up their supplies by setting up new plants, signing long-term contracts with suppliers and even making acquisitions.

#### That’s key to the Chinese development model

**Wang, 05** – Michigan State University (Joy, Wind Power in China: Social Acceptability and Development of a Domestic Manufacturing Industry”, http://forestry.msu.edu/China/New%20Folder/Joy\_Wind.pdf)

China does not necessarily require the development of its own domestic wind industry and market, but from the successes of various other countries utilizing wind power, it seems such development is key to the success of wind energy within a country.

“All leading turbine manufacturers are from countries with significant domestic wind power development, and most all have been very successful in their home markets…the size of the home market is a key determinant of global success in wind turbine manufacturing. Moreover,…the top 5 countries in terms of installed capacity are also home to 9 of the top 10 wind companies globally” (Lewis & Wiser, 2005, p. 58).

The wind power market and domestic turbine manufacturers support each other. To form a strong market, a government can formulate incentives for industry to become involved. “Companies facing unstable markets are less willing to spend money on R&D and product development” (Lewis & Wiser, p. 58). With a more stable wind market, more investor interest could be gathered, and more spending on long term manufacturing R&D could be stimulated.

2. Decrease costs to further the market

A domestic wind industry can lower costs and further the market. “As the market has grown, wind power has shown a dramatic fall in cost. Production costs have fallen by up to 50% over 15 years” (BTM Consult, 2005, p. 10). Wind turbines hold about 75% of the total cost of an onshore wind project (BTM Consult, 2005,). With localized production, not only would less be spent on transportation, labor costs would also be much cheaper in China than abroad. A significant savings could be realized in turbine production, bettering the economics and feasibility of large-scale utilization of wind energy in China.

3. Better accessibility to best available wind technology

With its booming economy and strong desire to prove itself, China is demanding better products with its increasing wealth. The wind industry will be no different. If no domestic turbine manufacturers develop cutting-edge technology, any technology China receives will be second rate. Products are likely tested intensely before placement on the global market, where their performance reflects upon the manufacturing company. All commercially sold turbines will generally be reliable, with the newest technology in continued research and testing.

If China relies on non-domestic wind turbine manufacturers to supply its wind power generation facilities, it cannot expect the best technology to enter its borders first. So far, the largest installation in China to date is 1.5MW at the Nanhui and Chongming wind farms in Shanghai by General Electric (GE Wind), while the largest wind turbine installation to date has been 300 MW in the United States (BTM Consult, 2005), 200 times larger. Higher turbine capacities will transform to land savings since more electricity is generated per turbine. With limited arable land, it would make sense for China to search for better and larger turbines to reduce land requirements for the same amount of generated electricity.

4. Opportunity to demonstrate technological prowess

With its economic rise, China has shown an increasing desire to prove itself. The 2003 launch of China’s first manned rocket demonstrates its drive to push domestic technology to further limits. The successful rocket launching caused a swell of national pride. A show of local technological prowess in wind energy could cause a similar effect (Lewis & Wiser, 2005), while also offering a relatively new global industry in which to make a presence. From this aspect, it is not surprising to see China’s desire to have its own domestic wind power industry.

5. Alleviate power shortages in areas of need

Wind power could be used to alleviate brown-outs and other electricity shortages in the more affluent east coast. Near the time of Wallace’s paper (1997), over 20 million households in the heavily populated areas were without electricity. With the largest wind resources located along the southeastern coast and an intense appetite for energy in the same region, it is likely wind power can help alleviate the lacking electricity supply there.

6. Employment opportunities

The creation of a domestic wind power market and industry could generate employment opportunities in both urban and rural areas. A strong domestic market and wind turbine manufacturing industry will create a demand and supply for wind power. By having a local manufacturing base, China could mobilize significant numbers of its currently unemployed

masses. In 2003, 8 million urban people registered unemployment. Once the numbers of unregistered urban unemployed is considered, the total could further increase. From 1998-2003, unemployment grew at an annual rate of 5.6% (“China Statistical,” 2004). With almost 60% of China’s 2003 population located in rural areas (“China Statistical,” 2004), the total unemployed number could be significantly larger. Wind Force 12 estimates that 444,000 individuals will be occupied in the Chinese wind power industry in 2020 (2005).

7. Poverty alleviation

Though the demand for electricity may be greatest along the coast, the wind turbine manufacturers may be elsewhere. Strategically placed manufacturers throughout rural China could provide higher paying work, **alleviating poverty**. The 2003 per capita net income of rural households in the 12 western provinces was 1966¥, less than 75% of the national per capital rural net income (“China Statistical,” 2004).

8. Catalyst for further infrastructure development

A domestic wind industry could provide an additional catalyst for the development of efficient transportation systems in which to transport wind related turbines. Factories in rural locations would not necessarily be distanced from the final product destination. With 23.9% of the national energy industry located in the 12 western provinces (“China Statistical,” 2004), a well-established energy transmission infrastructure must already exist. Much of China’s wind resources also are in the area. Not only will manufacturers to realize financial savings by being geographically closer to more final product destinations, the location of wind power manufacturers there could also stimulate the improvement and adaptation of existing infrastructure to suit new needs. This possibility might require large financial resources, but the reaped benefits might justify further exploration.

9. Environmental benefits

Other environmental benefits can be realized through localized production outside of the clean energy turbines produce. If turbine manufacturers locate to more rural areas, resident income and standard of living will increase. Farmland might be less stressed, as income no longer relies singly on the land’s goods. Grasslands could benefit similarly as flock size decrease when factory work is obtained. From such possibilities, wind energy could potentially benefit soil stability. As school fees become more affordable, educational levels will increase. Higher educational attainment could increase environmental consciousness and also lessen environmental degradation.

#### Solves CCP collapse

**Pethokoukis 12-1-**08 (James, US News, “Bad Economy Could Cause China Crackup” <http://www.usnews.com/blogs/capital-commerce/2008/12/1/bad-economy-could-cause-china-crackup.html?s_cid=etRR-0126>)

¶ I have written a series of blog posts warning about the geopolitical and economic fallout of a sharp slowdown in China's economy. Simply put: Slower growth **could lead to** dangerous political instability. **The sole source of the** authoritarian **government's legitimacy has been its ability to deliver an even-rising standard of living** for more than a generation. Don't believe me? Here is what President Jintao Hu said over the weekend at a party meeting:  ¶ *“In this coming period, we will starkly confront the effects of the sustained deepening of the international financial crisis and pressure as global economic growth clearly slows. ... Whether we can turn this pressure into momentum, turn challenges into opportunities, and maintain steady and relatively fast economic development is a test of our Party's capacity to govern.”*  ¶ This is why China has been hesitant to allow any dramatic appreciation by the yuan vs. the dollar. To the extent that a stronger currency slows the economy, the ruling Communist Party views a rapid yuan appreciation as an existential threat. This what journalist Will Hutton, author of *The Writing on the Wall: Why We Must Embrace China as a Partner or Face It as an Enemy*, [told me early last year](http://www.usnews.com/usnews/biztech/articles/070105/5china.htm):  ¶ *"Unrest is growing even under current conditions. Such a rapid appreciation of the yuan over a short period could be a tipping point for a wave of unrest, which could threaten the regime's stability. The party leadership sees the demand for fast yuan appreciation as an act of economic warfare. In these terms, you can see why. ... The World Bank estimates that if China's growth rate fell by just 2 percent, up to 60 percent of China's bank loans would become nonperforming–so threatening both China's and, via Hong Kong, Asia's financial system. The flow of saving to finance the U.S.'s deficit would dry up, probably forcing U.S. interest rates up–so worsening the economic slowdown. ... There is the risk of a credit crunch forced by the banking system being overwhelmed by nonperforming loans. ... The risk of political instability is low, but it exists."*  ¶ Me: Let's remember that China a) has been -- along with America -- one of the primary engines of global economic growth as well as buy of U.S. bonds, and b) has nuclear weapons. While no freedom-loving member of Western Civilization has any love for the current despotic regime, neither do we want to see political and economic chaos in China. Fun China Fact: Back in the 1990s, Pentagon analysts thought a bad economy could result in the fall of the Communists from power and the political dissolution of the country into maybe a dozen smaller nations. Hey, have fun, Hillary!

#### Nuclear war

**Plate 2003** (Tom, Professor at UCLA, The Straits Times, June 28, L/N)

But, while China's prosperity may be good for Americans, is it necessarily the same for the totalitarians running China? After all, having created a runaway economic elephant, will the Communist Party leaders be able to stay in the saddle? Before long, the Chinese middle class alone may approach the size of the entire population of America. It will want more freedom, not less – bet on it. But imagine a China disintegrating – on its own, without neo-conservative or Central Intelligence Agency prompting, much less outright military invasion – because the economy (against all predictions) suddenly collapses. That would knock Asia into chaos. A massive flood of refugees would head for Indonesia and other places with poor border controls, which don't want them and can't handle them; some in Japan might lick their lips at the prospect of World War II Revisited and look to annex a slice of China. That would send Singapore and Malaysia – once occupied by Japan – into nervous breakdowns. Meanwhile, India might make a grab for Tibet, and Pakistan for Kashmir. Then you can say hello to World War III, Asia-style. That's why wise policy encourages Chinese stability, security and economic growth – the very direction the White House now seems to prefer.

### 1nc consult

#### The United States federal government should subject an expansion of financial incentives for energy production on lands defined by 18 United States Code section 1151 for wind power and solar power to prior, binding consultation with Native American tribes. The expansion of financial incentives for energy production on lands defined by 18 United States Code section 1151 for wind power and solar power should only be approved for tribes those tribes that request the aforementioned proposal in this consultation process.

#### It competes - the CP is less than the plan – many tribes will say yes to more wind incentives but the assumption they all will is based on romantic cultural stereotypes.

**Bosworth, 10** – Honors Thesis for Environmental Studies at Macalester College (Kai, “Straws in the Wind: Race, Nature and Technoscience in Postcolonial South Dakotan Wind Power Development,” 5/3,

<http://digitalcommons.macalester.edu/cgi/viewcontent.cgi?article=1007&context=envi_honors>

As many rural communities reject wind power projects, developers are more likely to turn towards communities that may be more accepting of the risks of wind power. Although Native American communities are not the only marginalized rural communities in the US, they have disproportionately born the brunt of many of the environmental risks of energy production, and wind power has the potential to slot into this same process. A number of restrictive policies may change in the upcoming years that will make it easier for both tribes and independent developers to construct wind power projects. As President Barack Obama remarked in 2009, “We’re streamlining and expediting the permit process for energy development and transmission across Tribal lands. We are securing Tribal access to financing and investments for new energy projects” (National Wildlife Federation 2010, 16). A federal amendment to restructure the tax credits available to wind power and make them available to tribes is being debated as I finish this paper. While these policy changes have yet to emerge, it is likely that as the wind power industry continues to grow nationwide, more wind power projects will be developed in Native American communities.¶ Articulations of wind power and Native American communities have fit into narratives of indigeneity and nature, and these narratives further help to change the conditions through which wind power projects can be developed. The assumption that Native Americans will or should unequivocally accept wind power because they value nature differently or more authentically denies Native American communities any agential role to negotiate their own livelihoods and relationships with diverse¶ environmental processes. It is to assume that each Native American community, or each individual, values the same thing – the global environmental benefit of the wind turbine. Policies, guidebooks, histories, and other representations are built upon this romantic image rather than the various other conditions that govern renewable energy development.

#### Genuine, binding consultation with tribes over new energy productionis vital to ending racism, fostering collaboration and ending jurisdictional conflicts over energy development The permutation is lip-service and reinforces status quo mistrust. The counterplan alone creates a process that solves the case better – the plan is more likely to turn itself

**Tanana and Ruple, 12** - \* Fellow with the University of Utah's Institute for Clean and Secure Energy AND \*\* Fellow with the University of Utah's Wallace Stegner Center for Land, Resources & the Environment (Heather and John, “Energy Development in Indian Country: Working within the Realm of Indian Law and Moving towards Collaboration,” 32 Utah Envtl. L. Rev. 1, lexis)

B. Moving Towards Collaboration¶ A collaborative approach in and around Indian country is needed to ensure efficient energy development. Land and resource ownership is highly fragmented, and Indian country jurisdiction remains a complicated and often misunderstood concept. Agency personnel may not understand the geographic extent of Indian country or why Indian country is not synonymous with current reservation boundaries. Formal agreements and maps of the **geographic extent of Indian country** and associated state regulatory jurisdictional limits are rare. n309 As a result, federal, state, and tribal officials must rely on informal understandings and ad-hoc [\*44] decision-making processes. The lack of clarity can create uncertainty for those potentially subject to regulation, as they legitimately question who will regulate their development and fear that a project extending across jurisdictional boundaries could be subject to multiple and conflicting requirements or worse, a jurisdictional battle between governments or agencies. Moreover, energy developers may be forced to configure proposals to address regulatory rather than resource constraint, which may in turn lead to inefficient development, redundant infrastructure, and a greater overall level of environmental impact.¶ Where **jurisdiction is unclear**, the risk of inconsistent regulation **increases**, **uncoordinated cumulative effects assessments become more likely**, and inadequate protection of transient resources, such as migrating wildlife and air quality related values, is more likely to occur. Energy resources within Indian country hold tremendous promise to reduce dependence on foreign oil and spur economic development. However, in order to prevent haphazard development, federal, state, and tribal governments must work together. Failure to coordinate plans among federal agencies, tribal governments, state governments, and the general public can lead to program duplication and inefficient accomplishment of governmental programs. n310 It is essential to bring all the relevant players into the land use planning process "so that they will have a voice in decisions that affect their interests." n311¶ Presently, energy resources are managed by different parties under different requirements, advancing different interests. Fragmented ownership, combined with divergent management objectives, threatens to either impede development or result in development that neither maximizes efficiencies nor minimizes environmental degradation. In order to prevent such outcomes, it is critical that federal, state, and tribal leaders coordinate their efforts to create synergies rather than conflicts.¶ Intergovernmental coordination can be facilitated by cross-jurisdictional, landscape-level land and resource management strategies, such as an ecosystem co-management agreement. n312 "Ecosystem management focuses on entire ecosystems, not just individual resources, emphasizing the need for inter-jurisdictional coordination to ensure ecological integrity and sustainable resource systems." n313 Such agreements, when done appropriately, can bring multiple sovereigns together to address and resolve maters of mutual concern to each [\*45] other. n314 Co-management agreements can also help avoid litigation and overcome situations when limited tribal capacities impede independent resource management. n315 Different levels of power sharing can be utilized in a co-management approach as well, ranging from joint decision-making to mere notification. n316 This flexibility allows agreements to be tailored to the individual needs and capabilities of a given area.¶ Overall, "intergovernmental agreements can serve both Indian and non-Indian communities by reducing cross-jurisdictional disputes and providing flexible and effective ways to manage inter-jurisdictional environmental resources." n317 Given the overlapping concerns and impacts of energy development, including the mobility of pollutants, such agreements provide an ideal solution for federal-tribal-state conflicts.¶ Neither tribes nor states can effectively regulate regional environmental quality without the cooperation of the other. Joint regulatory programs avoid jurisdictional disputes by allowing the parties to agree on who will regulate a particular activity for a particular period of time. Moreover, cooperative agreements lower intergovernmental tensions that can damage the overall quality of state/tribal relations and also provide greater flexibility for both tribal and state policy-makers in the future. n318¶ In order to be successful, one scholar suggests that co-management must include the following principles: 1) recognition of tribes as sovereign governments; 2) incorporation of the federal trust responsibility; 3) legitimate structures for tribal involvement; 4) integration of tribes early in the decision-making process; 5) recognition and incorporation of tribal expertise; and 6) dispute resolution mechanisms. n319 As the next section discusses, there are various obstacles in achieving each of these principles.¶ [\*46] ¶ IV. Moving towards Collaboration¶ Competition between tribes and states is mutually destructive, wastes taxpayer dollars, impedes economic development, and is based on racism and self-defeatism. Only through communication, cooperation, and understanding can sovereignty be made a positive force for the continued growth of both sovereigns and the people they serve. n320¶ While co-management between federal, state, and tribal governments may represent one advantageous path forward, achieving true collaboration will be difficult. This section addresses the barriers that must be overcome to pave the way for future partnerships and concludes with examples of innovative agreements to share regulatory responsibilities across jurisdictional boundaries.¶ A. Stumbling Blocks to Reaching Collaboration¶ Various hurdles stand between current practices and effective cooperative management. First, deep-rooted mistrust between the sovereign entities must be overcome. "Even where cooperative agreements prove, on balance, beneficial to tribes, it may be difficult to sustain them if ... mistrust makes them politically controversial." n321 Historic federal policies and state mistreatment resulted in harm to tribes, culminating in mistrust of these entities. For example, the allotment era left many tribal communities in a state of disarray, and the subsequent termination era called for an end to the trust relationship between the federal and tribal governments. As a result, more than 100 tribes and bands lost federal recognition and were terminated. n322¶ Additionally, tribes have historically battled states over resources, boundaries, and jurisdiction. Disputes over natural resources within the Uintah Basin have been contentious, with the tribe deferring development of the promised Ute Indian Water Project until other portions of the Central Utah Project (CUP) could be completed, delivering water to non-Indians along the Wasatch Front. n323 When the promised Ute Indian Water Project was not built, the tribe declared the deferral agreement null and void and obtained a $ 198 million settlement from the federal [\*47] government. n324 The State of Utah continued to negotiate settlement of Indian water right claims, but with the atmosphere tainted by cases such as Hagen and Brough n325 and continuing concerns over administration of tribal water rights, no resolution could be obtained. n326¶ Consultation with tribes is the first step towards remedying past harm and providing tribes with an equal seat at the table. Historic adversaries must be able to sit face-to-face before they can see eye-to-eye. While current federal policy encourages consultation and coordination with Indian tribes, n327 in the eyes of some, it remains "difficult to avoid the conclusion that "consultation' is the latest federal codeword for lip service." n328 Despite the existence of internal agency policies advocating government-to-government relations with tribes, "the ability of tribes to participate as decision makers with enforceable rights is often ambiguous," leaving open the question of what it means to have meaningful consultation. n329 Similarly, [\*48] few states include a tribal consultation requirement in their state environmental review laws. n330¶

### 1nc native economies

#### No impact to cultural survival – doesn’t spillover to effect all of humanity

**Coates 2009** – former adjunct professor at George Washington University, President of the Kanawha Institute for the Study of the Future and was President of the International Association for Impact Assessment and was President of the Association for Science, Technology and Innovation, M.S., Hon D., FWAAS, FAAAS, (Joseph F., Futures 41, 694-705, "Risks and threats to civilization, humankind, and the earth”, ScienceDirect, WEA)

The first category of significant dreadful outcomes: the death of cultures, raises definitional questions of what is a culture, and how to define the boundaries on it and what it means for it to disappear. Obviously, most of the cultures that would be at risk today are small, involving thousands, tens of thousands, or surely well under a million people. Cultures larger than that are becoming increasingly globalized, westernized, and part of an expanding international advanced-nation culture, with local flavors in different parts of the world. When we turn to the smaller cultures, there is not even a good guess as to how many there are, but an excellent surrogate for that is the number of languages that there are. Each culture insofar as it is isolated has created its own language. The linguists tell us that languages are dying in great numbers.¶ Another side of the question is, whether the death of cultures is good or bad. There are, worldwide, people who deplore the loss of any culture. (We are not thinking about people, but about the culture of a people.) Unfortunately, they would like to see functional groups of the people at cultural risk preserved to become parts of a living museum. That is unfair and, to say the least, undemocratic. Consider the case of the people who manage and harvest the reindeer in Finland, the Lapps. Their culture is in large part framed around a great annual cycle. The animals are collected together and moved much like the situation so common in our western movies of taking the herds of cattle from Texas to the Midwest slaughter houses and railroad yards. The snowmobile was introduced into Lapp society and has been rapidly changing their customs. Some outsiders, as noted, deplore this. But remember, no one forced the snowmobile on the Lapps; it is their free choice and it is outrageous to think that we would deprive them of free choice to adopt what they see will enhance the quality of their lives. On net, I see the loss of cultures as, in some romantic sense, regrettable and undesirable, but in terms of the overall benefits to humankind, the integration of the minor cultures into a global culture carries far more benefit for them and for the world than local survival does.

#### Indian culture is resilient

Stephen Cornell and Joseph Kalt, Harvard Project on American Indian Economic Development, 1993, Reloading the Dice: Improving the Chances for Economic Development on American Indian Reservations, http://www.hks.harvard.edu/hpaied/pubs/pub\_120.htm,

American Indian societies are phenomenally resilient. In the last several centuries, they have faced winds of economic, political, and cultural change that have blown as fiercely over them as over any people in history. These winds have brought military violence and subjugation, epidemics of disease, seizures of land and property, vicious racism, and economic deprivation. Yet, as the twenty-first century approaches, hundreds of distinct Indian nations built upon dozens of cultural lineages still persevere and grow, variously bound together by ties of family, language, history, and culture. The lesson from Indian Country is a lesson of strength.

#### Brain drain alt cause

Joseph **Kalt** and Stephen **Cornell, 2005,** Professor of International Political Economy at Harvard and professor of sociology and of public administration at University of Arizona, “Two Approaches to Economic Development on American Indian”, ([http://jopna.net/pubs/jopna\_ 2005-02\_Approaches.pdf](http://jopna.net/pubs/jopna_2005-02_Approaches.pdf) )

There’s a brain drain as a lot of the people with good ideas—particularly younger tribal members—leave home for somewhere else, desperate to support their families and discouraged by political favoritism, bureaucratic hassles, and the inability of tribal government to deal with the basic problems. Patterns of failure, mismanagement, and corruption encourage outside perceptions of Indian incompetence and reservation chaos that make it even harder to defend tribal sovereignty. **The ultimate economic result is continued poverty**. In short, the standard approach doesn’t work.

**Cultural survival is impossible and there’s no impact anyway.**

**Blake 2000** (Michael Blake, Professor of political philosophy and philosophy at Harvard University, August/September 2000, Civilization, p. 51-53)

One frequently hears that endangered cultural groups have a right to preservation, and indeed to outside aid and legal sanctions toward that end. Anthropologists and activists have made such claims on the grounds that the survival of these groups has inherent value. Some advocacy groups have even gone so far as to equate the absence of such special rights with genocide. There is no great moral distinction, such rhetoric seems to suggest, between allowing a culture to assimilate into the wider surrounding society and actually going out and killing its members en masse. This vague moral equation has turned up of late in the discussion of issues as varied as affirmative action, Southern regionalism, Quebecois nationalism, and the moral status of such culturally overwhelming institutions as Wal-Mart and McDonald’s. If we take these arguments at face value, cultural survival is something very close to a moral absolute; to refuse to endorse it is to sign up on the side of cultural atrocity and numbing global conformity This is a shame, because it is surprisingly difficult to figure out exactly what is morally relevant about cultural survival in itself. The first challenge is pinning down just what the term might mean. It cannot simply mean the continued existence of the individuals comprising the endangered culture, since their survival is entirely compatible with their complete assimilation and hence with the destruction of their culture. Nor however, can it mean the preservation of all existing aspects of a culture, for some degree of cultural change and adaptation is normal, indeed inevitable. Cultural stasis is not a plausible ideal, let alone a worthy guide to policy. The messy reality of cultural survival, then, lies somewhere between disintegration and the deep freeze. The most plausible meaning of the slogan as a political goal might be simply the preservation of difference: the desire that whatever cultures now exist not lose their distinctiveness and blend into surrounding society; and that they continue to serve as means by which some people make sense of their place in the world, however much the content of their cultures may change over time. The key idea here is that the number of cultures now present not be reduced, however much the lifeways and customs comprising each individual culture might change over time. But what reason have we, then, to think that cultural survival is valuable in itself? One argument draws an analogy between cultures and other threatened aspects of the social and natural world: We ought to preserve cultures because to do otherwise is to allow something unique and irreplaceable to leave the world. Refusing to act against assimilation might thus be thought roughly akin to, say; shooting the last of a particularly beautiful species of condor. This argument, though, claims too much, for we feel an equivalent sense of loss when we face not the destruction of a culture but merely its reworking from the inside—and, thereby the destruction of specific elements within it. For example, during Quebec’s Quiet Revolution— the tumultuous postwar period during which French Canada cast off clerical authority and conservatism and fashioned itself into a modem secular society—much of the culture was completely remade and many traditional norms and practices abandoned. We might easily sympathize with the feeling that there was a loss to the world in what was thereby abandoned. We do have reason to regret the fact that current ways by which the world is understood— our own ways included—will eventually disappear. But our justifiable sadness does not give us good reason to declare that what is now endangered ought to be preserved forever, or to forbid ourselves from altering inherited cultural norms—abandoning some, amending others, and embracing foreign ways and customs as our own. One could even say that this sadness is the inevitable price we pay for freedom: If we had no choice about what norms to adopt, and knew that our children would live as our ancestors lived before us, the world would lose one source of woe but gain many more. This approach to defending cultural survival, then, has some serious defects. Another line of argument harnesses the value of cultural survival to the more kindred value of cultural diversity gaining support from the undoubted attractiveness of the latter. On reflection, however, the ideal of cultural diversity seems scarcely less mysterious and ambiguous than the notion of cultural survival itself. The ambiguity in valuing diversity lies, on one level, in whether it means valuing people of distinct backgrounds or valuing the diversity of backgrounds itself. The first notion—that people ought to be respected as equals regardless of their ethnicity race, gender, and other distinguishing traits—is today a part of any plausible political philosophy But it hardly follows that we must value and preserve diversity itself, in the abstract; we have, I think, no reason to regret that the world does not contain twice as many cultures as it does. We might try to defend cultural diversity in the abstract by pointing out how much we benefit by its concrete existence. But this raises in turn another deep ambiguity—that between diversity of cultures and diversity within cultures. Exposure to a wide variety of lifeways is clearly of great moral value; it enables people to flourish in ways that conformity and sameness instead suppress. But there is no necessary link between the desirability of diversity within cultures and the demand that there be a wide variety of cultures themselves. More to the point, the latter demand can actually work against diversity. Political measures designed to foster a culture’s survival must perforce ascribe a negative value to assimilation; they therefore end up penalizing those individuals within it who seek, for example, to borrow or adapt from other cultures. In so doing, advocates of cultural survival often provoke a stilling insistence on cultural purity and conformity; one need only think of the recurrent French crusades for linguistic purity to realize how quickly a drive for cultural preservation can begin to resemble a paternalistic—and, if imposed from outside, patronizing—intolerance. It is one of the sharpest ironies of the cultural survival movement that defending a diversity of cultures tends to repress the possibilities for diversity within cultures.

#### Multiple jurisdictional barriers overwhelm the plan

Sullivan, 10 – JD, University of Arizona (Bethany, “Changing Winds: Reconfiguring the Legal Framework for Renewable-Energy Development in Indian Country,” 52 Ariz. L. Rev. 823, Fall, lexis)

Unfortunately, the IEED's TERA program has produced unsatisfactory results. Not a single tribe, as of present, has successfully attained a TERA. n54 This may partially be a consequence of the multi-step TERA application requirements, including: submission of documentation demonstrating a tribe's financial and personnel capacity to administer energy agreements and programs, establishment of a tribal environmental review process, and consultative meetings with the Director of the Indian Energy and Economic Development Office. n55 Perhaps more problematic are conflicting sentiments within tribes over distancing tribal energy development from federal government protection, an issue strongly debated among Indian law practitioners and scholars. n56 So, although tribes could arguably benefit [\*832] from the decreased federal oversight that TERAs would provide, it appears that this mechanism, on its own, is insufficient to truly stimulate renewable development.¶ In summary, the Act has provided for federal programs that encourage the development of tribal renewable resources, yet its policy goals of tribal economic and energy development and tribal self-determination have not yet been met. In part, this may be a function of inadequate appropriations for the Act's provisions. n57 An alternative explanation, however, is that the Act fails to address substantial obstacles to tribal renewable-energy development. The most significant obstacles can be generally divided into two categories: (1) tribal inability to take advantage of federal tax incentives in the renewable-energy industry and (2) unfavorable case law concerning tribal civil jurisdiction.

#### No model – other countries won’t comply

Walter, 2003.(Barbara F., Associate Professor Graduate School of International Relations and Pacific Studies at University of California, San Diego, December, “REPUTATION AND WAR: Explaining the Intractability of Territorial Conflict,” International Studies Review. Vol. 5, no. 4., http://www.ciaonet.org/wps/wab04/wab04.pdf )

Between 1940 and 1996, governments were seventy percent less likely to negotiate with rebels seeking independence or greater territorial autonomy than with rebels seeking any other goal. Current theories suggest that this is due to the economic, strategic, or psychological value of territory under dispute. I argue that a government’s decision to negotiate has more to do with the signal the government wishes to send to future challengers than with any specific characteristics of the land in question. If the government believes it could face multiple separatist challenges in the future, it will invest in a reputation for toughness now rather than face additional challengers down the road. If the government knows it will face such a challenge only once, there is less reason to invest in a reputation and negotiation is likely to result. An analysis of all self determination movements between 1940 and 2000 demonstrates that governments of multiethnic states are far *less* likely to negotiate than are governments that preside over more homogenous populations.

#### And, at best the model is only selective

Gevork **Ter-Gabrielian**, Department of Political Science Bowling Green State University, August **1999** “Strategies in Ethnic Conflict” Fourth World Journal <http://www.cwis.org/fwj/41/ethnic.html>

Accommodation, if it is possible to achieve in a form of federation or consociation, is a solution. However, the cases of accommodation are rare, and there is no guarantee that accommodation in a society divided by ethnic conflict will result in a long-lasting peace. Moreover, state elites are reluctant to consider accommodation as an option because they believe that a federative arrangement would give ethnic groups an even more legitimate opportunity to break away. This happened in Czechoslovakia. Before 1992, it was only nominally federation. In the 1992 Constitution, it was re-named Czecho-Slovakia, and the federation comprised of two equal republics was constituted. In less than a year Slovakia seceded. This was the only case of indeed peaceful ('velvet') divorce in the post-Soviet space. All other post-Soviet states, except for Russia and Romania, rather than enhancing the status of their ethnic groups have nominally discarded even the existing political autonomies (in the best case substituting them by a vague cultural autonomy), which, in turn, has become a cause for ethnic conflict escalation (Naumkin, 1994). If states are not liberal by their ideology, if they are not economically secure and politically well-established democracies, they tend to reject the option of accommodation to the demands of ethnic groups.

### 1nc environmental leadership

#### Can’t solve environmental leadership – past alt causes

**Victor 8** - law professor at Stanford's Program on Energy and Sustainable Development and adjunct senior fellow at the Council on Foreign Relations.

(David G., "The next U.S. President won't be green", 5-1-08 <http://www.newsweek.com/id/135073/>)

The U.S. record on international environmental issues is highly uneven for reasons that have little to do with George W. Bush's leadership. His administration has been tarred across the planet for reckless leadership on international environmental issues. (Its actual record, while dreadful, is not a uniform failure. It has done useful things in a few areas, such as a thoughtful initiative to help conserve forests in the Congo Basin.) But the signature of Bush's reckless foreign policy in this area, his decision to withdraw from the Kyoto treaty barely three months after taking office, actually has its roots in the Clinton administration. Clinton was highly committed to environmental issues and his vice president, Al Gore, was an even more passionate leader. Their zealous diplomats negotiated a treaty that was larded with commitments that the United States never could have honored. The promise to cut U.S. emissions 7 percent below 1990 levels is a good example. Because actual emissions were rising steadily, it would have been impractical to turn them around in time to meet the 2012 Kyoto deadline. The U.S. Congress never could have passed the requisite legislation, and no leader in the White House could have changed that voting arithmetic. The U.S. withdrawal from the Kyoto Protocol was inevitable.

What does this mean for America's credibility in the world? When the American president promises, should anyone listen?

Increasingly, other countries are learning that the answer is no—because American leaders have a habit of promising a lot more than they can deliver. Environmental issues are particularly prone to overpromising, and not just by the United States. Europe, too, is fresh with unrealistic claims by political leaders. The European Union, for example, has launched negotiations for the post-Kyoto agreement by claiming that Europeans will cut greenhouse-gas emissions 20 percent to 30 percent by 2020—an outrageous goal considering that most of Europe (with the exception mainly of Britain and Germany) will fail to meet their existing targets, and emissions are actually rising. Europe as a whole would blow through its Kyoto targets if not for its generous use of a scheme that lets them take credit for overseas investment in low-carbon technologies—despite mounting evidence that many of those overseas credits don't actually deliver real reductions in emissions. Smart politicians know that the benefits lie mainly in the promising today and not in the delivery long in the future.

Ironically, the more enthusiastic the leader, the less credibility he or she has. While the Clinton administration was busy negotiating the Kyoto treaty, the U.S. Senate was passing a resolution, 95 to 0, to signal that it would reject any treaty that didn't contain specific commitments by developing countries to control their effluent of greenhouse gases. Since the developing countries had already rejected that outcome the Clinton administration had little room to maneuver. The great reversal in U.S. "leadership" on global warming over the last year—signaled by President Bush's speech three weeks ago embracing the need for limits on greenhouse gases—came from the people rather than top leaders. Public concern about global warming is rising (though it will be checked by the even more acute worries on the economy and war). The Bush speech was more a recognition that serious efforts to develop climate legislation are already well underway without his stamp. Many states are already planning to regulate greenhouse gases. The Senate has a serious bill on this subject scheduled for floor debate starting June 2. Its sponsors are Joe Lieberman (the former running mate of Al Gore but now alienated from the Democratic Party for his overly independent views) and John Warner (a Republican who has no former track record on global warming). These are ideal leaders for this issue because often it takes the fresh faces focused on building bipartisan majorities to get things done in America.

Perhaps the most interesting signal that American presidents are losing the ability to lead is an effort to rewrite the rules that would govern environmental treaties under American law. Committed environmentalists have rightly noted that America's Constitution requires a two-thirds vote for treaties in the Senate. That standard is nearly impossible to meet because one third of the Senate is usually opposed to anything interesting. Serious efforts are now underway to reinterpret environmental "treaties" as agreements between Congress and the president, which would require only a majority vote. Most trade agreements, for example, travel under this more lax standard and also have special voting rules that require Congress to approve the agreement as a whole package rather than pick it apart piece by piece. Rebranding and changing voting rules makes it easier to approve agreements, boosting the credibility of the president to negotiate agreements that serve the country's interest.

#### And, economic factors block

Christian Science Monitor 2007 [Warming's bad guys made good, lexis]

Leaders of the world's two largest emitters of greenhouse gases, the United States and China, laid out plans in the past week to reduce their impact on the planet. But these two giants on the global scene also suggested two won'ts: They won't be bound to action by other nations and they won't hurt their own economies.

Even with those caveats, the fact that the Bush administration and China's top governing body, the State Council, acted just before the G-8 summit of industrial leaders this week is a healthy sign.

They now recognize their interests, and perhaps the welfare of all nations - especially poor ones - are at stake. They should be welcomed for joining the effort to save the global "commons" that is the atmosphere and oceans.

**And, the plan can’t solve leadership – not taken seriously**

**The Business Times Singapore 2007** [Can Bush follow through on his green policy?, lexis]

¶ WHO looks to President George Bush for leadership on global warming? When he announced his intention last week to set the United States on to the path of reducing greenhouse gases, the world reacted with scepticism.The sceptics see it as presidential grandstanding which in effect is intended to stall the Group of Eight nations' talks in Germany this week. That conclave aims to adopt a unified stand on the post-Kyoto round discussions ahead of a global in Bali later this year.¶ Similar scepticism was heard about the president's announcement last month about setting up an interdepartmental study on vehicle emissions in the US. Indeed, the Bush administration had to be hauled to the US Supreme Court and its federal Environmental Protection Agency had to be directed to use its power to rein in emissions. ¶ So, President Bush finds himself in a situation of being damned if you do and damned if you don't. After having spurned the Kyoto Protocol, the main global treaty for cutting emissions, and questioning the very science involved in global warming, Mr Bush has a hard time convincing the world that he is for real changes on emissions.¶ Earlier, there were sound bites like 'America is addicted to oil' and there was a tantalising proposal for cellulosic ethanol for the future and with funding increased for research to support technology-backed solutions to greenhouse gas emissions. But at the same time, immediate action to require more miles from vehicles was shunned. Nor has he abandoned his opposition to the cap and trade system to control emissions, a central plank of the Kyoto Protocol.

#### A focus on defense blocks

**Sacramento Bee 2007** [U.S. rift with Europe: G-8 should stay focused on climate change, lexis]

Global climate change should top the agenda of this week's G-8 summit of leaders from the United States, Canada, France, Germany, Italy, Japan, Russia and Great Britain -- plus Brazil, Mexico, China, India and South Africa.

But U.S. proposals for placing missile defense systems in Poland and the Czech Republic (dubbed "son of Star Wars") has dominated discussions leading up to the talks -- and, unfortunately, have the potential to derail the push to fight global warming. The United States will have to take the lead to elevate the one issue and defuse the other.

The need for action is urgent. The Earth is rapidly reaching tipping points that will make it more difficult to head off dramatic changes in global warming in the future. And the Kyoto Protocol, where nations committed to reduce carbon dioxide emissions, expires in 2012. The United States did not sign that agreement.

As German Chancellor Angela Merkel, chair of the G-8 and host of the summit, has said on climate change, "If the United States doesn't move, then others will also wait and see." Merkel wants the G-8 summit to agree to set long-term goals to cut greenhouse gas emissions to 50 percent below 1990 levels by the year 2050 -- and for this framework to be a new basis for an international agreement replacing the Kyoto Protocol. It would be nice to see such a landmark deal come out of the summit.

**Biodiversity loss is overstated**

**Bailey,** award-winning science correspondent for *Reason* magazine, testified before Congress, author of numerous books, member of the Society of Environmental Journalists and the American Society for Bioethics and Humanities, **2k** [ Ronald, “Earth Day, Then and Now The planet's future has never looked better. Here's why.”, http://reason.com/archives/2000/05/01/earth-day-then-and-now/4]

Worries about declining biodiversity have become popular lately. On the first Earth Day, participants were concerned about saving a few particularly charismatic species such as the bald eagle and the peregrine falcon. But even then some foresaw a coming holocaust. As Sen. Gaylord Nelson wrote in *Look*, "Dr. S. Dillon Ripley, secretary of the Smithsonian Institute, believes that in 25 years, somewhere between 75 and 80 percent of all the species of living animals will be extinct." Writing just five years after the first Earth Day, Paul Ehrlich and his biologist wife, Anne Ehrlich, predicted that "since more than nine-tenths of the original tropical rainforests will be removed in most areas within the next 30 years or so, it is expected that half of the organisms in these areas will vanish with it." There's only one problem: Most species that were alive in 1970 are still around today. "Documented animal extinctions peaked in the 1930s, and the number of extinctions has been declining since then," according to Stephen Edwards, an ecologist with the World Conservation Union, a leading international conservation organization whose members are non-governmental organizations, international agencies, and national conservation agencies. Edwards notes that a 1994 World Conservation Union report found known extinctions since 1600 encompassed 258 animal species, 368 insect species, and 384 vascular plants. Most of these species, he explains, were "island endemics" like the Dodo. As a result, they are particularly vulnerable to habitat disruption, hunting, and competition from invading species. Since 1973, only seven species have gone extinct in the United States. What mostly accounts for relatively low rates of extinction? As with many other green indicators, wealth leads the way by both creating a market for environmental values and delivering resource-efficient technology. Consider, for example, that one of the main causes of extinction is deforestation and the ensuing loss of habitat. According to the Consultative Group on International Agricultural Research, what drives most tropical deforestation is not commercial logging, but "poor farmers who have no other option for feeding their families than slashing and burning a patch of forest." By contrast, countries that practice high yield, chemically assisted agriculture have expanding forests. In 1920, U.S. forests covered 732 million acres. Today they cover 737 million acres, even though the number of Americans grew from 106 million in 1920 to 272 million now. Forests in Europe expanded even more dramatically, from 361 million acres to 482 million acres between 1950 and 1990. Despite continuing deforestation in tropical countries, Roger Sedjo, a senior fellow at the think tank Resources for the Future, notes that "76 percent of the tropical rain forest zone is still covered with forest." Which is quite a far cry from being nine-tenths gone. More good news: In its *State of the World's Forests 1999*, the U.N.'s Food and Agriculture Organization documents that while forests in developing countries were reduced by 9.1 percent between 1980 and 1995, the global rate of deforestation is now slowing. "The developed countries in the temperate regions appear to have largely completed forestland conversion to agriculture and have achieved relative land use stability. By contrast, the developing countries in the tropics are still in a land conversion mode. This suggests that land conversion stability correlates strongly with successful economic development," concludes Sedjo, in his chapter on forestry in *The True State of the Planet*, a collection of essays I edited. In other words, if you want to save forests and wildlife, you had better help poor people become wealthy.

**Ozone depletion inevitable**

**TIMES EDUCATIONAL SUPPLEMENT 1-16-2004**

Without this protection, there would be little life on Earth. So, ozone is formed by UV, destroyed by UV, and in the process it protects us from UV. What this means is that there is an "ozone balance" -a state in which ozone is being created and destroyed at equal rates -which keeps the ozone layer in being. The balance is naturally fragile and fluctuating, and anything that upsets it and increases the rate of ozone destruction is potentially life-threatening -hence the worry, since the 1980s, about the effect of the release into the atmosphere of chlorofluorocarbons (CFCs), such as those used in aerosols, refrigerators and air conditioners. These interfere with the ozone balance by promoting complex chemical reactions that speed up the breakdown of ozone. The problem is aggravated by the fact that CFCs were used for many years in the belief that they were inert, with no environmental penalties. Their very stability, however, means that even after they have been phased out, they will remain in the atmosphere for a long time.

**Soft power is necessary not sufficient—everything turns it**

**Quinn, 11** – Lecturer in International Studies at the University of Birmingham, having previously worked at the University of Leicester and the University of Westminster alongside his graduate studies at the LSE. His chief area of interest is the role of national history and ideology in shaping US grand strategy (Adam, “The art of declining politely: Obama’s prudent presidency and the waning of American power”, International Affairs 87:4 (2011) 803–824 http://www.chathamhouse.org/sites/default/files/87\_4quinn.pdf

Nevertheless, this qualification demands two further qualifications of its own. The first is that if we consider ‘soft power’ as a national attribute then it is difficult to separate it with confidence from the economic and military dimensions of power. Is it really likely that America’s ideological and cultural influence will endure undiminished in the absence of the platform of military and economic primacy upon which it has been constructed? It may be overstatement to suggest that, borrowing Marxist terminology, hard power represents the ‘base’ and soft power mere ‘superstructure’. But one could plausibly argue that even America’s non-coercive power and political appeal are inextricably entwined with the status conferred upon it by possession of a preponderance of material resources. While vestigial soft power may delay or mitigate the consequences of relative material decline, it is surely unrealistic to expect it to override them such as to allow the US to continue to exercise the same influence in a multipolar or non-polar world as it did in a unipolar one.

**Soft power fails**

**Rachman 9** [Gideon Rachman is the Economist's bureau chief in Brussels, June 1 http://www.ft.com/cms/s/0/e608b556-4ee0-11de-8c10-00144feabdc0.html]

Barack Obama is a soft power president. But the world keeps asking him hard power questions.

From North Korea to Guantánamo Bay, from Iran to Afghanistan, Mr Obama is confronting a range of vexing issues that cannot be charmed out of existence.

The problem is epitomised by the US president’s trip to the Middle East this week. Its focal point will be a much-trailed speech in Cairo on Thursday June 4, in which he will directly address the Muslim world.

The Cairo speech is central to Mr Obama’s efforts to rebuild America’s global popularity and its ability to persuade – otherwise known as soft power. The president has been trying out potential themes for the speech on aides and advisers for months. He is likely to emphasise his respect for Islamic culture and history, and his personal links to the Muslim world. He will suggest to his audience that both the US and the Islamic world have, at times, misjudged and mistreated each other – and he will appeal for a new beginning.

George W. Bush launched a military offensive in the Middle East. Mr Obama is launching a charm offensive.

There is plenty to be said for this approach. Mr Bush embroiled America in a bloody war in Iraq that strengthened Iran and acted as a recruiting sergeant for America’s enemies. Mr Obama’s alternative strategy is based on diplomacy, engagement and empathy.

Mr Bush had a shoe thrown at him in his last appearance in the Middle East. So if Mr Obama receives his customary standing ovation in Cairo, that will send a powerful symbolic message. But the president should not let the applause go to his head. Even if his speech is a success, the same foreign-policy problems will be sitting in his in-tray when he gets back to the Oval Office – and they will be just as dangerous as before.

In particular, there is chatter in official Washington that the Israelis may be gearing up to attack Iran’s nuclear facilities before the end of the year. The Obama administration is against any such move and it is normally assumed that Israel would not dare to pull the trigger without the go-ahead from Washington – not least because the Israelis would have to fly across US-controlled airspace to get to their targets. But the Americans do not have a complete veto over Israel’s actions. One senior US official asks rhetorically: “What are we going to do? Shoot down their planes?”

A conflict between Israel and Iran would scatter the Obama administration’s carefully laid plans for Middle East peace to the winds. It would also make talk of improving American soft power around the world seem beside the point. The immediate task would be to prevent a wider regional war.

In the meantime, the US will press on with the effort to achieve peace between the Israelis and the Palestinians. But even that goal is unlikely to be advanced much by Mr Obama’s trip to the Middle East. Many in the audience in Cairo and in the wider Islamic world will want and even expect the new president to lay out a complete vision for a peace settlement and to apply unambiguous pressure on Israel. For reasons of domestic politics, diplomacy and timing, Mr Obama is highly unlikely to do this.

Yet while his Arab audience may be disappointed by what he has to say about the Middle East peace process, Mr Obama is already facing an increasingly tense relationship with the new Israeli government. The administration has now clashed openly with the Israelis over the Netanyahu government’s tolerance of expanded settlements in occupied Palestinian land.

Mr Obama is also running up against the limits of soft power elsewhere. Closing the prison camp at Guantánamo was meant to be the ultimate tribute to soft power over hard power. The Obama team argued consistently that the damage that Guantánamo did to America’s image in the world outweighed any security gains from holding al-Qaeda prisoners there. Yet, faced with the backlash against releasing the remaining 240 prisoners or imprisoning them in the US, the Obama administration has back-tracked. It is not clear whether Guantánamo will be closed on schedule or what will happen to the riskier-sounding prisoners, who may still be held indefinitely. The much-criticised military trials are likely to be revived.

In Afghanistan, Mr Obama is trying a mixture of hard and soft power. There will be a military surge – but also a “civilian surge”, designed to build up civil society and governance in Afghanistan. Old hands in Washington are beginning to shake their heads and mutter about Vietnam.

Mr Obama’s preferred tools of diplomacy, engagement and charm do not seem to be of much use with Kim Jong-il of North Korea, either. The North Koreans have just tested a nuclear weapon – leaving the Obama administration scratching its head about what to do.

The president’s charisma and rhetorical skill are real diplomatic assets. If Mr Obama can deploy them to improve America’s image and influence around the world, that is all to the good. There is nothing wrong with trying to re-build American “soft power”.

The danger is more subtle. It is that President Yes-we-can has raised exaggerated hopes about the pay-off from engagement and diplomacy. In the coming months it will become increasingly obvious that soft power also has its limits.

#### Soft power resilient

**Nye 6** – IR Professor, Harvard (Joseph, 6/25, Why Do They Hate Us?, http://www.washingtonpost.com/wp-dyn/content/article/2006/06/22/AR2006062200972\_pf.html)

Fortunately, even when the U.S. government's foreign policies are unattractive to others, our culture and our open political processes can produce a "meta" form of soft power -- winning grudging admiration for our freedoms at the same time that our policies are unpopular. After all, anti-American protests were rampant around the world during the Vietnam War, but the protesters did not sing "The Internationale"; they sang the American civil rights anthem "We Shall Overcome." Today, the fact that America remains democratic and self-critical, that its free press exposes governmental flaws and that the legislative and judicial branches can act against the executive, means that anti-American critics of U.S. foreign policies can still feel a residual attraction to our society. As Sweig puts it, "The best antidote to Anti-America may well come not from how we fight (or prevent) the next war but from the degree to which we keep intact the social contract and international appeal of American society." She also urges Washington to adopt a changed foreign policy style that develops empathy for foreign cultures, practices better manners and pays more attention to rules and fairness. Anti-Americanism will not go away, but it need not dominate the 21st century if Americans follow the advice of this well-reasoned book.

### 2nc

**Pakistan**

**Morgan, 10 –** former member of the British Labour Party Executive Committee. A political writer, his first book was "The Mind of a Terrorist Fundamentalist" He is a journalist and columnist for http://www.thecheers.org/ magazine (Stephen, “Better Another Taliban Afghanistan, than a Taliban NUCLEAR,” 6/4, http://society.ezinemark.com/better-another-taliban-afghanistan-than-a-taliban-nuclear-pakistan-4d0ce18ba75.html)

Strong centrifugal forces have always bedevilled the stability and unity of Pakistan, and, in the context of the new world situation, the country could be faced with civil wars and popular fundamentalist uprisings, probably including a military-fundamentalist coup d'état.

Fundamentalism is deeply rooted in Pakistan society. The fact that in the year following 9/11, the most popular name given to male children born that year was "Osama" (not a Pakistani name) is a small indication of the mood. Given the weakening base of the traditional, secular opposition parties, conditions would be ripe for a coup d'état by the fundamentalist wing of the Army and ISI, leaning on the radicalised masses to take power. Some form of radical, military Islamic regime, where legal powers would shift to Islamic courts and forms of shira law would be likely. Although, even then, this might not take place outside of a protracted crisis of upheaval and civil war conditions, mixing fundamentalist movements with nationalist uprisings and sectarian violence between the Sunni and minority Shia populations.

The nightmare that is now Iraq would take on gothic proportions across the continent. The prophesy of an arc of civil war over Lebanon, Palestine and Iraq would spread to south Asia, stretching from Pakistan to Palestine, through Afghanistan into Iraq and up to the Mediterranean coast.

Undoubtedly, this would also spill over into India both with regards to the Muslim community and Kashmir. Border clashes, terrorist attacks, sectarian pogroms and insurgency would break out. A new war, and possibly nuclear war, between Pakistan and India could not be ruled out.

Atomic Al Qaeda

Should Pakistan break down completely, a Taliban-style government with strong Al Qaeda influence is a real possibility. Such deep chaos would, of course, open a "Pandora's box" for the region and the world. With the possibility of unstable clerical and military fundamentalist elements being in control of the Pakistan nuclear arsenal, not only their use against India, but Israel becomes a possibility, as well as the acquisition of nuclear and other deadly weapons secrets by Al Qaeda.

Invading Pakistan would not be an option for America. Therefore a nuclear war would now again become a real strategic possibility. This would bring a shift in the tectonic plates of global relations. It could usher in a new Cold War with China and Russia pitted against the US.

#### Russia

**Cohen 01** (Stephen, Prof of Russian Studies + History @ NYU, Failed Crusade, p. 222-3)

In that connection, two circumstances are clear. As was true during the Cold War, hard-line and intrusive U.S. policies toward Russia abet the political fortunes of Moscow's own hard-liners, who are inveterate opponents of democratization and a pro-Western orientation in general. The growing revival of this unholy axis between American and Russian cold warriors in the 1990s is yet another unintended but dangerous legacy of the Clinton administration that must be overcome.'''

We may still hope that the other circumstance is only hypothetical. If democracy turns out to be the inescapable price of nuclear stability in Russia, the United States will have to accept the new regime, assuming it is not itself a destabilizing extreme form of authoritarianism and while hoping it will be short-lived. American missionaries whose policy contributed greatly to this tragic possibility continue to insist that "democracy in Russia is a precondition for cooperation."`'' But without cooperation, some kind of nuclear catastrophe is increasingly likely, and the fallout will not discriminate between democrats and despots or leave behind soil in which any kind of democracy can grow.

Several factors will determine whether or not post Communist Russia confronts the world with such a dire choice, but one of the most important is whether or not the United States adopts a wiser policy toward that fateful country. Lack of wisdom usually derives from false assumptions. In this case, it has been four false premises that informed the failed crusade of the 1990s and now must be discarded.

#### China trade

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: In regards to presidential elections, how do you think energy will fare under Obama and under Romney? Which sectors will benefit, and which will suffer? Mish: Mitt Romney has declared that if he’s elected he is going to label China a currency manipulator and increase tariffs on China across the board. That's something that I believe he might be able to do by mandate. If he's elected and he does follow through, I think the result will be a global trade war the likes of which we have not seen since the infamous Smoot-Hawley Tariff Act compounded problems during the Great Depression. Simply put, I think that global trade will collapse if Romney wins and he follows through on his campaign promises.

#### Turns warming and causes extinction

**China Daily, 8** (Rikki N. Massand and Gazelle Emami, “U.S.-China relations at the world's fingertips,” 4-20-2008, http://www.chinadaily.com.cn/world/2008-04/20/content\_6629700.htm, JMP)

To frame the importance of this discussion and the topics that must be met, Siegal used the analogy of “the U.S. and China having their hands around each other’s necks and we’re both going over the waterfall.” After that comment a man in the audience then suggested that in that case both countries would have to look to the other for help and teamwork would be the only way to survive.

That theme resonated from coast to coast. At the University of California-Berkeley, speaker Sidney Rittenberg took a more intimate approach to U.S.-China relations. A man who lived in China for 35 years, Rittenberg has worked for the past two decades as an advisor to major corporations doing business in China such as AIG, Intel, Hughes Aircraft, Pricewaterhouse Coopers, and Ford. At the Bay Area gathering he emphasized respect and dignity through his own stories, and instead of categorizing the issues into right and wrong Rittenberg advocates looking at the bigger picture. For him the imperative for Americans is to learn to get along with the Chinese.

“We must -- we don't have a choice. **The crises that threaten the human race**, like weapons of mass destruction in the hands of terrorist groups, global warming, **none of the issues will get resolved unless we work with China**, Brazil, India and of course Europe and other countries. Really the central axis that holds the whole thing together is the U.S. and China," Rittenberg said.

#### Romney turns case

**ETF, 9/13/12** (ETF Daily News, 13 September 2012, “Why Mitt Romney As President Could Destroy Alternative Energy Investing (TAN, FSLR, TSL, UNG, USO),” http://etfdailynews.com/2012/09/13/why-mitt-romney-as-president-could-destroy-alternative-energy-investing-tan-fslr-tsl-ung-uso/)//CC

One of the biggest attacks on Romney’s plan comes from the fact that he does not appear to be very environmentally conscious. “The word climate does not appear in the energy plan. That is a conspicuous absence” says Michael Levi of the Council on Foreign Relations in New York. Romney seems to have little in the way of climate policies to combat some of the more aggressive oil policies, like green lighting the Keystone XL Pipeline despite it travelling through one of the largest aquifers on the face of the earth. Romney’s plan is to increase burning fossil fuels which will do little to combat climate change (it in fact will be bad news for climate change management). Of course, the biggest threat that investors need to worry about is the pulling of funds from some of the biggest names in green energy. Without government subsidies, many alternative energy companies will have trouble funding as well as breaking even. Though green energy may be better for the environment, the fact remains that these energy sources simply cannot compete with the low cost options provided by fossil fuels, hence the subsidies in the first place. Renewable energy investing has been bad enough over the past few years, but a Romney presidency could put a nail in that coffin. Of course, that is not to say that a Romney administration would potentially do wonders for fracking companies and other new oil technologies, but it is almost certain that green energy would suffer [see also The Best Way To Invest In Solar Energy].

#### Romney can recover

**Thrush and Tau, 9/18/12 -** covers the White House for Politico.(Glenn and Byron, “Romney RIP — not so fast” Politico, http://www.politico.com/news/stories/0912/81369.html?hp=t1\_3)

But Romney, however humbled, has nearly 50 more chances to change the narrative. Despite his stunning missteps, his failure to articulate an attractive rationale for his candidacy, a growing GOP pessimism and tales of corrosive internal dissent, he remains within easy striking distance of Obama in most polls and is showing no signs of imminent collapse.

His support isn’t likely to dip much below 45 percent to 47 percent largely because nine in 10 Republicans are backing him.

“President Obama may make major strategic decisions in response to two tough days in the fishbowl — but that’s not how Crossroads rolls,” said Jonathan Collegio, spokesman for the Rove-linked groups American Crossroads and Crossroads GPS. “Every state where Romney needs to win is tight — we know this; our donors know this; and we’re continuing with our plan to end this train wreck of a presidency that has been Obama’s last four years.”

There aren’t a lot of raging optimists in Obama’s inner circle anyway, and now, they are being very careful, in private, to moderate their glee with a realism.

“Democrats should just remember Florida 2000 before they get cocky,” veteran Democratic strategist Karen Finney said. “It’s the stuff you don’t see that goes under the radar — the robocalls … flyers and mailings. … That’s the kind of stuff you can’t detect. Karl Rove knows how to win,” she said.

#### Especially if approval slips

**Usher, September, 12** – PhD, director of Purple Insights, a polling firm (Doug, September 2012 edition Purple Poll, <http://www.purplestrategies.com/wp-content/uploads/PurplePoll-9.21.12.pdf?utm_medium=email&utm_campaign=PurplePoll+Sept+2012-+from+Doug&utm_content=PurplePoll+Sept+2012-+from+Doug+CID_3d908eaa034685f378af8d464ed685de&utm_source=Email%20marketing%20software&utm_term=For%20much%20more%20read%20the%20full%20poll%20and%20our%20analysis%20here>)

Six weeks is a lifetime in politics, particularly in an election as closely monitored as this year’s presidential race. While Obama has gained momentum, there is a small but significant window of opportunity for Romney. First, the President’s approval rating and vote level indicate that voters remain hesitant to re-elect him. Second, the Romney campaign has had a string of difficult events (some self-inflicted), and as the campaign rights its ship the polls may tighten again. Finally, the upcoming debates provide a level of exposure (and risk) for both candidates. A strong showing by Governor Romney could turn the race around once more.

#### The fact that Obama is crushing it doesn’t mean the link is weaker—their claim is a logical fallacy

**Ifill, 9/20/12 -** Moderator and Managing Editor, Washington Week (Gwen, “When the Horse Race (Kinda) Matters” National Journal, <http://www.nationaljournal.com/columns/gwens-take/when-the-horse-race-kinda-matters-20120921>)

In the past 12 days, there have been 82 published election polls. Eighty-two. National, state-by-state, and some partisan polls. And that’s just the presidential surveys. And we stopped counting on Thursday.

Taken together, they tell of a good week for President Obama. If politics is indeed all about the horse race, then the candidates are rounding the far curve and heading for the homestretch that will take them to Nov. 6.

(And, yes, I do hate sport metaphors, but this one proved difficult to resist.)

But it’s tough--and a bit arrogant--to call the election in mid-September, before a single debate has been held or vote cast. It’s far smarter to try to use this trove of survey information and figure out what it tells us about the American electorate.

These are the kinds of discussions we have in our Washington Week and PBS NewsHour planning meetings. We want to know what the numbers mean, not just what they are.

Fortunately, these surveys are rich in information about what is driving voters' decisions. That’s what I had in mind when we invited Andrew Kohut of the Pew Research Center and Mark Blumenthal of HuffPost Pollster to appear on the NewsHour this week.

Kohut reported that Obama is now running a full 8 points ahead of Mitt Romney among likely voters--a larger margin heading into the fall than any nominee since Bill Clinton.

And Blumenthal, who analyzes thousands of surveys and keeps a running chart updated on his site daily, gave the president an average lead of 4 percentage points and, significantly, a 51 percent approval rating.

But what do these polls tell us about the voters that explains why the horse race is where it is? Three things:

Voters are enthusiastic. So much for the idea that voters are so depressed and turned off by political negativity that they have stopped paying attention to the election. According to the Pew survey, 70 percent are giving a lot of thought to the election. More are reading political news, and nearly 80 percent say it matters who wins.

Voters are somewhat optimistic. How can that be? More than 60 percent of Americans say that the economy is in poor shape, and a compilation of a number of polls shows that half of voters disapprove of how the president is handling things.

But go figure: nearly half--48 percent--say they expect things to get better next year, according to an AP-Gfk survey.

Voters are looking to pick a leader. Asked who they trust to handle a crisis (remember the 3 a.m. phone call ad that Hillary Rodham Clinton used against then-Sen. Obama in 2008?), the president comes out ahead of Romney in the Pew poll, 51 percent to 37 percent. Aside from the fact that he enjoys an incumbent’s advantage, Obama is also ahead on questions of relatability and his ability to handle foreign policy. Yet a closer look reveals another conundrum: Fully half--49 percent--say they are disappointed in the president.

Taken together, these polls show an uncertain electorate, and uncertainty seems to benefit the incumbent unless the challenger can prove he would be able to do any better.

#### It’s between Harry Reid and House Republicans and won’t pass anyway

Kelley, 9/20/12 (Matt correspondent for IowaRadio, “Senator Harkin Blames Repubicans for lack of wind tax credit”, http://www.radioiowa.com/2012/09/20/senator-harkin-blames-republicans-for-lack-of-wind-tax-credit/)

He says Senate Leader Harry Reid tried to bring the measure up for a vote again on Wednesday, and was denied. “Last evening, Senator Reid asked for consent to move to take up the production tax credit bill and the Republicans objected on the Senate floor,” Harkin says. “So here it is. It’s the Republicans who are stopping us from getting a production tax credit bill through that would save these jobs in Iowa.”

Siemens is cutting 407 jobs in Fort Madison, in addition to 200 more at plants in Florida and Kansas. About 220 jobs will remain at the company’s Iowa plant, one of the largest employers in Lee County. Harkin was asked about the chances of the wind energy credit passing.

“If we can ever get it to the floor, 100%,” Harkin says. “I think we have more than enough votes to pass it, we just can’t get over the filibuster by Republicans to bring it up on the floor. I also think that if we ever get it on the floor, we’ll get more than 60 votes on the final passage on extending the wind energy tax credits.”

Iowa’s other U.S. Senator, Republican Charles Grassley, blames the failure of the wind tax credit on the Democrat leadership and Democrat President Barack Obama.

The tax credits expire at year’s end and any progress in Congress is being hobbled by partisan bickering prior to the November elections.

#### Too old—stopped being an issue a week ago when the voting timetable expired

Bussiness Green, 9/11/12 (“Clock ticking for crucial US wind energy tax break”, http://www.businessgreen.com/bg/news/2204586/clock-ticking-for-crucial-us-wind-energy-tax-break)

Proposals to extend the [tax break](http://www.businessgreen.com/bg/news/2204586/clock-ticking-for-crucial-us-wind-energy-tax-break) as part of a wider package of tax credit extensions were approved in early August by the Senate Finance Committee, but they are still yet to move to a full vote in either the Senate or the House of Representatives.

There are now only eight working days left until Congress breaks up ahead of the November presidential election, and campaigners are increasingly desperate to see the measure approved next week amidst fears the uncertainty over the future of the incentive could prompt wind farm developers to shelve plans for next year.

It remains unlikely the PTC will be approved by the Republican-controlled House of Representatives before the recess given the number of GOP Representatives opposed to wind energy incentives. But the industry remains hopeful that passage through the Senate will provide developers with reassurance that the [tax](http://www.businessgreen.com/bg/news/2204586/clock-ticking-for-crucial-us-wind-energy-tax-break) credit could still be extended before the end of the year.

#### Wont come up until after the election and hasn’t been seriously debated

Bowen, 9/11/12 (Robert served on various government commissions, businessman, “Wind energy advocates push Senate for tax credit vote this week”, http://www.examiner.com/article/wind-energy-advocates-push-senate-for-tax-credit-vote-this-week)

The wind incentive is also still wrapped up in a broader, more complicated tax bill. Many lawmakers are holding out for federal tax code reform. There is a fat chance that will get done in this Congress.

The House is less likely to approve the credit than the Senate. The lower chamber has yet seriously debated the issue, making its passage before the election unlikely. The House is controlled by Republicans.

#### Solar funding has been curtailed to shield criticism over Solyndra

Sandoval, 7-27 (Michael Sandoval, an investigative reporter with The Heritage Foundation, 7-27-2012, “Abound Solar: Doomed to Fail Because of Election-Year Politics, Investor Says,” http://blog.heritage.org/2012/07/27/abound-solar-doomed-to-fail-because-of-election-year-politics-investor-says/)

“After Solyndra, the Department of Energy was balking and not releasing any more money under the loan guarantee because they didn’t want to be embarrassed in an election year,” he told MarketWatch.

Hill met with Colorado Democrats like Gov. John Hickenlooper and Sen. Michael Bennet, but could not prevail upon them to act.

“None of these guys would touch it. They said ‘Solyndra is a poisonous issue,’” according to Hill.

The Department of Energy, which had granted Abound its $400 million loan guarantee, suddenly began to enforce many of the stringent benchmarks that precluded access to drawing down additional loan funds, something it only did in the wake of the Solyndra news, Hill said.

This means the link is unique

Flock, 9-11 (Elizabeth Flock, staff writer for U.S. News & World Report, US News World Report, http://www.usnews.com/news/blogs/washington-whispers/2012/09/11/google-data-voters-may-not-care-about-solyndra)

Interest in Solyndra proved low both over the four year period of Obama's presidential term, as well as over the last twelve months, Google Insights for Search shows.

The low level of interest doesn't match up to the doggedness with which Republicans have attacked Obama on Solyndra.

In May, GOP presidential nominee Mitt Romney made a surprise visit to the shuttered Solyndra headquarters to accuse Obama of "crony capitalism," saying the solar company received federal loans because of its ties to the administration. Last month, Romney's running mate, Paul Ryan, decried Solyndra's "gold-plated connections" in his acceptance speech at the Republican National Convention.

Hundreds of news stories about the political angle of the company's closing have been published over the last 30 days alone.

Sorting the Google searches for "Solyndra" geographically, it becomes clear that interest in the failed company may be big inside the Beltway, but lagging outside of it. The tiny District of Columbia had more interest in the term over the last 12 months than any state.

Testing groups prove the issue is potentially explosive, and the plan expands it to a campaign issue wrecks Obama

Restuccia et al., 9-6 (Andrew Restuccia, Darren Samuelsohn, Darren Goode, staff writer, Politico.com, “Who wins Solyndra message war?” lexis)

Meanwhile, evidence is scant on how much mileage the Republicans are getting out of all their Solyndra messaging -- though their persistence is a sign that GOP strategists see promise there. And conservative groups have certainly spent big bucks promoting the message.

Luke Frans, executive director of the GOP-aligned polling firm Resurgent Republic, said the issue hits home when people in focus groups hear about Solyndra's price tag and a version of how the Energy Department approved the company's $535 million loan guarantee. He said it's especially damaging for the president among swing voters.

"Solyndra is an issue that puts President Obama in the context of being just another politician, instead of the transformative, post-partisan figure introduced to the electorate in 2008," said Frans, a former George W. Bush White House aide.

"If you're a disillusioned Obama voter, this is an issue that reminds you why you're disillusioned," he added.

But Frans acknowledged that Solyndra is not the top issue going into November. "It's not going to knock the economy off the top of the voting ballot," he said.

Americans for Prosperity President Tim Phillips, whose group has spent at least $13.5 million on ads attacking Solyndra and the Obama stimulus, says the criticisms work best in context with the broader stimulus effort. "Solyndra is just an example," he said.

After hosting focus groups, Phillips said he came away thinking that the goal isn't to get viewers to follow every detail of the Solyndra deal.

"What you're hoping to do is give them a sense of a theme or just one information data point that rings true with something already in their mind, that confirms a broader belief," Phillips said.

Jennifer Duffy, senior editor at the Cook Political Report, agreed that Solyndra doesn't work as a standalone issue. "Instead it's a symptom of what Republicans call 'Obama's failed economic policy.' It is one concrete example for voters that the stimulus/loan guarantees didn't work," she said.

Romney aides say they have Republican National Committee testing that shows the Solyndra attacks work when boiled down to a one- to two-sentence message about the money lost and the company's connections to Obama donors.

"It was the single, No. 1 most potent hit" among about 25 messages, including the growing national debt and a lack of "shovel ready job projects," a Romney aide said. "It even beat health care."

#### GOP win causes Iran strikes

Dilek 9-20-11 (Emine, addicting info, “All Republican Candidates Favor War with Iran” http://www.addictinginfo.org/2011/09/20/all-republican-candidates-favor-war-with-iran/, jj)

All Republican Candidates Favor War with Iran Prepare yourself my fellow Americans. If you elect a Republican President in the 2012 elections, more than likely we will be at war with Iran before his or her Presidency is over. In a disturbing new article written by Trita Parsi, a columnist for Salon.com, he expertly connects the dots on which single foreign policy issue is uniting all GOP candidates: Iran. He writes that when it comes to Arab Spring and all other foreign policy issues, GOP candidates are all over the place. But when it is about Iran, they all agree; USA must be tougher. Parsi asserts that “Republicans will present a narrative that diplomacy was tried and failed, sanctions are tough but insufficient, and the only remaining option is some form of military action. As the memory of the Iraq invasion slowly fades away, Republican strategists calculate, the American public will return to rewarding toughness over wisdom at the ballot boxes.” Although I agree with Parsi’s claim that Iran is the only foreign policy matter that unites all GOP candidates, I do not believe the memory of Iraq invasion is slowly fading. Contrary to his assertion, I believe Americans are fed up with the unending wars.

#### Obama won’t be an environmental leader and Congress would block it anyway

**McDermott, 11** - edits the Business and Energy sections of TreeHugger, as well as writing about resource consumption, animal welfare issues, and the response of religious communities to our current environmental problems, also a goddamned hippie (Mat, “President Obama Continues Squandering Opportunities to Show Environmental Leadership” 1/26, <http://www.treehugger.com/corporate-responsibility/president-obama-continues-squandering-opportunities-to-show-environmental-leadership.html>)

By now you're likely well aware that despite talking about clean energy and jobs, President Obama made no mention of climate change or environmental issues as such during yesterday's State of the Union address. Which somehow makes it an even more important time to highlight comments that scientist-activist Dr James Hansen once wrote to Obama in advice. Obama Apparently Hasn't Listened to Hansen

New York Times has the entire letter--we don't know if it was ever actually read--but here are some of the highlights, which I personally find important and resonant:

The President should use his ascendancy to the most powerful position on the planet to help set a new sensible course for the planet and humanity. It would have required being blunt and honest about the situation and what was needed to break our addiction and avoid the tremendous inter-generational injustice that the present path will bring to pass. The path to a clean energy future would not be painful for the public, but it requires standing up to special interests who benefit from business-as-usual.

It is both a moral issue and a question of where the United States will stand in the future. Our economic standing is going to become second class this century if we do not move smartly toward a clean energy future.

Further along:

The other thing not mentioned above is that the most fundamental problem, which I keep repeating, is this: as long as fossil fuels are the cheapest energy, somebody will keep burning them -- implication, we must put a rising price on carbon. (Not cap-and-trade! A simple, honest approach -- collect a fee from fossil fuel companies at first sale, distribute that money, 100 percent, to the public.)

Nevertheless, the easiest thing that he could do, and perhaps the best that we can hope for, is for him to give a strong boost to nuclear power.

Unfortunately, he seems to fall prey to Democratic politics on this, rather than being a responsible leader.

Nuclear Energy May Help Greenhouse Gas Emissions, But Not Environment

The reference to nuclear power is something that Hansen brought up earlier in the letter--he called it a "huge mistake" that the Carter and Clinton administrations didn't more support the development of advanced reactor designs.

Personally I'm not sure nuclear power is any better solution to our greater environmental problems than continued reliance on other non-renewable fuels--even if it does address greenhouse gas emissions. And to be fair, President Obama continues to show strong support for clean energy, even if implementation isn't as robust as it could be or is needed to be.

President's Clean Energy Approach Neglects Why It's Important

But the part that is really lacking right now, linking together two things that Hansen advised as symbols of this lack, is President Obama showing or even hinting at moral leadership in establishing Hansen's "sensible course for the planet and humanity" and breaking away from business-as-usual thinking.

Pushing for 80% of US electricity coming from clean energy sources by 2035 is somewhat stepping away from that path, breaking away from the pack of polluters desperately trying to retain their profitable place in the world, but it is simply not enough.

The failure of President Obama to mention climate change, and the utter fingers-in-ears approach of Congress in even acknowledging that climate change is happening (on one side of the aisle) and in even attempting to push forward something that will effectively address it (on the other), just makes Hansen's words about intergenerational injustice all the more poignant.

**China isn’t stupid enough to attack Russia**

**Menon 2003** (Rajan, Rathbone Professor of International Relations at Lehigh University, The National Interest, Fall)

By contrast, China's military, which was quite recently a giant horde of foot soldiers, is modernizing steadily-chiefly with Russian weaponry, much of it supplied from cash-starved military industries in Khabarovsk, Komsomol'sk and Vladivostok. It may lag far behind the United States, but in force projection, speed, accuracy and lethality it is a wholly different force than it was a decade ago, thanks to Russian fighter jets, submarines, tanks and missiles, many of them built in the Russian Far East. Yet the chances that China will attempt to conquer Russia's Far East are slim. Such a brazen power play would damage China's wider interests. Taiwan might recoil in terror and treat Beijing's proposals for a negotiated reunification with even greater skepticism and wariness. The prevailing Western rationale for economic engagement with China-that commerce will transform and co-opt that country-would be shredded. China would likely face a counterbalancing, encircling coalition of the United States, India, Japan, Russia and Vietnam. Would such setbacks justify the burdens of ruling the vast, problem-infested Russian Far East? The Chinese leaders know their Sun Tzu: what they seek from the Russian Far East (access to resources and a benign northern front) can be had by means of silk-gloved hegemony. Chinese interests can be served without its formal occupation of the territory. Indeed, what may emerge could be a "reverse Manchurian" scenario, where the Russian Far East remains a titular part of Russia but is increasingly integrated into Beijing's sphere of influence. That is precisely what the conspiracy among geography, demography, power and time may create in Russia's Far East.

**No impact or spillover—no broader environmental harm or domino effect. Low resilience claims are false**

**Ridder 2008** – PhD, School of Geography and Environmental Studies, University of Tasmania (Ben, Biodiversity And Conservation, 17.4, “Questioning the ecosystem services argument for biodiversity conservation”) \*ES = environmental services

The low resilience assumption

Advocates of the conservation of biodiversity tend not to acknowledge the distinction between resilient and sensitive ES. This ‘low resilience assumption’ gives rise to, and is reinforced by the almost ubiquitous claim within the conservation literature that ES depend on biodiversity.

An extreme example of this claim is made by the Ehrlichs in Extinction. They state that “all [ecosystem services] will be threatened if the rate of extinctions continues to increase” then observe that attempts to artificially replicate natural processes “are no more than partially successful in most cases. Nature nearly always does it better. When society sacrifices natural services for some other gain… it must pay the costs of substitution” (Ehrlich and Ehrlich 1982, pp. 95–96). This assertion—that the only alternative to protecting every species is a world in which all ES have been substituted by artificial alternatives—is an extreme example of the ‘low resilience assumption’. Paul Ehrlich revisits this flawed logic in 1997 i nhis response (with four co-authors) to doubts expressed by Mark Sagoff regarding economic arguments for species conservation (Ehrlich et al. 1997, p. 101).

The claim that ES depend on biodiversity is also notably present in the controversial Issues in Ecology paper on biodiversity and ecosystem functioning (Naeem et al. 1999) that sparked the debate mentioned in the introduction. This appears to reflect a general tendency among authors in this field (e.g., Hector et al. 2001; Lawler et al. 2002; Lyons et al. 2005). Although such authors may not actually articulate the low resilience assumption, presenting such claims in the absence of any clarification indicates its influence.

That the low resilience assumption is largely false is apparent in the number of examples of species extinctions that have not brought about catastrophic ecosystem collapse and decline in ES, and in the generally limited ecosystem influence of species on the cusp of extinction. These issues have been raised by numerous authors, although given the absence of systematic attempts to verify propositions of this sort, the evidence assembled is usually anecdotal and we are forced to trust that an unbiased account of the situation has been presented. Fortunately a number of highly respected people have discussed this topic, not least being the prominent conservation biologist David Ehrenfeld. In 1978 he described the ‘conservation dilemma’, which “arises on the increasingly frequent occasions when we encounter a threatened part of Nature but can find no rational reason for keeping it” (Ehrenfeld 1981, p. 177). He continued with the following observation:

Have there been permanent and significant ‘resource’ effects of the extinction, in the wild, of John Bartram’s great discovery, the beautiful tree Franklinia alatamaha, which had almost vanished from the earth when Bartram first set eyes upon it? Or a thousand species of tiny beetles that we never knew existed before or after their probable extermination? Can we even be certain than the eastern forests of the United States suffer the loss of their passenger pigeons and chestnuts in some tangible way that affects their vitality or permanence, their value to us? (p. 192)

Later, at the first conference on biodiversity, Ehrenfeld (1988) reflected that most species “do not seem to have any conventional value at all” and that the rarest species are “the ones least likely to be missed… by no stretch of the imagination can we make them out to be vital cogs in the ecological mach

ine” (p. 215). The appearance of comments within the environmental literature that are consistent with Ehrenfeld’s—and from authors whose academic standing is also worthy of respect—is uncommon but not unheard of (e.g., Tudge 1989; Ghilarov 1996; Sagoff 1997; Slobodkin 2001; Western 2001).

The low resilience assumption is also undermined by the overwhelming tendency for the protection of specific endangered species to be justified by moral or aesthetic arguments, or a basic appeal to the necessity of conserving biodiversity, rather than by emphasising the actual ES these species provide or might be able to provide humanity. Often the only services that can be promoted in this regard relate to the ‘scientific’ or ‘cultural’ value of conserving a particular species, and the tourism revenue that might be associated with its continued existence. The preservation of such services is of an entirely different order compared with the collapse of human civilization predicted by the more pessimistic environmental authors.

The popularity of the low resilience assumption is in part explained by the increased rhetorical force of arguments that highlight connections between the conservation of biodiversity, human survival and economic profit. However, it needs to be acknowledged by those who employ this approach that a number of negative implications are associated with any use of economic arguments to justify the conservation of biodiversity.

### 1nr

**China is committed to controlling pollution now- rural areas**

**Xinhua 3-12-12** [Rural Chinese pollution to be monitored soon English.news.cn 2012-03-12 09:44:22 <http://news.xinhuanet.com/english/china/2012-03/12/c_131461244.htm>]

China aims to finish building a nationwide network to monitor air quality in its vast rural areas by the end of the year, an environmental researcher said. The construction of the network shows China is extending its pollution-busting drive to rural villages, where environmental protection awareness is weakest, said Wen Xiangcai, of the China National Environmental Monitoring Center. Wen, also a member of the country's top political advisory body, said China had already begun to choose one rural spot in each province, municipality and autonomous region for the setting-up of air monitoring stations. "Through the stations, we will collect the data that forms the basis for pollution prevention and control," Wen said, adding that all stations will be set up before the end of 2012. As China is strengthening pollution control in cities, some small, heavily polluting enterprises will shift to rural areas, bringing much pressure to the environment of China's countryside, according to Wen. A nationwide pollution survey conducted by the Ministry of Environment Protection in 2011 showed that rural areas account for 43 percent of the nation's chemical oxygen demand discharges, 57 percent of its nitrogen discharges and 67 percent of its phosphorus discharges. "Bringing pollution in rural areas under control is a pressing task," Wen said. The central government has in recent years beefed up measures to control pollution in rural areas. Its funding for such initiatives jumped from 500 million yuan (79.36 million U.S. dollars) in 2008 to 9.5 billion yuan in 2011. The next step, said Wen, is to "train more environmental professionals to strengthen technical surveillance and expand advertisements about environmental protection."

#### Vote negative on presumption, not specifying means evaluating the desirability of the plan is IMPOSSIBLE

**Azurin 8** [Rene B., Business World, "Strategic Perspective: Renewable Energy Barriers," February 7th, Lexis]¶ Chatting at the just-concluded Energy Summit with the very charming Dr. Nandita Mongia, regional coordinator for the Energy Program for Poverty Reduction in Asia and the Pacific of the UNDP, I learned that Indonesia mobilizes funding for renewable energy for the poor through taxes on fossil fuels. That, to me, is an example of a logical public finance policy: Penalize, through taxes, what you wish to discourage and use the funds raised to help develop what you wish to encourage. It is also a manifestation of a strategic perspective, the kind of system-wide thinking and long-run view we need to see exhibited by more of our own government's finance and economic managers. One of the things our highest officials sometimes seem to be unconscious of is a principle I drum repeatedly into the minds of my strategy students: Outcomes are the product of the prevailing structure of incentives; if you want a particular outcome, you must first design the incentive system to lead to it. Exhortations and directives without an accompanying incentive structure consistent with the desired outcomes are no more than expressions of wishful thinking.The exhortations are simply ignored and the directives simply make people waste time and, uh, energy inventing ways to avoid complying while vigorously pretending to be absolutely, completely in favor of the announced action. Filipinos are particularly creative in this regard. ¶ We say - or, more precisely, our public officials say - that the country's energy strategy should be to develop more renewable and alternative energy sources - solar, wind, geothermal, ocean, hydro, biomass - that, because they are indigenous and climate friendly, will reduce our country's dependence on imported fossil fuels that pollute our environment. Currently (according to Department of Energy figures), power plants using renewable energy have an installed capacity of 5,260 megawatts, or 33.5% of total power generating capacity in the country. This is broken down into hydro (3,257 MW), geothermal (1,978 MW), and wind (25 MW). The DOE, according to the hardworking director of DOE's Energy Utilization Bureau, Mr. Mario Marasigan, launched in August 2003 an aggressive Renewable Energy Policy Framework that targeted the doubling of renewable energy capacity by 2013. This proposed Renewable Energy Bill, says Mr. Marasigan, will "provide incentives and remove some major market and financial barriers to renewable energy development [and] should create a better investment environment for private proponents." Unfortunately, the bill remains stuck in Congress. A workshop participant wryly commented that congressional energy is naturally directed more toward increasing congressional pork barrel allocations than achieving energy independence for the country.¶ The principal barrier to renewable energy development is the fact that the energy it produces is still generally more costly than the energy produced by conventional fossil fuels. One estimate indicates that electric power from renewable or alternative fuels is 25% to 50% more expensive than electric power from oil or coal. The higher costs stem in large measure from the site-specific nature of renewable energy projects - you cannot set up a windmill farm where there is no wind or a mini-hydro plant where there is no water - which leads to high construction costs and, later, high transmission costs. Moreover, the modern imported technologies required to build efficient renewable energy plants are hardly cheap.¶ This is why the structure of incentives needs to be modified as proposed in the RE Bill. The RE Bill provides for the usual tax-break incentives but complement these with the setting up of an RE Trust Fund that can finance research and development, help pay for preparatory studies, and provide loan guarantee facilities. Non-fiscal, market development-directed incentives are also provided, like the mandating of a 1% bio-diesel mix which increases to 2% by 2009, and a 5% bio-ethanol gasoline blend in 2009 which increases to 10% by 2011. Similarly, for electric utilities, it will be mandated that the electric power produced from renewable energy sources must constitute 7% to 12% of the total electric power mix and, further, that such power must be dispatched as soon as it is made available.

## doubles—aff v. northwestern mp

### 1ac

#### ADVANTAGE ONE IS PROLIF—

#### Continued weapons prolif is uniquely destabilizing

Heisbourg 12—chairman of the council of the Geneva Centre for Security Policy and of the London-based International Institute for Strategic Studies (Francois, 3/4/12, “NUCLEAR PROLIFERATION – LOOKING BACK, THINKING AHEAD: HOW BAD WOULD THE FURTHER SPREAD OF NUCLEAR WEAPONS BE?,” http://www.npolicy.org/article\_file/Nuclear\_Proliferation\_-\_Looking\_Back\_Thinking\_Ahead\_How\_Bad\_Would\_the\_Further\_Spread\_of\_Nuclear\_Weapons\_Be.pdf, RBatra)

The problem with this reassuring reading of the past is that it is not entirely true. Yes, the NPT had a major material effect by gradually making non nuclear the new normal. Yes again, defense guarantees by the US weaned Germany, Italy (13), South Korea, Taiwan and even neutral Sweden away from the nuclear road, followed by the US-French-British assurances to post-Soviet Ukraine. Yes too, various levels of coercion worked in Iraq, Libya and Syria. But no, the practice of even the most ‘classical’ bilateral deterrence was not nearly as reassuring as the mainstream narrative inherited from the Cold War would have it. Nor can we consider that our elements for empirical judgment as methodologically satisfactory in terms of their breadth and depth. These two negatives will be examined in turn.

Nuclear archives, as other sensitive governmental archives, open up usually after an interval of decades and even then with varying levels of culling and redaction. Even oral histories tend to follow this pattern, as ageing witnesses feel freer to speak up. Hence a paradox: when the Soviet- American nuclear confrontation was central to our lives and policies during the Cold War, we didn’t how bad things really where; now that we are beginning to know, there is little public interest given the disappearance of the East-West contest. Yet there are lessons of general interest which can be summarized as follows: 1) the Cuban missile crisis brought us much closer to the brink than the acute sense of danger which prevailed at the time, for reasons which are germane to the current situation: massive **failures of intelligence** on Soviet nuclear preparations and dispositions in Cuba, notably on tactical nukes and on the operational readiness of a number of IRBMs and their warheads; dysfunctional or imperfect command and control arrangements (notably vis à vis Soviet submarines), unintentionally mixed signals on each antagonist’s actions). These are effectively laid out in Michael Dobb’s book, “One Minute to Midnight”(14). 2) the safety and security of nuclear forces are subject to potentially calamitous procedural, technical or operational mishaps and miscalculations, somewhat along the lines of what applies to related endeavors (nuclear power and aerospace). Scott Sagan in his “Limits of Safety”(15) provides compelling research on the American Cold War experience. It would be interesting to have a similar treatment on the Soviet experience…Although it can be argued that today’s nuclear arsenals are much smaller and easier to manage reliable, and that the technology for their control has been vastly improved, several facts remain:

the US has continued to witness serious procedural lapses in the military nuclear arena (16); the de-emphasis of the importance of nuclear weapons in the US force structure is not conducive to treating them with the respect which is due to their destructive power; other nuclear powers do not necessarily benefit from the same technology and learning curves as the older nuclear states, and notably the US; cheek-to-jowl nuclear postures, which prevailed in the Cuban missile crisis and which help explain why World War III nearly occurred, and which characterize India and Pakistan today.

Despite the dearth of detail on Indian and Pakistani nuclear crisis management, we know that the stability of nuclear deterrence between India and Pakistan is by no means a given, with serious risks occurring on several occasions since the mid-1980s(17).

At another level of analysis, we have to recognize the limits of the database on which we ground our policies on nonproliferation. The nuclear age, in terms of operationally usable devices, began in 1945, less than seventy years, less than the age of an old man. The fact that there has been no accidental or deliberate nuclear use during that length of time is nearly twice as reassuring as the fact that it took more than thirty years (18) for a nuclear electricity generating plant to blow up, in the form of the Chernobyl disaster of 1986. But given the destructive potential of nuclear weapons, twice as much reassurance (in the form of no use of nuclear weapons for close to seventy years) is probably not good enough. Furthermore, the Chernobyl disaster involved the same sort of errors of judgment, procedural insufficiencies and crisis-mismanagement visible in Scott Sagan’s book, not only or even mainly, flawed design choices: inadvertence at work, in other words of the sort which could prevail in a time-sensitive, geographically constrained Indo- Pakistani or Middle Eastern conflict. Give it another seventy years to pass judgment?

The same empirical limits apply to the number of actors at play: we have simple bipolar (US-USSR/Russia or India/Pakistan) and complex bipolar (US/France/UK/NATO-Soviet Union/Russia) experience; we’ve had US-Soviet-Chinese or Sino- Indian-Pakistani tripolarity; and we’ve had a number of unipolar moments (one nuclear state vis à vis non-nuclear antagonists). But we mercifully have not had to deal with more complex strategic geometries –yet- in the Middle East or East Asia. We only know what we know, we don’t know what we don’t know.

A historical narrative which is not reassuring and an empirical record that is less than compelling need to inform the manner in which we approach further proliferation.

PROLIFERATION PUSH AND PULL

Ongoing proliferation differs from that of the first halfcentury of the nuclear era in three essential ways: on the demand side, the set of putative nuclear actors is largely focused in the most strategically stressed regions of the world; on the supply side, the actual or potential purveyors of proliferation are no longer principally the first, industrialized, generation of nuclear powers; the technology involved in proliferation is somewhat less demanding than it was during the first nuclear age. Taken together, these changes entail growing risks of nuclear use.

Demand is currently focusing on two regions, the Middle East and East Asia (broadly defined) and involves states and, potentially, non-state actors. In the Middle East, Iran’s nuclear program is the focus of the most intense concerns. A potential consequence in proliferation terms would be to lead regional rivals of Iran to acquire nuclear weapons in term: this concern was vividly in 2007 by the then President of France, Jacques Chirac (19) who specifically mentioned Egypt and Saudi Arabia. The likelihood of such a “proliferation chain-reaction” may have been increased by President Obama’s recent repudiation of containment as an option (20): short of Iran being persuaded or forced to abandon its nuclear ambitions, the neighboring states would presumably have to contemplate security options other than a Cold War style US defense guarantee. Given prior attempts by Iraq, Syria and Libya to become nuclear powers, the probability of a multipolar nuclear Middle East has to be rated as high in case Iran is perceived as having acquired a military nuclear capability. Beyond the Middle East, the possibility of civil war in nuclear-armed Pakistan leading to state failure and the possibility of nukes falling out of the hands of an effective central government. There are historical precedents for such a risk, most notably, but not only(21)in the wake of the collapse of the Soviet Union: timely and lasting action by outside powers, such as the US with the Nunn-Lugar initiative, and the successor states themselves has prevented fissile material from falling into unauthorized hands in significant quantities. Pakistan could pose similar problems in a singularly more hostile domestic environment. As things stand, non-state actors, such as post-Soviet mafiya bosses (interested in resale potential) or Al Qaeda (22) have sought, without apparent success, to benefit from opportunities arising from nuclear disorder in the former USSR and Central Asia. Mercifully, the price Al Qaeda was ready to pay was way below the going rate (upwards of hundreds of $million) for the sorts of services provided by the A.Q.Khan network (see below)to some of his clients.

Although North Korea’s nuclear ambitions appear to be both more self-centered and more containable than is the case for Iran, the possibility of state collapse in combination with regional rivalry leave no room for complacency.

More broadly we are facing the prospect of a multipolar nuclear Middle East, linked to an uncertain nuclear Pakistan already part of a nuclear South Asia tied via China to the Korean nexus in which nuclear America and Russia also have a stake. More broadly still, such a nuclear arc-of-crisis from the Mediterranean to the Sea of Japan, would presumably imply the breakdown of the NPT regime, or at least its reversion to the sort of status it had during the Seventies, when many of its currently significant members had not yet joined (23), unloosening both the demand and supply sides of proliferation.

On the supply side, “old style” proliferation relied on official cooperation between first-generation nuclear or nuclearizing powers, of which the Manhattan project was a forerunner (with American, British and Canadian national contributions and multinational scientific teams), followed inter alia by post-1956 French-Israeli, post-1958 US-UK, pre- 1958 USSR-China cooperation. If India relied heavily on the “unwitting cooperation” , notably on the part of Canada and the US involved in the Atoms for Peace CIRUS research reactor, Pakistan set up the first dedicated, broad spectrum, crossborder trading network to make up for the weakness of its limited industrial base. This import-focused organization thus went beyond traditional espionage-aided efforts (as practiced by the USSR during and after the Manhattan project) or case-by-case purloining or diversion of useful material on the global market (as practiced by Israeli operatives). Even before the Pakistani network had fulfilled its primary task of supplying the national program, it began its transformation into an export-oriented venture.

Libya, Iran, North Korea and a fourth country which remains officially unnamed became the main outlets of what became the world’s first private-sector (albeit government originated and ,presumably, supported)proliferation company which was only wound down after strong Western pressure on Pakistan after 9/11. Although the by-now richly documented A.Q.Khan network (24) appears to have ceased to function in its previous incarnation, it has powerfully demonstrated that there is an international market for proliferation which other operators can expect to exploit. Furthermore, budding, resource-weak nuclear powers have a strong incentive to cover the cost of their investment by selling or bartering their nuclear-related assets, including delivery systems. The fruits of state-tostate cooperation between Iran, North Korea and Pakistan are clearly apparent in the close-to-identical genealogy of their nuclear-capable ballistic missiles of the No- Dong/Ghauri/Shahab families displayed in military parades and test launches. Not all such cooperation consists of televised objects.

Even in the absence of game-changing breakthroughs, technical trends facilitate both demand and supply-side proliferation. For the time being, the plutonium route towards the bomb remains essentially as easy and as difficult as from the earliest years of the nuclear era. Provided a country runs a (difficult-to-hide) research or a power reactor from which low-irradiated fuel can be downloaded at will (such as CANDUtype natural uranium reactors), reprocessing is a comparatively straightforward and undemanding task. Forging and machining a multiple-isotope metal which is notorious for its numerous physical states and chemical toxicity is a substantial challenge, with the companion complications of devising a reliable implosion mechanism. Nuclear testing is highly desirable to establish confidence in the end-result. Opportunities for taking the plutonium-proliferation road may increase somewhat as new techniques (such as pyro-processing) come on stream. Developments in the enriched uranium field have been more substantial in facilitating proliferation. The development of lighter and more efficient centrifuges make it easier for a state to extract enriched uranium speedily in smaller and less visible facilities. Dealing with the resulting military-level HEU is a comparatively undemanding task. The long-heralded advent of industrially effective and reliable laser enrichment technology may eventually further increase ease of access. Downstream difficulties would still remain. Although implosion-mechanisms are not mandatory, they are desirable in order both to reduce the critical mass of U235 for a nuclear explosion and to make for a lighter and smaller more-readily deliverable weapons package.

In sum, incremental improvements increase the risk of proliferation. However, non-state actors are not yet, and will not be on the basis of known technical trends, in a position to master the various steps of the two existing military nuclear fuel cycles, which remain the monopoly of states. Nonstate actors would need the active complicity from (or from accomplices within) states, or benefit from the windfall of state collapse, to acquire a military nuclear capability. The threat of nuclear terrorism continues to be subordinated to developments involving state actors, a remark which is not meant to be reassuring since such developments (see above) are increasingly likely as proliferation spreads to new states and as state failure threatens in the ‘arc of proliferation’ extending from the Mediterranean to North-East Asia. Furthermore, non-state actors can be satisfied with levels of nuclear reliability and performance which states could not accept. A difficult-to-deliver or fizzle-prone nuclear device would not provide a state with the level of deterrence needed to shield it from pre-emptive or retaliatory action, whereas a terrorist group would not be seeking such immunity. A road or ship-delivered imperfect device, which would be closer to a radiological bomb than to a fully-fledged atomic weapon would provide its non-state owners with immense potential. The road to a non-state device does not need to be as well-paved.

NUCLEAR FUTURES

‘New’ lessons from a revisited past and current trends in nuclear proliferation, will tie into a number of characteristics of contemporary international relations with potentially destabilizing consequences, leading to an increasing likelihood of nuclear use. Four such characteristics will be singled out here both because of their relevance to nuclear crisis management and because of their growing role in the world system in the age of globalization:

- Strategic upsets

- Limits of imagination

- Unsustainable strains

- Radical aims

The 2008 French Defence and National Security White Paper (25) developed the concept of ‘ruptures stratégiques’ (strategic upsets) to describe the growing tendency of the world system to generate rapid, unexpected, morphing upsets of international security as a consequence of globalization broadly defined against the backdrop of urbanizing populations generating economic growth and environmental and resource constraints. In themselves, such upsets are not novel (see inter alia, a pandemic such as the Black Death in 1348-49, the Great Depression not to mention World Wars or indeed the major and benign strategic upset of 1989-1991) but the very nature of globalization and the relationship between human activity and the Earth’s ability to sustain them) mean more, and more frequent as well as more complex upsets. If this reading is correct –and the Great financial crisis, the Arab revolutions, the accession of China to superpower status can be mentioned as examples which followed the publication of the White paper- ,then the consequences in the nuclear arena will be twofold. First, nuclear doctrines and dispositions which were conceived under a set of circumstances (such as the Cold War or the India-Pakistan balance of power) may rapidly find themselves overtaken by events. For instance it is easier to demonstrate that US and Russian nuclear forces still visibly bear the imprint of their 1950s template than it is to demonstrate their optimal adaptation to post-post-Cold War requirements. Second, more challenges to international security and of a largely unforeseeable nature mean greater strains placed on the ability of nuclear powers to manage crises against the backdrop of their possession of nuclear weapons. In many, indeed most, cases, such ‘ruptures stratégiques’ will no doubt be handled with nuclear weapons appearing as irrelevant: hypothetical security consequences of an epidemic (such as the interhuman transmission of the H5N1 bird flu virus) or prospective conflicts resulting from climate change do not have prima facie nuclear aspects. But beyond the reminder that we don’t know that as a fact, the probability is, under the ‘rupture stratégique’ hypothesis, that there will be more occasions for putting all crisis management, including nuclear, to the test.

Human societies tend to lack the imagination to think through, and to act upon, what have become known as ‘black swan’ events (26): that which has never occurred (or which has happened very rarely and in a wholly different context) is deemed not be in the field of reality, and to which must be added eventualities which are denied because their consequences are to awful to contemplate. The extremes of human misconduct (the incredulity in the face of evidence of the Holocaust, the failure to imagine 9/11) bear testimony to this hard-wired trait of our species. This would not normally warrant mention as a factor of growing salience if not for the recession into time of the original and only use of nuclear weapons in August 1945. Non-use of nuclear weapons may be taken for granted rather than being an absolute taboo. Recent writing on the reputedly limited effects of the Hiroshima and Nagasaki bombs (27) may contribute to such a trend, in the name of reducing the legitimacy of nuclear weapons. Recent (and often compelling) historical accounts of the surrender of the Japanese Empire which downplay the role of the atomic bombings in comparison to early research can produce a similar effect, even if that may not have been the intention (28). However desirable it has been, the end of atmospheric nuclear testing (29) has removed for more than three decades the periodic reminders which such monstrous detonations made as to the uniquely destructive nature of nuclear weapons. There is a real and growing risk that we forget what was obvious to those who first described in 1941 the unique nature of yet-to-be produced nuclear weapons (30). The risk is no doubt higher in those states for which the history of World War II has little relevance and which have not had the will or the opportunity to wrestle at the time or ex post facto with the moral and strategic implications of the nuclear bombing of Japan in 1945.

Unsustainable strains are possibly the single most compelling feature of contemporary proliferation. Tight geographical constraints –with, for instance, New Delhi and Islamabad located within 300 miles of each other-; nuclear multipolarity against the backdrop of multiple, criss-crossing, sources of tension in the Middle East (as opposed to the relative simplicity of the US-Soviet confrontation); the existence of doctrines (such as India’s ‘cold start’) and force postures (such as Pakistan’s broadening array of battlefield nukes) which rest on the expectation of early use; the role of non-state actors as aggravating or triggering factors when they are perceived as operating with the connivance of an antagonist state ( in the past, the assassination of the Austrian Archduke in Sarajevo in 1914; in the future, Hezbollah operatives launching rockets with effect against Israel or Lashkar-e-Taiba commandos doing a ‘Bombay’ redux in India?) : individually or in combination, these factors test crisis management capabilities more severely than anything seen during the Cold War with the partial exception of the Cuban missile crisis. Even the overabundant battlefield nuclear arsenals in Cold War Central Europe, with their iffy weapons’ safety and security arrangements, were less of a challenge: the US and Soviet short-range nuclear weapons so deployed were not putting US and Soviet territory and capitals at risk.

It may be argued that these risk factors are known to potential protagonists and that they therefore will be led to avoid the sort of nuclear brinksmanship which characterized US and Soviet behavior during the Cold War in crises such as the Korean war, Berlin, Cuba or the Yom Kippur war. Unfortunately, the multiple nuclear crises between India and Pakistan demonstrate no such prudence, rather to the contrary. And were such restraint to feed into nuclear policy and crisis planning –along the lines of apparently greater US and Soviet nuclear caution from the mid-Seventies onwards-, the fact would remain that **initial intent** rarely resists the strains of a complex, multi-actor confrontation between inherently distrustful antagonists. It is also worth reflecting on the fact that during the 1980s, there was real and acute fear in Soviet ruling circles that the West was preparing an out-of-the-blue nuclear strike, a fear which in turn fed into Soviet policies and dispositions (31).

The Cold War was a set of crises and misunderstandings which came within a whisker of a nuclear holocaust; India and Pakistan’s nuclear standoff is deeply unstable not least as a result of the interaction with non-state actors; a multipolar nuclear Middle East would make the Cuban missile crisis look easy in comparison.

Great conflicts tend to occur when one or several of the antagonists views the status quo as sufficiently undesirable and/or unsustainable to prompt forceful pro-action. Notwithstanding widespread perceptions to the contrary, this was not the case of the USSR and the United States during the Cold War. The US had chosen a policy of containment, as opposed to roll-back, of the Soviet Empire within its limits established as a result of World War II. The Soviet Union seized targets of opportunity outside of its 1945 area of control but avoided direct confrontation with US forces. Messianic language from the USSR on the global victory of communism or from the US about the end of the Evil Empire did not take precedence over the prime Soviet concern of preserving the Warsaw Pact and the US pursuit of containment – and, no less crucially, their mutual confidence that they could achieve these aims without going to war one with the other.

No such generalization can be made about the Middle East, a region in which the very existence of a key state (Israel) is challenged while others have gone to war with each other (e.G.Iran-Iraq war, the Gulf War of 1990-1991), or are riven by deep internal conflicts. Actors such as Hezbollah, with its organic and functional links with Islamic Iran and Alawite Syria add to the complexities and dangers. Extreme views and actions vis à vis the strategic status quo are widely prevalent. Although the India-Pakistan relationship corresponds to something akin to the US-Soviet ‘adversarial partnership’, that does not apply to radical non-state actors prevalent in Pakistan with more or less tight links to that country’s military intelligence services (ISI, Inter-Services Intelligence). The potential for danger is compounded by the variety of such groups: the Pashtu-related Pakistani Taliban (TTP), Kashmiri-related groups, Jihadi militants from the core provinces of Punjab and Sind… Their common characteristics are extreme radicalism, high levels of operational proficiency, and shared enmity of India. Their potential for triggering a conflict between the two countries is substantial, above and beyond the intentions of government officials.

#### The impact is extinction—nuclear optimism is conceptually bankrupt

Kroenig, 12 [May 26th, Matthew Kroenig: Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, The History of Proliferation Optimism: Does It Have A Future? Prepared for the Nonproliferation Policy Education Center, <http://www.npolicy.org/article.php?aid=1182&tid=30>]

Proliferation Optimism: Proliferation optimism was revived in the academy in Kenneth Waltz’s 1979 book, Theory of International Politics.[[30]](#footnote-30)[29] In this, and subsequent works, Waltz argued that the spread of nuclear weapons has beneficial effects on international politics. He maintained that states, fearing a catastrophic nuclear war, will be deterred from going to war with other nuclear-armed states. As more and more states acquire nuclear weapons, therefore, there are fewer states against which other states will be willing to wage war. The spread of nuclear weapons, according to Waltz, leads to greater levels of international stability. Looking to the empirical record, he argued that the introduction of nuclear weapons in 1945 coincided with an unprecedented period of peace among the great powers. While the United States and the Soviet Union engaged in many proxy wars in peripheral geographic regions during the Cold War, they never engaged in direct combat. And, despite regional scuffles involving nuclear-armed states in the Middle East, South Asia, and East Asia, none of these conflicts resulted in a major theater war. This lid on the intensity of conflict, according to Waltz, was the direct result of the stabilizing effect of nuclear weapons. Following in the path blazed by the strategic thinkers reviewed above, Waltz argued that the requirements for deterrence are not high. He argued that, contrary to the behavior of the Cold War superpowers, a state need not build a large arsenal with multiple survivable delivery vehicles in order to deter its adversaries. Rather, he claimed that a few nuclear weapons are sufficient for deterrence. Indeed, he even went further, asserting that any state will be deterred even if it merely suspects its opponent might have a few nuclear weapons because the costs of getting it wrong are simply too high. Not even nuclear accident is a concern according to Waltz because leaders in nuclear-armed states understand that if they ever lost control of nuclear weapons, resulting in an accidental nuclear exchange, the nuclear retaliation they would suffer in response would be catastrophic. Nuclear-armed states, therefore, have strong incentives to maintain control of their nuclear weapons. Not even new nuclear states, without experience in managing nuclear arsenals, would ever allow nuclear weapons to be used or let them fall in the wrong hands. Following Waltz, many other scholars have advanced arguments in the proliferation optimist school. For example, Bruce Bueno de Mesquite and William Riker explore the “merits of selective nuclear proliferation.”[[31]](#footnote-31)[30] John Mearsheimer made the case for a “Ukrainian nuclear deterrent,” following the collapse of the Soviet Union.[[32]](#footnote-32)[31] In the run up to the 2003 Gulf War, John Mearsheimer and Steven Walt argued that we should not worry about a nuclear-armed Iraq because a nuclear-armed Iraq can be deterred.[[33]](#footnote-33)[32] And, in recent years, Barry Posen and many other realists have argued that nuclear proliferation in Iran does not pose a threat, again arguing that a nuclear-armed Iran can be deterred.[[34]](#footnote-34)[33] What’s Wrong with Proliferation Optimism? The proliferation optimist position, while having a distinguished pedigree, has several major problems. Many of these weaknesses have been chronicled in brilliant detail by Scott Sagan and other contemporary proliferation pessimists.[[35]](#footnote-35)[34] Rather than repeat these substantial efforts, I will use this section to offer some original critiques of the recent incarnations of proliferation optimism. First and foremost, proliferation optimists do not appear to understand contemporary deterrence theory. I do not say this lightly in an effort to marginalize or discredit my intellectual opponents. Rather, I make this claim with all due caution and with complete sincerity. A careful review of the contemporary proliferation optimism literature does not reflect an understanding of, or engagement with, the developments in academic deterrence theory in top scholarly journals such as the American Political Science Review and International Organization over the past few decades.[[36]](#footnote-36)[35] While early optimists like Viner and Brodie can be excused for not knowing better, the writings of contemporary proliferation optimists ignore the past fifty years of academic research on nuclear deterrence theory. In the 1940s, Viner, Brodie, and others argued that the advent of Mutually Assured Destruction (MAD) rendered war among major powers obsolete, but nuclear deterrence theory soon advanced beyond that simple understanding.[[37]](#footnote-37)[36] After all, great power political competition does not end with nuclear weapons. And nuclear-armed states still seek to threaten nuclear-armed adversaries. States cannot credibly threaten to launch a suicidal nuclear war, but they still want to coerce their adversaries. This leads to a credibility problem: how can states credibly threaten a nuclear-armed opponent? Since the 1960s academic nuclear deterrence theory has been devoted almost exclusively to answering this question.[[38]](#footnote-38)[37] And, unfortunately for proliferation optimists, the answers do not give us reasons to be optimistic. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.[[39]](#footnote-39)[38] He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”[[40]](#footnote-40)[39] They can engage in a process, the nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis there is an **increasing probability** that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before back down will win the crisis as long as it does not end in catastrophe. It is for this reason that Thomas Schelling called great power politics in the nuclear era a “competition in risk taking.”[[41]](#footnote-41)[40] This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Or they can the escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. Since 1945 there were have been many high stakes nuclear crises (by my count, there have been twenty) in which “rational” states like the United States run a risk of nuclear war and inch very close to the brink of nuclear war.[[42]](#footnote-42)[41] By asking whether states can be deterred or not, therefore, proliferation optimists are asking the wrong question. The right question to ask is: what risk of nuclear war is a specific state willing to run against a particular opponent in a given crisis? Optimists are likely correct when they assert that Iran will not intentionally commit national suicide by launching a bolt-from-the-blue nuclear attack on the United States or Israel. This does not mean that Iran will never use nuclear weapons, however. Indeed, it is almost inconceivable to think that a nuclear-armed Iran would not, at some point, find itself in a crisis with another nuclear-armed power and that it would not be willing to run any risk of nuclear war in order to achieve its objectives. If a nuclear-armed Iran and the United States or Israel have a geopolitical conflict in the future, over say the internal politics of Syria, an Israeli conflict with Iran’s client Hezbollah, the U.S. presence in the Persian Gulf, passage through the Strait of Hormuz, or some other issue, do we believe that Iran would immediately capitulate? Or is it possible that Iran would push back, possibly even brandishing nuclear weapons in an attempt to deter its adversaries? If the latter, there is a real risk that proliferation to Iran could result in nuclear war. An optimist might counter that nuclear weapons will never be used, even in a crisis situation, because states have such a strong incentive, namely national survival, to ensure that nuclear weapons are not used. But, this objection ignores the fact that leaders operate under competing pressures. Leaders in nuclear-armed states also have very strong incentives to convince their adversaries that nuclear weapons could very well be used. Historically we have seen that in crises, leaders purposely do things like put nuclear weapons on high alert and **delegate nuclear launch authority to low level commanders**, purposely increasing the risk of accidental nuclear war in an attempt to force less-resolved opponents to back down. Moreover, not even the optimists’ first principles about the irrelevance of nuclear posture stand up to scrutiny. Not all nuclear wars would be equally devastating.[[43]](#footnote-43)[42] Any nuclear exchange would have devastating consequences no doubt, but, if a crisis were to spiral out of control and result in nuclear war, any sane leader would rather be facing a country with five nuclear weapons than one with thirty-five thousand. Similarly, any sane leader would be willing to run a greater risk of nuclear war against the former state than against the latter. Indeed, systematic research has demonstrated that states are willing to run greater risks and, therefore, more likely to win nuclear crises when they enjoy nuclear superiority over their opponent.[[44]](#footnote-44)[43] Proliferation optimists miss this point, however, because they are still mired in 1940s deterrence theory. It is true that no rational leader would choose to launch a nuclear war, but, depending on the context, **she would almost certainly be willing to risk one.** Nuclear deterrence theorists have proposed a second scenario under which rational leaders could instigate a nuclear exchange: a limited nuclear war.[[45]](#footnote-45)[44] By launching a single nuclear weapon against a small city, for example, it was thought that a nuclear-armed state could signal its willingness to escalate the crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. In a future crisis between a nuclear-armed China and the United States over Taiwan, for example, China could choose to launch a nuclear attack on Honolulu to demonstrate its seriousness. In that situation, with the continental United States intact, would Washington choose to launch a full-scale nuclear war on China that could result in the destruction of many more American cities? Or would it back down? China might decide to strike hoping that Washington will choose a humiliating retreat over a full-scale nuclear war. If launching a limited nuclear war could be rational, it follows that the spread of nuclear weapons increases the risk of nuclear use. Again, by ignoring contemporary developments in scholarly discourse and relying exclusively on understandings of nuclear deterrence theory that became obsolete decades ago, optimists reveal the shortcomings of their analysis and fail to make a compelling case. The optimists also error by confusing stability for the national interest. Even if the spread of nuclear weapons contributes to greater levels of international stability (which discussions above and below suggest it might not) it does not necessarily follow that the spread of nuclear weapons is in the U.S. interest. There might be other national goals that trump stability, such as reducing to zero the risk of nuclear war in an important geopolitical region. Optimists might argue that South Asia is more stable when India and Pakistan have nuclear weapons, but certainly the risk of nuclear war is higher than if there were no nuclear weapons on the subcontinent. In addition, it is wrong to assume that stability is always in the national interest. Sometimes it is, but sometimes it is not. If stability is obtained because Washington is deterred from using force against a nuclear-armed adversary in a situation where using force could have advanced national goals, stability harms, rather than advances, U.S. national interests. The final gaping weakness in the proliferation optimist argument, however, is that it rests on a logical contradiction. This is particularly ironic, given that many optimists like to portray themselves as hard-headed thinkers, following their premises to their logical conclusions. But, the contradiction at the heart of the optimist argument is glaring and simple to understand: either the probability of nuclear war is zero, or it is nonzero, but it cannot be both. If the probability of nuclear war is zero, then nuclear weapons should have no deterrent effect. States will not be deterred by a nuclear war that could never occur and states should be willing to intentionally launch large-scale wars against nuclear-armed states. In this case, proliferation optimists cannot conclude that the spread of nuclear weapons is stabilizing. If, on the other hand, the probability of nuclear war is nonzero, then there is a real danger that the spread of nuclear weapons increases the probability of a catastrophic nuclear war. If this is true, then proliferation optimists cannot be certain that nuclear weapons will never be used. In sum, the spread of nuclear weapons can either raise the risk of nuclear war and in so doing, deter large-scale conventional conflict. Or there is no danger that nuclear weapons will be used and the spread of nuclear weapons does not increase international instability. But, despite the claims of the proliferation optimists, it is nonsensical to argue that nuclear weapons will never be used and to simultaneously claim that their spread contributes to international stability. Proliferation Anti-obsessionists: Other scholars, who I label “anti-obsessionists” argue that the spread of nuclear weapons has neither been good nor bad for international politics, but rather irrelevant. They argue that academics and policymakers concerned about nuclear proliferation spend too much time and energy obsessing over something, nuclear weapons, that, at the end of the day, are not all that important. In Atomic Obsession, John Mueller argues that widespread fears about the threat of nuclear weapons are overblown.[[46]](#footnote-46)[45] He acknowledges that policymakers and experts have often worried that the spread of nuclear weapons could lead to nuclear war, nuclear terrorism and cascades of nuclear proliferation, but he then sets about systematically dismantling each of these fears. Rather, he contends that nuclear weapons have had little effect on the conduct of international diplomacy and that world history would have been roughly the same had nuclear weapons never been invented. Finally, Mueller concludes by arguing that the real problem is not nuclear proliferation, but nuclear nonproliferation policy because states do harmful things in the name of nonproliferation, like take military action and deny countries access to nuclear technology for peaceful purposes. Similarly, Ward Wilson argues that, despite the belief held by optimists and pessimists alike, nuclear weapons are not useful tools of deterrence.[[47]](#footnote-47)[46] In his study of the end of World War II, for example, Wilson argues that it was not the U.S. use of nuclear weapons on Hiroshima and Nagasaki that forced Japanese surrender, but a variety of other factors, including the Soviet Union’s decision to enter the war. If the actual use of nuclear weapons was not enough to convince a country to capitulate to its opponent he argues, then there is little reason to think that the mere threat of nuclear use has been important to keeping the peace over the past half century. Leaders of nuclear-armed states justify nuclear possession by touting their deterrent benefits, but if nuclear weapons have no deterrent value, there is no reason, Ward claims, not to simply get rid of them. Finally, Anne Harrington de Santana argues that nuclear experts “fetishize” nuclear weapons.[[48]](#footnote-48)[47] Just like capitalists, according to Karl Marx, bestow magical qualities on money, thus fetishizing it, she argues that leaders and national security experts do the same thing to nuclear weapons. Nuclear deterrence as a critical component of national security strategy, according to Harrington de Santana, is not inherent in the technology of nuclear weapons themselves, but is rather the result of how leaders in countries around the world think about them. In short, she argues, “Nuclear weapons are powerful because we treat them as powerful.”[[49]](#footnote-49)[48] But, she maintains, we could just as easily “defetish” them, treating them as unimportant and, therefore, rendering them obsolete. She concludes that “Perhaps some day, the deactivated nuclear weapons on display in museums across the United States will be nothing more than a reminder of how powerful nuclear weapons used to be.”[[50]](#footnote-50)[49] The anti-obsessionists make some thought-provoking points and may help to reign in some of the most hyperbolic accounts of the effect of nuclear proliferation. They remind us, for example, that our worst fears have not been realized, at least not yet. Yet, by taking the next step and arguing that nuclear weapons have been, and will continue to be, irrelevant, they go too far. Their arguments call to mind the story about the man who jumps to his death from the top of a New York City skyscraper and, when asked how things are going as he passes the 15th story window, replies, “so far so good.” The idea that world history would have been largely unchanged had nuclear weapons not been invented is a provocative one, but it is also unfalsifiable. There is good reason to believe that world history would have been different, and in many ways better, had certain countries not acquired nuclear weapons. Let’s take Pakistan as an example. Pakistan officially joined the ranks of the nuclear powers in May 1998 when it followed India in conducting a series of nuclear tests. Since then, Pakistan has been a poster child for the possible negative consequences of nuclear proliferation. Pakistan’s nuclear weapons have led to further nuclear proliferation as Pakistan, with the help of rogue scientist A.Q. Khan, transferred uranium enrichment technology to Iran, Libya, and North Korea.[[51]](#footnote-51)[50] Indeed, part of the reason that North Korea and Iran are so far along with their uranium enrichment programs is because they got help from Pakistan. Pakistan has also become **more aggressive** since acquiring nuclear weapons, displaying an increased willingness to sponsor cross-border incursions into India with terrorists and irregular forces.[[52]](#footnote-52)[51] In a number of high-stakes nuclear crises between India and Pakistan, U.S. officials worried that the conflicts could escalate to a nuclear exchange and intervened diplomatically to prevent Armageddon on the subcontinent. The U.S. government also worries about the safety and security of Pakistan’s nuclear arsenal, fearing that Pakistan’s nukes could fall into the hands of terrorists in the event of a state collapse or a break down in nuclear security. And we still have not witnessed the full range of consequences arising from Pakistani nuclear proliferation. Islamabad has only possessed the bomb for a little over a decade, but they are likely to keep it for decades to come, meaning that we could still have a nuclear war involving Pakistan. In short, Pakistan’s nuclear capability has already had deleterious effects on U.S. national security and these threats are only likely to grow over time. In addition, the anti-obsessionists are incorrect to argue that the cure of U.S. nuclear nonproliferation policy is worse than the disease of proliferation. Many observers would agree with Mueller that the U.S. invasion of Iraq in 2003 was a disaster, costing much in the way of blood and treasure and offering little strategic benefit. But the Iraq War is hardly representative of U.S. nonproliferation policy. For the most part, nonproliferation policy operates in the mundane realm of legal frameworks, negotiations, inspections, sanctions, and a variety of other tools. Even occasional preventive military strikes on nuclear facilities have been far less calamitous than the Iraq War. Indeed, the Israeli strikes on nuclear reactors in Iraq and Syria in 1981 and 2007, respectively, produced no meaningful military retaliation and a muted international response. Moreover, the idea that the Iraq War was primarily about nuclear nonproliferation is a contestable one, with Saddam Hussein’s history of aggression, the unsustainability of maintaining the pre-war containment regime indefinitely, Saddam’s ties to terrorist groups, his past possession and use of chemical and biological weapons, and the window of opportunity created by September 11th, all serving as possible prompts for U.S. military action in the Spring of 2003. The claim that nonproliferation policy is dangerous because it denies developing countries access to nuclear energy also rests on shaky ground. If anything, the global nonproliferation regime has, on balance, increased access to nuclear technology. Does anyone really believe that countries like Algeria, Congo, and Vietnam would have nuclear reactors today were it not for Atoms for Peace, Article IV of the NPT, and other appendages of the nonproliferation regime that have provided developing states with nuclear technology in exchange for promises to forgo nuclear weapons development? Moreover, the sensitive fuel-cycle technology denied by the Nuclear Suppliers Group (NSG) and other supply control regimes is not even necessary to the development of a vibrant nuclear energy program as the many countries that have fuel-cycle services provided by foreign nuclear suppliers clearly demonstrate. Finally, the notion that nuclear energy is somehow the key to lifting developing countries from third to first world status does not pass the laugh test. Given the large upfront investments, the cost of back-end fuel management and storage, and the ever-present danger of environmental catastrophe exemplified most recently by the Fukushima disaster in Japan, many argue that nuclear energy is not a cost-effective source of energy (if all the externalities are taken into account) for any country, not to mention those developing states least able to manage these myriad challenges. Taken together, therefore, the argument that nuclear nonproliferation policy is more dangerous than the consequences of nuclear proliferation, including possible nuclear war, is untenable. Indeed, it would certainly come as a surprise to the mild mannered diplomats and scientists who staff the International Atomic Energy Agency, the global focal point of the nuclear nonproliferation regime, located in Vienna, Austria. The anti-obsessionsists, like the optimists, also walk themselves into logical contradictions. In this case, their policy recommendations do not necessarily follow from their analyses. Ward argues that nuclear weapons are irrelevant and, therefore, we should eliminate them.[[53]](#footnote-53)[52] But, if nuclear weapons are really so irrelevant, why not just keep them lying around? They will not cause any problems if they are as meaningless as anti-obsessionists claim and it is certainly more cost effective to do nothing than to negotiate complicated international treaties and dismantle thousands of warheads, delivery vehicles, and their associated facilities. Finally, the idea that nuclear weapons are only important because we think they are powerful is arresting, but false. There are properties inherent in nuclear weapons that can be used to create military effects that simply cannot, at least not yet, be replicated with conventional munitions. If a military planner wants to quickly destroy a city on the other side of the planet, his only option today is a nuclear weapon mounted on an ICBM. Therefore, if the collective “we” suddenly decided to “defetishize” nuclear weapons by treating them as unimportant, it is implausible that some leader somewhere would not independently come to the idea that nuclear weapons could advance his or her country’s national security and thereby re-fetishize them. In short, the optimists and anti-obsessionists have brought an important perspective to the nonproliferation debate. Their arguments are provocative and they raise the bar for those who wish to argue that the spread of nuclear weapons is indeed a problem. Nevertheless, their counterintuitive arguments are not enough to wish away the enormous security challenges posed by the spread of the world’s most dangerous weapons. These myriad threats will be considered in the next section. Why Nuclear Proliferation Is a Problem The spread of nuclear weapons poses a number of severe threats to international peace and U.S. national security including: nuclear war, nuclear terrorism, emboldened nuclear powers, constrained freedom of action, weakened alliances, and further nuclear proliferation. This section explores each of these threats in turn. Nuclear War. The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there is a **catastrophic nuclear war**. A nuclear exchange between the two superpowers during the Cold War could have arguably resulted in human extinction and a nuclear exchange between states with smaller nuclear arsenals, such as India and Pakistan, could still result in millions of deaths and casualties, billions of dollars of economic devastation, environmental degradation, and a parade of other horrors. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used one nuclear weapon each on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to sixty-five-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again. After all, analysts in the 1990s argued that worldwide economic downturns like the great depression were a thing of the past, only to be surprised by the dot-com bubble bursting in the later 1990s and the Great Recession of the late Naughts.[[54]](#footnote-54)[53] This author, for one, would be surprised if nuclear weapons are not used in my lifetime. **Before** reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preemptive nuclear strike to disarm Iran’s nuclear capabilities and eliminate the threat of nuclear war against Israel. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use ‘em or loose ‘em pressures. That is, if Tehran believes that Israel might launch a preemptive strike, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.[[55]](#footnote-55)[54] If there are advantages to striking first, one state might start a nuclear war in the **belief that war is inevitable** and that it would be better to go first than to go second. In a future Israeli-Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, there is a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders that would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. For example, Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who genuinely hold millenarian religious worldviews who could one day ascend to power and have their finger on the nuclear trigger. We cannot rule out the possibility that, as nuclear weapons continue to spread, one leader will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine a nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. This leads to the credibility problem that is at the heart of modern deterrence theory: how can you threaten to launch a suicidal nuclear war? Deterrence theorists have devised at least two answers to this question. First, as stated above, leaders can choose to launch a limited nuclear war.[[56]](#footnote-56)[55] This strategy might be especially attractive to states in a position of conventional military inferiority that might have an incentive to escalate a crisis quickly. During the Cold War, the United States was willing to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority in continental Europe. As Russia’s conventional military power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear use in its strategic doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a U.S. superpower in a possible East Asia contingency. Second, as was also discussed above leaders can make a “threat that leaves something to chance.”[[57]](#footnote-57)[56] They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents could have led to war.[[58]](#footnote-58)[57] When we think about future nuclear crisis dyads, such as India and Pakistan and Iran and Israel, there are fewer sources of stability that existed during the Cold War, meaning that there is a very real risk that a future Middle East crisis could result in a devastating nuclear exchange.

#### Domestic nuclear expansion prevents global prolif and solidifies leadership

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

The health of the U.S. civil nuclear infrastructure can have an important bearing in a variety of ways on the ability of the United States to advance its nonproliferation objectives. During the Atoms for Peace Program and until the 1970s, the U.S. was the dominant supplier in the international commercial nuclear power market, and it exercised a strong leadership role in shaping the global nonproliferation regime. In those early days, the U.S. also had what was essentially a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Today due to its political, military and economic position in the world, the United States continues to exercise great weight in nonproliferation matters. However, the ability of the United States to promote its nonproliferation objectives through peaceful nuclear cooperation with other countries has declined**.** The fact that no new nuclear power plant orders have been placed in over three decades has led to erosion in the capabilities of the U.S. civil nuclear infrastructure. Moreover, during the same period, the U.S. share of the global nuclear market has declined significantly, and several other countries have launched their own nuclear power programs and have become major international suppliers in their own right. It is highly significant that all but one of the U.S. nuclear power plant vendors and nuclear fuel designers and manufactures for light water reactors have now been acquired by their non-U.S. based competitors. Thus, while the U.S. remains a participant in the international market for commercial nuclear power, it no longer enjoys a dominant role as it did four decades ago. To the extent that U.S. nuclear plant vendors and nuclear fuel designers 2 and manufacturers are able to reassert themselves on a technical and commercial basis, opportunities for U.S. influence with respect to nuclear nonproliferation can be expected to increase. However, the fact that there are other suppliers that can now provide plants and nuclear fuel technology and services on a competitive commercial basis suggests that the U.S. will have to work especially hard to maintain and, in some cases, rebuild its nuclear infrastructure, if it wishes to exercise its influence in international nuclear affairs. The influence of the United States internationally could be enhanced significantly if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. There is a clear upsurge of interest in nuclear power in various parts of the world. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. **Constructive** U.S. influence will be best achieved to the extent that the U.S. is perceived as a major **technological leader**, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, the erosion of the U.S. nuclear infrastructure has begun to weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international 3 nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, enrichment services, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation with other countries. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. Further, the ability of the U.S. to develop improved and advanced nuclear technologies will depend on its ability to provide consistent and vigorous support for nuclear R&D programs that will enjoy solid bipartisan political support in order that they can be sustained from one administration to another. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and to U.S. non-proliferation posture as criteria in project design and source selection where possible. Finally, the ability of the United States to resolve its own difficulties in managing its **spent fuel** and nuclear wastes will be crucial to maintaining the credibility of the U.S. nuclear power program and will be vital to implementing important new nonproliferation initiatives designed to discourage the spread of sensitive nuclear facilities to other countries.

**Fuel cycle solutions are key**

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

Historically, the ability of the U.S. to help prevent the spread of nuclear weapons has stemmed from many factors, not least of which has been the political, military and economic power that the US has exercised in international affairs. The U.S. has used many tools to promote its nonproliferation objectives. One important instrument that the U.S. has employed for decades in building the international nonproliferation system has been its ability to provide nuclear fuel, nuclear power plants and fuel cycle services to countries on a reliable and stable basis, under strict nonproliferation controls and conditions. In the early days of the nuclear era, the U.S. essentially had a monopoly in the nuclear fuel supply market. This capability, among others, allowed the U.S. to promote the widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures, and, most notably, the NPT. The United States concluded agreements for cooperation in peaceful nuclear energy with other states, which require strict safeguards, physical protection and other nonproliferation controls on their civil nuclear programs. Moreover, the strength of U.S. civil nuclear capabilities gave it an important seat at the international table, not only in negotiating the norms that should 10 govern the conduct of civil nuclear power programs to protect against their misuse or diversion to nuclear weapons, but also in shaping the key elements of the global nonproliferation regime. In addition domestic U.S. nuclear programs have enabled the United States to make important contributions to achieving technical improvements in international safeguards, physical protection, and nuclear detection systems. However, the challenges now confronting the international nonproliferation regime come at a time when the U.S. commercial share of the global nuclear market has declined and when there are serious concerns about the health of the U.S. nuclear infrastructure.

#### Strong domestic conditions overcome expanded global interest—plan ensures a lead role and global export controls

**Bengelsdorf and McGoldrick**, **07** [currently a Principal with the consulting firm of Bengelsdorf, McGoldrick, and Associates, held numerous senior positions in the U.S. government, including the Energy Department and its predecessor agencies, the State Department, and the U.S. Mission to the IAEA. Among his appointments, he served as the director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affairs. Throughout his career, Mr. Bengelsdorf contributed significantly to the development and implementation of U.S. international fuel cycle and nonproliferation policies, having participated in several White House and National Security Council studies. He was involved in the negotiation of numerous bilateral and multilateral nuclear and nonproliferation agreements, including the development of full-scope IAEA safeguards (INFCIRC/153) to implement the Nuclear, THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY A White Paper Presented by the American Council on Global Nuclear Competitiveness May 2007, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf>]

Consumer countries are likely to turn for support and assistance to those states possessing **the most vigorous** domestic nuclear power programs that are placing new power plant orders, extending international fuel cycle services, and maintaining leadership roles in supporting innovative improvements in advanced technologies. This suggests that the influence of the United States internationally could be enhanced significantly if the U.S. is able to achieve success in its Nuclear Power 2010 program and place several new orders in the next decade and beyond. Conversely, if the 2010 initiative falters, or if U.S. companies only are given subordinate roles in processing new plant orders, then this can only further weaken the U.S. nuclear infrastructure as well as the stature of the U.S. in the international nuclear community. Experts believe that the U.S. nuclear infrastructure is capable of sustaining the goals of the 2010 program, but this will require the resolution of a number of formidable problems, including arrangements for the acquisition of long lead time components and coping with anticipated shortages of experienced personnel. Maintaining the U.S. as a Significant Global Supplier The health of the U.S. civil nuclear infrastructure will also be crucial to the success of U.S. efforts to play a significant role as a nuclear supplier and to advance its nonproliferation objectives. There is a clear and compelling upsurge of interest in nuclear power in various parts of the world that is independent of U.S. policy and prerogatives. As a consequence, if the U.S. aspires to participate in these programs and to shape them in ways that are most conducive to nonproliferation, it will need to promote the health and viability of the American nuclear infrastructure. Perhaps more importantly, if it wishes to 23 exert a positive influence in shaping the nonproliferation policies of other countries, it can do so more effectively by being an active supplier to and partner in the evolution of those programs. Concurrent with the prospective growth in the use of nuclear power, the global nonproliferation regime is facing some direct assaults that are unprecedented in nature. International confidence in the effectiveness of nuclear export controls was shaken by the disclosures of the nuclear operations of A.Q. Khan. These developments underscore the importance of maintaining the greatest integrity and effectiveness of the nuclear export conditions applied by the major suppliers. They also underscore the importance of the U.S. maintaining effective policies to achieve these objectives. Constructive U.S. influence will be best achieved to the extent that the U.S. is perceived as a major technological leader, supplier and partner in the field of nuclear technology. As the sole superpower, the U.S. will have considerable, on-going influence on the international nonproliferation regime, regardless of how active and successful it is in the nuclear export market. However, if the U.S. nuclear infrastructure continues to erode, it will weaken the ability of the U.S. to participate actively in the international nuclear market. If the U.S. becomes more dependent on foreign nuclear suppliers or if it leaves the international nuclear market to other suppliers, the ability of the U.S. to influence nonproliferation policy will diminish. It is, therefore, essential that the United States have vibrant nuclear reactor, uranium enrichment, and spent fuel storage and disposal industries that can not only meet the needs of U.S. utilities but will also enable the United States to promote effective safeguards and other nonproliferation controls through close peaceful nuclear cooperation other countries. The U.S. should establish a high priority goal to rebuild an indigenous nuclear industry and support its growth in domestic and international markets. U.S. nuclear exports can be used to influence other states’ nuclear programs through the nonproliferation commitments that the U.S. requires. The U.S. has so-called consent rights over the enrichment, reprocessing and alteration in form or content of the nuclear materials that it has provided to other countries, as well as to the nuclear materials that are produced from the nuclear materials and equipment that the U.S. has supplied. 24 The percentage of nuclear materials, including separated plutonium, that are subject to U.S. consent rights will diminish over time as new suppliers of nuclear materials and facilities take a larger share of the international nuclear market. Unless the U.S. is able to compete effectively in the international market as a supplier of nuclear fuels, equipment and technology, the quantity of the nuclear materials around the globe that the U.S. has control over will diminish significantly in the future. This may not immediately weaken the effectiveness of the nonproliferation regime since all the major suppliers have adopted the export guidelines of the Nuclear Supplier Group. However, only the U.S., Australia and Canada have consent rights over enrichment and reprocessing of the nuclear materials subject to their agreements. Consequently, if there is a major decline in the U.S. share of the international nuclear market, the U.S. may not be as effective as it has been in helping to ensure a rigorous system of export controls. Nuclear R&D Further, the revitalization of the U.S. nuclear infrastructure will depend on the U.S. ability to provide sustained bipartisan support for nuclear R&D programs in order that they can be sustained from one administration to another. The ability of the United States to continue to make significant contributions to the improvement of safeguards, physical protection and proliferation resistance of nuclear systems is dependent, at least in part, on the continued health of the U.S. technological base. This assumes close collaboration between industry and the national laboratories, which could be increased through greater use of Cooperative Agreements between U.S. firms and national laboratories. GNEP contains some important new ideas that could advance U.S. nonproliferation objectives. Envisioned within both GNEP and the U.S.-led Generation IV Initiative is the development and deployment of nextgeneration nuclear power plant designs that, if completed, could help restore a U.S. competitive edge in nuclear system supply. As the U.S. Government expends taxpayer funds on the Nuclear Power 2010 program, the Global Nuclear Energy Partnership, the Generation IV initiative and other programs, it should consider the benefit to the U.S. industrial base and the benefit to U.S. non-proliferation posture as criteria in project design and selection where possible.

#### Federal action is key to reverse industry decline and influence reactor adoption

Wallace and Williams, 12 [Michael, Senior Adviser, U.S. Nuclear Energy Project, Sarah, CSIS, “Nuclear Energy in America: Preventing It’s Early Demise,” <http://csis.org/files/publication/120417_gf_wallace_williams.pdf>]

America’s nuclear energy industry is in decline. Low natural gas prices, financing hurdles, new safety and security requirements, failure to resolve the waste issue and other factors are hastening the day when existing reactors become uneconomic, making it virtually impossible to build new ones. Two generations after the United States took this wholly new and highly sophisticated technology from laboratory experiment to successful commercialization, our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future. The pace of this decline, moreover, could be more rapid than most policymakers and stakeholders anticipate. With 104 operating reactors and the world’s largest base of installed nuclear capacity, it has been widely assumed that the United States—even without building many new plants—would continue to have a large presence in this industry for some decades to come, especially if existing units receive further license extensions. Instead, current market conditions are such that growing numbers of these units are operating on small or even negative profit margins and could be retired early. Our nation is in danger of losing an industry of **unique** strategic **importance**, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future.60 | Center for Strategic and International Studies Meanwhile, China, India, Russia, and other **countries are looking to significantly expand** their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. **With the center of gravity** for global nuclear investment **shifting** to a new set of players, the United States and the international community face a difficult set of challenges: stemming the **spread of nuclear weapons-**usable materials and know-how; preventing **further catastrophic nuclear accidents**; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. In this context, **federal action** to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective SHARE OF NET GLOBAL NUCLEAR GENERATION 1980-2030 Source: Energy Information Agency (EIA) databaseGlobal Forecast 2012 | 61 safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be **more effective** and less expensive than trying to contain these risks militarily. Second, **setting global norms** and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, **America’s ability to exert leadership** and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty and other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### LFTRs are impervious to prolif – shifting away from uranium is key

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

IN REPORTING ON THE THORIUM POWER MOVEMENT, I heard plenty of reasons why it would never work. After a year or so I classified them into three categories: market barriers, challenges related to waste and proliferation, and what I came to call the traditionalist argument. The market-based argument is simple: the nuclear power industry has a fuel today that is abundant and inexpensive. Why should it switch to a new, relatively unproven fuel? These assumptions are faulty (uranium may well not be inexpensive and plentiful much longer—see the comments of Srikumar Banerjee, chair of India’s Atomic Energy Commission, from chapter 7). More important, this argument does not take into account the broader costs and risks of uranium-based nuclear power, which have been highlighted by the Fukushima-Daiichi accident. There’s little chance of nuclear power’s fulfilling its promise until those costs are driven down—**by shifting to thorium power**. The waste and proliferation issues are more complicated, and I will break them down into four elements.“ In distilled form they sum up the objections to thorium from both the nuclear establishment and antinuclear groups. 1. The use of enriched uranium or plutonium in thorium fuel to ignite the fission reaction carries proliferation risks, and U-233 is as useful as Pu-239 for making nuclear bombs. This is the central claim of those who dismiss thorium’s prospects for reducing the nuclear waste stream: Solid-fuel thorium reactors produce both U233 (the fissile daughter element of Th232) and plutonium, so what’s the difference? What’s more, thorium reactors require lowenriched uranium or plutonium to initiate the fission reaction, thus creating more material that can be refined into bombs. The kernel of truth here is that the U233 (and thus the plutonium as well) created in the transmutation of thorium is contaminated by U232, one of the nastiest isotopes in the universe. With a half-life of less than 70 years, U-232 decays into the radioisotopes bismuth-212 and thallium-208, which emit intense gamma rays that make it very, very hard to handle and transport (not to mention reprocess) and that would very likely destroy the electronics of any weapon into which they were built. Theoretically, it's possible to make a bomb with U-233, but plutonium is much easier to make and does not come with the problematic U-232. Militaries will always opt for plutonium and U235, because they can't afford to expose their personnel to the deadly risks of U232. As for terrorists, they'd be better off simply buying natural uranium on the open market and finding a way to enrich it. The United States reportedly tested bombs with U-233 cores in the late 1950s, but no country has ever included it as a material as a part of its nuclear weapons program. It's useless even for the most zealous of hypothetical suicide bombers, because they’d probably never reach their target. 2. Most proposed thorium reactors require reprocessing to separate out the U-233 for use in fresh fuel. As with conventional uranium power plants that include reprocessing, bomb-making material is separated out, making it vulnerable to theft or diversion. This is a tired canard. Never mind that **every nuclear fuel cycle currently in production or contemplated generates “bomb-making material**” -- this statement ignores the realities of weapons building. Most Gen IV designs described in this chapter involve fuel recycling; indeed, as the Peterson report stated, **recycling is critical to the future of nuclear power**. To be sure, reprocessing spent fuel rods from a solid fuel thorium reactor is not a simple matter, whether you’re making bombs or new fuel. But it’s important to note that, as with all these arguments, external reprocessing is necessary only for solid fuel reactors, not LFTRs. Alone among advanced reactor designs, LFTRs have the capacity to reprocess the fuel in the reactor building itself, while the reactor is operating. There’s no opportunity for diversion unless you raid the entire plant, shut down the reactor, and figure out a way to separate and abscond with the weaponizable isotopes. Good luck with that. 3. The claim that radioactive waste from thorium reactors creates waste that would have to be isolated from the environment for only 500 years, whereas irradiated uranium-only fuel remains dangerous for hundreds of thousands of years, is false. Thorium-based reactors create long-lived fission products like technetium-99 (its half-life is more than 200,000 years), and thorium- 232 is extremely long lived (its half-life is 14 billion years). This argument ignores the larger context. The volume of fission products from thorium-based solid fuel reactors is about a tenth of that from conventional reactors. What's more, in small amounts, many of these fission products have become common in modern life. Technetium-99, for example, is powerful stuff, worthy of respectful treatment; it’s also commonly used, in a slightly altered form, in medical imaging procedures. Millions of patients ingest it every day without significant risk. The amounts of technetium-99 produced in solid-fuel thorium reactors would be negligible; in LFTRs it would be processed off along with other fission products and largely recycled. Some geological storage will be required, but in general waste from LFTRs decays to safe, stable states within a few hundred years, far less than the millennia required for the by-products of uranium reactors. As for Th-232, it's long lived but safe. The longerlived a radioactive element is, the lower its radioactivity, with its very long half-life, Th-232 is an exceedingly weak producer of radiation. It is so common that it's found in small amounts in virtually all rock, soil, and water. You could sleep with it under your pillow and suffer no ill effects. 4. Reprocessing of thorium fuel cycles has not been successful because uranium-232 is created along with uranium-233. U-232, which has a halflife of about 70 years, is extremely radioactive and is therefore quite dangerous in small quantities. U-232 is indeed extremely radioactive, but its brief half-life means that in less than a century half of it will have decayed to a stable form. Because isotopes decay at a geometric rate (50 percent of half of the original material, or one-quarter of the original, is still radioactive after another 70 years, then one-eighth, one-sixteenth, and so on), the decrease in radioactivity drops off quickly. Many, many hazardous materials are put in storage for centuries. We do not object to them. To summarize, the most common objections to thorium power from the perspective of radioactive waste and the proliferation of nuclear weapons are inflated for solid fuel reactors, and **they** simply do not apply to LFTRs. That leaves the traditionalist argument, which essentially echoes Milton Shaw and the WASH-1222 report from 1972: It can’t be done because it has never been done before. When I heard this brand of defeatism, it always came from someone with a vested interest in the current nuclear power establishment. I’ll explore the traditionalist argument in more detail in the final pages of this book.

#### And, new tech is the crux – the alternative is cascading prolif and terrorism

NESG, 05 [report by the Nuclear Energy Study Group of the American Physical Society Panel on Public Affairs, “Nuclear Power And Proliferation Resistance: Securing Benefits, Limiting Risk,” May, http://www.aps.org/policy/reports/popa-reports/proliferation-resistance/upload/proliferation.pdf]

Nuclear Power, Nuclear Proliferation and National Security The technologies and materials used in the manufacture of nuclear weapons overlap with those used in peaceful nuclear power applications. The extent to which nuclear power will be an acceptable and enduring option to meeting future energy requirements in many regions of the world will therefore depend in part upon the ability to minimize the associated proliferation risks. The elements of a nuclear power system include: facilities that mine and mill uranium ore, facilities that enrich uranium to create fuel, fuel fabrication facilities, reactors that burn that fuel to generate electricity, possibly facilities to reprocess the spent fuel,6 and waste storage sites. Nuclear reactors themselves are not the primary proliferation risk. The principal proliferation concern among the various elements of a nuclear power system are the enrichment and reprocessing facilities, which can produce materials directly usable in weapons. In addition, the spent fuel is a potential source of plutonium that must be safeguarded to prevent its clandestine separation for use in weapons, and fresh low-enriched uranium (LEU) fuel materials are a potential source for clandestine enrichment to nuclear weapons grade material. Further, poorly secured nuclear materials, including plutonium separated for fabrication into reactor fuel, present a risk of proliferation through theft and transfer to another country or terrorist group. The **challenges to the non-proliferation regime** are evident worldwide. Negotiations are under way to persuade Iran to abandon a uranium enrichment program, heavy water production plant and high-power research reactor that Iran claims are for civilian use but could easily be used to produce high-enriched uranium and plutonium for nuclear weapons. In North Korea, negotiations continue on termination of its nuclear weapons program and the associated reprocessing and enrichment activities. Much of Russia’s approximately 2 million pounds of weapons usable uranium and plutonium from both military and civilian nuclear energy programs may not be satisfactorily secured.7 Also, the smuggling network run by A.Q. Khan, who in the 1970s diverted uranium enrichment technology from a European consortium for use in Pakistan’s nuclear weapons program, reportedly sold enrichment technology to several countries, including Libya. This recent history leaves little doubt that civilian nuclear technology and materials can be misused, sold, stolen, or used as a cover for development of a nuclear weapons production capability. Figure 2 illustrates four primary pathways from nuclear-power programs to nuclear-weapons proliferation: theft, sale, diversion, and breakout.8 Addressing the Proliferation Risks of Nuclear Power There are a number of diplomatic, economic, military, and scientific and technical (S&T) approaches to reducing the proliferation risks of nuclear power.9 President Bush made a two part proposal to restrict the spread of enrichment and reprocessing technologies: 1) the world's leading nuclear exporters should ensure that states have reliable access at reasonable cost to fuel for civilian reactors, so long as those states renounce enrichment and reprocessing; and 2) The 40 nations of the Nuclear Suppliers Group should refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants.10 IAEA director, Mohammed ElBaradei proposed a 5-year moratorium on construction of new enrichment or reprocessing plants while an effort is made to establish a multi-national alternative to nationally owned plants.11 Such fuel assurances and pledges to restrict sales are important components of a strategy to reduce the proliferation risks of nuclear power. 12 However, no single diplomatic, military, economic, or technical initiative alone will be able to fully deal with the proliferation challenge. The best prospect for achieving non-proliferation goals while expanding nuclear power is to engage all appropriate means and to maximize their respective contributions.13 From a technical point of view, nuclear power cannot be made “proliferation proof”. However, numerous steps can be taken -- and must be taken -- to make it as “proliferation-resistant” as reasonably possible. This is an urgent global security problem. China is poised to greatly expand its nuclear power program and Indonesia, Vietnam and Egypt have all declared an interest in building civilian nuclear power plants. **Without technological advances** and institutional changes, it will be easier for countries motivated to proliferate to take advantage of the global expansion of nuclear power or for terrorists to access nuclear materials. Iran’s developing nuclear program indicates the **urgent need to enhance the proliferation resistance of nuclear power.** Thus, whether or not the United States constructs new nuclear power plants over the next quarter century, it is vital to US national security that the US remain engaged in the development of proliferation-resistant nuclear-energy technologies and of technologies that can support any new arrangements to safeguard and internationalize the fuel-cycle and strengthen international institutions.

#### Thorium R&D is key – spurs elimination of plutonium stockpiles

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “[What about thorium?](http://www.fas.org/blogs/sciencewonk/2012/08/what-about-thorium/)” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into uranium in the form of U-233. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was [used](http://www.neimagazine.com/story.asp?storyCode=2054564) to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a [process](http://nuclearweaponarchive.org/Library/Plutonium/index.html) of decay whereby plutonium in the form of Pu-239 is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly 13 kilograms (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly [70](http://www.world-nuclear.org/info/inf15.html) tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would [realize](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf) a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, [featuring](http://www.oecd-nea.org/science/meetings/arwif2001/57.pdf.) a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, **thus making the thorium process less suitable for the development of plutonium for a nuclear weapon.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would [require](http://www.ltbridge.com/assets/Thorium_Fuel_Fact_Sheet.pdf) uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have [detonated](http://en.wikipedia.org/wiki/Nuclear_weapons_testing) nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “[in situ](http://hdl.handle.net/1721.1/29956).” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an [article](http://www.wired.com/magazine/2009/12/ff_new_nukes/) by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further **research and development of thorium** needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### And, in-situ reprocessing removes plutonium – solves extinction from terrorism

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (<http://thoriumenergy.blogspot.com/>). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the <http://thoriumenergy.blogspot.com/> blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes in-situ reprocessing possible, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and **does not require liquid sodium** as a coolant, while it also **avoids the risk of plutonium getting into the hands of terrorists**. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### And, dual use makes other reactors too risky – federal investment streamlines tech transfers

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Advanced nuclear power must be proliferation resistant. Nuclear weapons can cause terrible destruction of whole cities and contaminate entire regions, so expansion of nuclear power must come with assurances that the risk of proliferation of nuclear weapons is not increased. The technology for making such weapons is widely known, although the process is difficult and expensive. Building commercial nuclear power plants has not led to weapons development; nations that have nuclear weapons have developed them with purposeful programs and facilities. However dual-use technologies such as centrifuge enrichment of U-235 that can make fuel for PWRs can be adapted to make highly enriched uranium for weapons. After President Eisenhower’s Atoms for Peace speech the US helped nations to acquire the knowledge and materials to use nuclear technology for peaceful purposes. Unexpectedly this knowledge led India to develop nuclear weapons instead. Selling advanced nuclear power plants worldwide does not require providing each nation with the technical skills and materials to build nuclear power plants or nuclear weapons. Consider the airplane and jet engine industry: nations want prestigious national airlines. Fully 83 countries, from Algeria to Yemen, operate airlines using the Boeing 747 airliner, yet these nations do not have their own airframe or engine production or maintenance capabilities. General Electric makes a business of maintaining and overhauling engines at GE’s own service centers. This is a technology-transfer-resistant model suitable for LFTR installation and maintenance. The liquid fluoride thorium reactor is proliferation resistant. LFTR requires fissile material to be transported to the site for startup, but not thereafter. LFTR then creates and burns fissile U-233 that conceivably could be used instead for a nuclear weapon. Would this ever happen? China, USA, Russia, India, UK, France, Pakistan, and Israel, which account for 57% of global CO2 emissions, already have nuclear weapons and no incentive to subvert LFTR technology. So just implementing LFTRs in these nations would be a big step in addressing global warming. Many additional nations, such as Canada, Japan, and South Africa, have the capability to build nuclear weapons but have chosen not to, so there is no incentive for them to subvert LFTR technology for this purpose. Should LFTRs be implemented in other non-weapons states? Certainly terrorists could not steal this uranium dissolved in a molten salt solution along with even more radioactive fission products inside a sealed reactor. IAEA safeguards include physical security, accounting and control of all nuclear materials, surveillance to detect tampering, and intrusive inspections. LFTR’s neutron economy contributes to securing its inventory of nuclear materials. Neutron absorption by uranium-233 produces about 2.4 neutrons per fission—one to drive a subsequent fission and another to drive the conversion of Th-232 to U-233 in the blanket molten salt. Taking into account neutron losses from capture by protactinium and other nuclei, a well-designed LFTR reactor will direct just about 1.00 neutrons per fission to thorium transmutation. This delicate balance doesn’t create excess U-233, just enough to generate fuel indefinitely. If this conversion ratio could be increased to 1.01, a 100 MW LFTR might generate kilogram of excess U-233 per year. If meaningful quantities of uranium-233 are misdirected for non-peaceful purposes, the reactor will report the diversion by stopping because of insufficient U-233 to maintain a chain reaction. Yet a sovereign nation or revolutionary group might expel IAEA observers, stop the LFTR, and attempt to remove the U-233 for weapons. Accomplishing this would require that skilled engineers, working in a radioactive environment, modify the reactor's fluorination equipment to separate uranium from the fuel salt instead of the thorium blanket salt. What would happen to them? The neutrons that produce U-233 also produce contaminating U-232, whose decay products emit 2.6 MeV penetrating gamma radiation, hazardous to weapons builders and obvious to detection monitors. The U-232 decays via a cascade of elements to thallium- 208, which builds up and emits the radiation. Depending on design specifics, the proportion of U-232 would be about 0.13% for a commercial power reactor. A year after separation, a weapons worker one meter from a subcritical 5 kg sphere of such U-233 would receive a radiation dose of 43 mSv/hr, compared to 0.003 mSv/hr from plutonium, even less from U-235. Death becomes probable after 72 hours exposure. After ten years this radiation triples. A resulting weapons would be highly radioactive and therefore dangerous to military workers nearby. The penetrating 2.6 MeV gamma radiation is an easily detected marker revealing the presence of such U-233, possibly even from a satellite. U-232 can not be removed chemically, and centrifuge separation from U-233 would make the centrifuges too radioactive to maintain. Conceivably, nuclear experts might try to stop the reactor, chemically extract the uranium, and devise chemistry to remove the intermediate elements of the U-232 decay chain before the thallium is formed, except that the isotopes are continually replaced by U-232 decay. They might try to quickly separate the small amount of Pa-233 from the uranium and let it decay to pure U-233, but they would have to design and build a special chemical plant within the radioactive reactor. Bomb-makers might attempt quickly fabricate a weapon from newly separated U-233 before radiation hazards become lethal; even so there will be sufficient U-232 contamination that penetrating 2.6 MeV gamma rays will be readily detected. The challenge of developing and perfecting such new processes will be more difficult and expensive than creating a purpose-built weapons factory with known technology, such as centrifuge enrichment of U-235 conducted in Iran or PUREX for extracting plutonium from solid fuel irradiated in LWRs. Bruce Hoglund wrote a fuller report of the challenges to would-be bomb makers, and there is a discussion in the comments of the energy from thorium blog, both linked in the references section. A LFTR operating under IAEA safeguards might additionally be protected by injecting U-238 from a remotely controlled tank of U-238. The U-238 would dilute (denature) the U-233 to make it useless for weapons, but it would also stop the reactor and ruin the fuel salt for further use. For personnel safety, any U-233 material operations must be accomplished by remote handling equipment within a radioactively shielded hot cell. This can be designed to make it very hard for any insiders or outsiders to remove material from the hot cell. Another hurdle for the would-be pilferer uranium from 700° C molten salt is the retained radioactive fission products. Even with a l-hour cooling period to allow decay of the short-lived isotopes, the salt still releases ~350 W/liter of heat. That heat comes from deadly ionizing radiation that would kill a nearby pilferer in minutes unless shielded by meters of concrete or water or heavy lead. This fission product radiation is the same self protection that protects spent LWR fuel from theft. The single-fluid DMSR is highly proliferation resistant. The DMSR contains enough U-238 mixed with fissile U-233 and U-235 that the uranium can not sustain the rapid fission reaction necessary for a nuclear weapon. Uranium enriched to less than 20% U-235 is termed LEU, low-enriched uranium. The LEU fuel is not suitable for a nuclear weapon, which typically requires over 90% U-235. The DMSR with at least 80% U-238 is said to be denatured with it. The DMSR has less chemical processing equipment than the two- fluid LFTR, which uses fluorine chemistry to direct U-233 generated in the thorium blanket to the core. The DMSR has no chemical processing equipment in the reactor plant that might somehow be modified to divert U-233 for a weapons program. Because of the substantial amount of U-238 in the DMSR, it does breed plutonium from neutron capture, just as does a standard LWR. Some Pu-239 fissions. However the fissile Pu-239 isotope that might be desired for a weapon is only 31% of the plutonium, mixed with other isotopes (Pu-238, 240, 241, 242) that make the plutonium unsuitable for a weapon. Because the plutonium is dissolved in the fuel salt, there is no opportunity to remove it early to obtain weapons grade Pu-239 before neutrons convert it to other isotopes, as in a LWR, CANDU, RBMK, or military plutonium production reactor. Further, plutonium’s chemistry makes it difficult to remove from the salt. Also, the salt contains highly radioactive fission products as well as U-232, whose decay daughters emit a penetrating 2.6 MeV gamma ray. DMSR is the most proliferation-resistant nuclear reactor. There are easier paths than U-233 to make nuclear weapons. Pakistan has illustrated how a developing nation can make uranium weapons using centrifuge enrichment; in a dual path it simultaneously developed the methods to extract weapons grade plutonium from uranium reactors. India and North Korea developed plutonium weapons from heavy water or graphite moderated reactors with online fuel exchange capability. Iran has built centrifuge enrichment plants capable of making highly enriched U-235 for nuclear weapons. These proven weapons paths eliminate the incentive for nations to try to develop nuclear weapons via the technically challenging and expensive U-233 path. Only a determined, well-funded effort on the scale of a national program could overcome the obstacles to illicit use of uranium- 232/233 produced in a LFTR reactor. Such an effort would certainly find that it was less problematic to pursue the enrichment of natural uranium or the breeding of plutonium. LFTR reduces existing weapons proliferation risks. Deploying LFTRs on a global scale will not increase the risk of nuclear weapons proliferation, but rather decrease it. Starting up LFTRs with existing plutonium can **consume inventories** of this weapons-capable material. The thorium-uranium fuel cycle reduces demand for U-235 enrichment plants, which can make weapons material nearly as easily as power reactor fuel. Abundant energy cheaper than coal can increase prosperity and enable lifestyles that lead to sustainable populations, reducing the potential for wars over resources.

#### ADVANTAGE TWO IS RARE EARTHS—

#### China just cut rare earth permits

**Pugliese 9/23 –** writer for the Ottawa Citizen

(David, “China Uses Its Control Of Rare Earth Minerals To Punish Japan Over Territory Dispute While Warning Canada Against Letting Politics From Scuttling Its Nexen Energy Purchase”, http://blogs.ottawacitizen.com/2012/09/23/china-uses-its-control-of-rare-earth-minerals-to-punish-japan-over-territory-dispute-while-warning-canada-against-letting-politics-from-scuttling-its-nexen-energy-purchase/, dml)

Associated Press is reporting that China has cut the number of permits for rare earths mining in a new move to tighten controls over the exotic minerals needed to manufacture mobile phones, electric cars and other high-tech goods. The move appears to be aimed at tightening the political screws on Japan – the Japanese and Chinese governments are in a dispute now over a group of uninhabited islands in the East China Sea.¶ It’s not the first time this has happened. China temporarily suspended rare earths shipments to Japanese firms the last time tensions over the islands erupted two years ago.¶ Beijing has alarmed global manufacturers by restricting production and exports while it tries to build up its own processing industry to capture profits that flow to U.S., Japanese and European companies that use rare earths to make lightweight magnets, batteries and other products, Associated Press points out.¶ China has about 30 percent of world supplies of rare earths but accounts for more than 90 percent of production, the news agency reports. Its trading partners say quotas and taxes push up rare earths prices abroad, giving buyers in China an unfair advantage, it adds.

#### The effects are global

**Westlake 9/20 –** writer for the Japan Daily Press

(Adam, “China reduces rare earth mining permits by 40% amid territorial island dispute”, <http://japandailypress.com/china-reduces-rare-earth-mining-permits-by-40-amid-territorial-island-dispute-2012711>, dml)

China has taken a step to further tighten its grip on the world’s supply of rare earth minerals by reducing its number of mining permits by 40%. The Ministry of Land and Resources announced the new restrictions on rare earths, necessary minerals for the production of mobile phones, hybrid car batteries, and other modern tech products, to decrease from 113 to 67 mining permits. The ministry hasn’t given an explanation for Wednesday’s announcement, but it could be seen as further action against Japan as tensions continue to rise over the territorial islands in the East China Sea.

The Chinese government has been continuously seen as trying to restrict the production and export of rare earth minerals in order to monopolize profits on the industry. The markets of the U.S., Japan, and Europe have little options for harvesting the valuable minerals other than China, for while they are believed to have roughly 30% of the world’s supply, they maintain 90% of production. While these newly imposed limits aren’t targeted at any market specifically, the last time tensions between Japan and China flared in 2010, Beijing temporarily halted all rare earth exports to Japanese buyers.

The restrictions will also hurt the U.S. and Europe as those markets want to fight unemployment by increasing the exports of products that use rare earth minerals, notably flat-screen TVs and hybrid cars. China’s controls have been brought up at the World Trade Organization (WTO) recently, but the Beijing government says they are trying to reduce environmental damage, and are still acting within WTO rules. Japan has recently formed an agreement with Vietnam to help with harvesting minerals in exchange for mining technology and equipment, therefore helping to lower the reliance on China.

#### And, Chinese cutoff inevitable—plan prevents continued monopoly and allows US market expansion

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

¶ NOT LONG AGO, FEW AMERICAN POLITICIANS or journalists could¶ have told you what “rare earth” is. Now they are at the center of a¶ controversy that includes issues of national security, trade policy,¶ green energy, and high-tech supremacy. The “rare earths crisis,” as it’s¶ now termed, has been covered at length in the Wall Street journal, New¶ York Times, Financial Times, and National Geographic.“ To thorium¶ advocates, though, the critical importance of these unique elements is¶ not news.¶ The term “rare earth” is a misnomer: rare earth elements are¶ actually quite plentiful. Comprising the lanthanoid elements—¶ lanthanum (from the Greek lanthanein, to be hidden) through lutetium,¶ numbers 57 to 71 on the periodic table—plus scandium and yttrium—¶ they are most often found in the ground in association with monazite,¶ the reddish-brown ore that also happens to be the principal source of¶ thorium. When you find thorium, you usually find rare earth elements.¶ Where you find rare earths, you almost always find thorium.¶ They are rare in the sense that, until relatively recently, they were¶ exceedingly difficult to isolate and thus of little or no industrial value.¶ During the Manhattan Project chemists developed the process of ion¶ exchange for separating and purifying rare earths. Of course, they¶ were actually working on purifying plutonium-239 for bombs; the¶ separation of rare earths was a happy by-product of that research.¶ Rare earth elements became valuable in the 1950s, with the advent of¶ color TVs: they were (and still are) used as phosphors to brighten the¶ colors of television tubes.¶ Rare earths are still complicated and costly to extract today. Mining¶ gold, for example, is much simpler than mining rare earth elements.¶ Significant deposits of rare earths are found in Australia, Brazil, India,¶ Malaysia, South Africa, Sri Lanka, Thailand, and the United States, and¶ for many years the world’s leading producer of rare earths was, as you¶ might imagine, the United States. Through the 1990s the Mountain Pass¶ mine in California was the world’s largest source of rare earths. Then,¶ as low-cost Chinese-produced rare earth elements became available,¶ Americans lost interest in actually finding and producing the stuff¶ themselves. China now controls about 97 percent of the world market¶ for rare earths.¶ ¶ That fact is largely the doing of one man, Xu Guangxian, who is the¶ inventor of separation techniques for both uranium isotopes and rare¶ earths in China. Like many Chinese scientists, Xu was trained in the¶ United States, at Columbia University, where he received his doctoral¶ degree in chemistry in 1951. He pioneered the extraction of fissile fuels¶ before being caught up in the Cultural Revolution, when he and his¶ wife were sent to a labor camp. Released in 1972, he returned to Beijing¶ University and began to apply his previous work on uranium to rare¶ earths. He was successful. Chinese leaders were not slow to realize the¶ strategic importance of a domestic rare earths industry. Chinese¶ premier Deng Xiaoping reportedly declared, “There is oil in the Middle¶ East; there is rare earth in China.” In 2009, at the age of 89, Xu was¶ awarded the State Supreme Science and Technology prize, the Chinese¶ equivalent of the Nobel.¶ As Chinese companies began flooding the market with inexpensively¶ produced rare earths in the 1980s, the price began to fall. Between 1992¶ and 1996 the price of a ton of rare earths fell from $11,700 to $7,430,¶ and undersold U.S. producers started getting out. Rare earths¶ production in the United States effectively ceased in the early 2000s.¶ ¶ Today these elements form essential components in much of the¶ advanced technology used in communications, weapons systems, and¶ even oil refining. They have been designated strategic materials by¶ both China and the United States. They’re found in missile guidance¶ and radar systems, smartphones, laptop and tablet computers, as well¶ as such green technology as next-generation wind turbines and hybrid¶ vehicles. And because rare earths occur in such close association with¶ thorium, China—which for many years simply set aside thorium bearing¶ ore in tailings after removing the rare earths—now has an¶ abundant supply of thorium.¶ The Chinese takeover of the rare earths industry is epitomized by¶ what happened in Anderson, Indiana in the mid-1990s. A company¶ called Magnequench, a division of GM that made sophisticated¶ magnets from iron, boron, and the rare earth neodymium, was sold to¶ a Chinese consortium allied with a U.S. investment firm, the Sextant¶ Group, founded by Archibald Cox Jr. (who gained fame as the¶ special prosecutor in the Watergate affair). The Chinese group won¶ approval for the buyout by agreeing to keep the company in the United¶ States for five years. The day after that deal expired in 2002, “the entire¶ operation, along with all the equipment, disappeared. . . . At the time, it¶ seemed that no one really cared.”15¶ ¶ Today those magnets are used in critical military systems, including¶ lasers, range finders, traveling wave tubes, and Klystrons, which are¶ used in satellite communications. The United States has no domestic¶ capacity to produce the magnets.¶ As I learned about the death of the rare earths industry in the United¶ States, I couldn’t help thinking about the abandonment of thorium and¶ molten salt reactors. Both technologies were pioneered by Americans¶ (or scientists working in the United States); both were based on¶ elements that are abundantly available in U.S. soil; and both have¶ become strategically important in the twenty-first century for energy¶ security and national security. The difference is that thorium power¶ was consciously set aside in favor of an existing and established¶ technology. The rare earths industry was more a case of negligence:¶ with nobody really paying attention, U.S. producers simply abandoned¶ it when it became less profitable. It was as if the United States could no¶ longer be bothered to find and develop the materials on which its high tech economy and national defense depend.¶ ¶ STARTING IN 2007, CHINA DRAMATICALLY CUT export quotas for rare¶ earth elements, capping foreign shipments at 7,976 metric tons in the¶ last six months of 2010, down from 28,417 tons for the same period in¶ 2009. In response, the World Trade Organization ruled that the export¶ curb violated international trade agreements and demanded that¶ China return to full production. Chinese leaders were defiant.¶ Interviewed by the official newspaper, China Daily, Huang Dongli, a¶ researcher at the Institute of International Law, which is affiliated with¶ the Chinese Academy of Social Sciences, said the cuts were justified¶ based on “conservation of exhaustible natural resources.”16¶ “Rare earths are nonrenewable resources of strategic importance,”¶ declared deputy commerce minister Zhong Shan, speaking at a¶ conference on rare earths in Baotou, in Inner Mongolia, in July 2011.¶ Hosting a conference in Inner Mongolia pretty much guarantees that¶ you’ll have not only the market but the dais to yourself. China’s export¶ restrictions, Zhong said, “will help the country protect the environment¶ and accelerate the industry’s restructuring.”17¶ In fact, Chinese officials have said that by 2015, they may export no¶ rare earths at all, because domestic demand, growing quickly as China¶ becomes the world’s major source of many high-tech components, will¶ consume all the production from its mines. By the fall of 2011, Chinese¶ mining companies were reportedly trying to buy up rare earth sources¶ outside the mainland.18¶ Given this situation, it was inevitable that U.S. companies would try¶ to reenter the market. And since the association of rare earth elements¶ and thorium is so strong, it was inevitable that the thorium movement¶ would align with those who believe that domestic rare earth¶ production is critical to the future economic competitiveness of the¶ United States. That started happening in early 2011.¶ Jim Kennedy, a St. Louis—based developer who has become the most¶ vocal figure demanding the return of a domestic rare earths industry¶ in the United States, began an effort, along with the Thorium Energy¶ Alliance, to reopen the Pea Ridge Mine in Missouri. Kennedy actually¶ has a permit for the Pea Ridge Mine, but there’s a problem: because the¶ rare earths are interlaced with thorium—which is, after all, a¶ radioactive element—the regulations for handling the ore are highly¶ restrictive, and the processing is costly. Wings Enterprises, Kennedy’s¶ company, has reached agreements with private funders to reopen the¶ Pea Ridge Mine—but there are no facilities to process the ore. Like¶ many self-made men, Kennedy was not to be deterred. Unlike many¶ such men, he came up with an audacious solution: have the¶ government step in.¶ Under legislation formulated by Kennedy and John Kutsch, head of¶ the Thorium Energy Alliance, and hand-carried to Capitol Hill,¶ Congress would authorize and provide loan guarantees for a rare¶ earths processing facility (preferably in Missouri near the Pea Ridge¶ Mine) that will also separate thorium, to be stored until a thoriumbased¶ power industry emerges to use it to generate electricity. This was¶ free-market economics that a central planner could get behind.¶ Congress had effectively outlawed the processing of rare earth¶ elements because of the thorium problem; Kennedy and Kutsch wanted¶ Congress to solve the problem by creating a repository for rare earths¶ and thorium. Kutsch compared it with a grain elevator for rare earth¶ and thorium producers; instead of processing and storing their own¶ grains, farmers pool their funds, get a little help from the feds, and¶ build a centralized facility. So it would be for miners of rare earths and¶ thorium. China would lose its rare earth monopoly, the United States¶ would jump-start a domestic thorium power industry, and no longer¶ would you have to travel to Inner Mongolia to attend a rare earths¶ conference.

#### And, Chinese rare earth monopoly causes extinction

Anthony, 11 [12/30, Lead Editor at Ziff Davis Inc. Graduated from the University of Essex, Columnist,, “Rare earth crisis: Innovate, or be crushed by China”http://www.extremetech.com/extreme/111029-rare-earth-crisis-innovate-or-be-crushed-by-china/2]

The rare earth apocalypse¶ The doomsday event that everyone is praying will never come to pass, but which every Western nation is currently planning for, is the eventual cut-off of Chinese rare earth exports. Last year, 97% of the world’s rare earth metals were produced in China — but over the last few years, the Chinese government has been shutting down mines, ostensibly to save what resources it has, and also reducing the amount of rare earth that can be exported. Last year, China produced some 130,000 tons of rare earths, but export restrictions meant that only 35,000 tons were sent to other countries. As a result, demand outside China now outstrips supply by some 40,000 tons per year, and — as expected — many countries are now stockpiling the reserves that they have.¶ Almost every Western country is now digging around in their backyard for rare earth-rich mud and sand, but it’ll probably be too little too late — and anyway, due to geochemistry, there’s no guarantee that explorers and assayers will find what they’re looking for. The price of rare earths are already going up, and so are the non-Chinese-made gadgets and gizmos that use them. Exacerbating the issue yet further, as technology grows more advanced, our reliance on the strange and magical properties of rare earths increases — and China, with the world’s largest workforce and a fire hose of rare earths, is perfectly poised to become the only real producer of solar power photovoltaic cells, computer chips, and more.¶ In short, China has the world by the short hairs, and when combined with a hotting-up cyber front, it’s not hard to see how this situation might devolve into World War III. The alternate, ecological point of view, is that we’re simply living beyond the planet’s means. Either way, strategic and logistic planning to make the most of scarce metals and minerals is now one of the most important tasks that face governments and corporations. Even if large rare earth deposits are found soon, or we start recycling our gadgets in a big way, the only real solution is to somehow lessen our reliance on a finite resource. Just like oil and energy, this will probably require [drastic technological leaps](http://www.extremetech.com/tag/green). Instead of reducing the amount of tantalum used in capacitors, or indium in LCD displays, we will probably have to discover completely different ways of storing energy or displaying images. My money’s on [graphene](http://www.extremetech.com/tag/graphene).

#### And, monopoly kill first strike credibility

**Kennedy, 10** [J. Kennedy, March, President of Wings Enterprises, “Critical and Strategic Failure of Rare Earth Resources,”http://www.smenet.org/rareEarthsProject/TMS-NMAB-paperV-3.pdf]

The national defense issues are equally important. Rare earths are critical components for military jet engines, guided missiles and bombs, electrical countermeasures, anti-missile systems, satellite communication systems and armor, yet the U.S. has no domestic sources. Innovation Drives Industry – Industry Carries the Economy Advances in Materials Science are a result of tireless innovation; innovation seeking improvements in the performance and characteristics of material properties or a change in their form or function. Much of this work must eventually translate into commercial and military applications. Today many advances in material science are achieved through the application of rare earth oxides, elements and alloys. This group of elements, also known as the lanthanide series, represents the only known bridge to the next level of improved performance in the material properties for many metallurgical alloys, electrical conductivity, and instrument sensitivity and in some cases a mechanical or physical change in function. These lanthanides hold unique chemical, magnetic, electrical, luminescence and radioactive shielding characteristics. Combined with other elements they can help maintain or alter physical and structural characteristics under changing conditions. Today, these rare earth elements are essential to every computer hard drive, cell phone, energy efficient light bulb, many automotive pollution control devices and catalysts, hybrid automobiles and most, if not all, military guidance systems and advanced armor. Tomorrow, they will be used in ultra capacity wind turbines, magnetic refrigeration, zero emission automobiles, superconductors, sub-light-speed computer processors, nano-particle technologies for material and metallurgical applications, structurally amorphous metals, next generation military armor and TERFENOL-D Radar. America must lead in these developments. The entire U.S. defense system is completely interdependent upon REO enhanced technologies for our most advanced weapons guidance systems, advanced armor, secure communications, radar, advanced radar systems, weapons triggering systems and un-manned Drones. REO dependent weapons technologies are predominantly represented in our ‘first strike’ and un-manned capabilities. This national defense issue is not a case of limited exposure for first-strike capabilities. This first-strike vulnerability translates into risk exposure in every level of our national defense system, as the system is built around our presumptive technological and first-strike superiority. Yet the DoD has abandon its traditional procurement protocols for “strategic and critical” materials and components for weapons systems in favor of “the principles of free trade.”

#### And, arsenal cuts are inevitable – accuracy upgrades key to counterforce

McDonough 9 [David S, Doctoral Fellow at the Centre for Foreign Policy Studies at Dalhousie University, March, “Tailored Deterrence: The ‘New Triad’ and the Tailoring of Nuclear Superiority,”<http://www.canadianinternationalcouncil.org/download/resourcece/archives/strategicd~2/sd_no8_200>]

Less noticed is the continuing modernization of the existing arsenal. The remaining low-yield Minuteman III ICBM warheads will be replaced by the high-yield MX warhead and further augmented by the inclusion of GPS guidance systems. The SLBM force of highly accurate and high-yield D-5 warheads will also benefit from the addition of GPS accuracy and ground-burst capability. Even the bomber force will become armed with stealthy and low-flying cruise missiles – ideal to avoid an adversary’s early warning radar. The nuclear force may indeed be smaller, but it is also becoming more accurate and more lethal, and ideal for disarming counterforce strikes.

#### And, the impact is global nuclear war

Caves 10 (John P, Senior Research Fellow in the Center for the Study of Weapons of Mass Destruction at the National Defense University, January, Strategic Forum, No. 252, “Avoiding a Crisis of Confidence in the U.S. Nuclear Deterrent,” da 11/16, mat)

Perceptions of a compromised U.S. nuclear deterrent as described above would have profound policy implications, particularly if they emerge at a time when a nuclear-armed great power is pursuing a more aggressive strategy toward U.S. allies and partners in its region in a bid to enhance its regional and global clout. A dangerous period of vulnerability would open for the United States and those nations that depend on U.S. protection while the United States attempted to rectify the problems with its nuclear forces. As it would take more than a decade for the United States to produce new nuclear weapons, ensuing events could preclude a return to anything like the status quo ante. The assertive, nuclear-armed great power, and other major adversaries, could be willing to challenge U.S. interests more directly in the expectation that the United States would be less prepared to threaten or deliver a military response that could lead to direct conflict. They will want to keep the United States from reclaiming its earlier power position. Allies and partners who have relied upon explicit or implicit assurances of U.S. nuclear protection as a foundation of their security could lose faith in those assurances. They could compensate by accommodating U.S. rivals, especially in the short term, or acquiring their own nuclear deterrents, which in most cases could be accomplished only over the mid- to long term. A more nuclear world would likely ensue over a period of years. Important U.S. interests could be compromised or abandoned, or a major war could occur as adversaries and/or the United States miscalculate new boundaries of deterrence and provocation. At worst, war could lead to state-on-state employment of weapons of mass destruction (WMD) on a scale far more catastrophic than what nuclear-armed terrorists alone could inflict.

#### And, monopoly impedes innovation

Morrison, 12 [April 30th, Wayne M. Morrison¶ Specialist in Asian Trade and Finance, Congressional Research Service, China’s Rare Earth Industry and Export¶ Regime: Economic and Trade Implications for¶ the United States, <http://www.fas.org/sgp/crs/row/R42510.pdf>]

China’s position as the world’s dominant producer and supplier of rare earths (97% of total¶ output) and its policies to limit exports have raised concerns among many in Congress, especially¶ given the importance of rare earths to a variety of U.S. commercial industries (e.g., hybrid and¶ conventional autos, oil and gas, energy-efficient lighting, advanced electronics, chemicals, and¶ medical equipment), as well as to U.S. defense industries that produce various weapon systems.¶ Many are concerned that rising rare earth prices could undermine the global competitiveness of¶ many U.S. firms (lowering their production and employment), impede technological innovation,¶ and raise prices for U.S. consumers. Others are concerned that China’s virtual monopoly over rare¶ earths could be used as leverage against major rare earth importers, such as the United States,¶ Japan, and the European Union (EU).

**Extinction**

**Kurzweil 8**—BS in Computer Science and Literature in 1970 from MIT, header of tons of entrepreneurial projects (Ray, 13 April 2008, Making the World A Billion Times Better, http://www.washingtonpost.com/wp-dyn/content/article/2008/04/11/AR2008041103326.html)

This exponential progress in the power of information technology goes back more than a century to the data-processing equipment used in the 1890 census, the first U.S. census to be automated. It has been a smooth -- and highly predictable -- phenomenon despite all the vagaries of history through that period, including two world wars, the Cold War and the Great Depression. I say highly predictable because, thanks to its exponential power, only technology possesses the **scale to address** the **major challenges** -- such as energy and the environment, disease and poverty -- confronting society. That, at least, is the major conclusion of a panel, organized by the National Science   
Foundation and the National Academy of Engineering, on which I recently participated. Take energy. Today, 70 percent of it comes from fossil fuels, a 19th-century technology. But if we could capture just one ten-thousandth of the sunlight that falls on Earth, we could meet 100 percent of the world's energy needs using this renewable and environmentally friendly source. We can't do that now because solar panels rely on old technology, making them expensive, inefficient, heavy and hard to install. But a new generation of panels based on nanotechnology (which manipulates matter at the level of molecules) is starting to overcome these obstacles. The tipping point at which energy from solar panels will actually be less expensive than fossil fuels is only a few years away. The power we are generating from solar is doubling every two years; at that rate, it will be able to meet all our energy needs within 20 years. Nanotechnology itself is an information technology and therefore subject to what I call the "law of accelerating returns," a continual doubling of capability about every year. Venture capital groups and high-tech companies are investing billions of dollars in these new renewable energy technologies. I'm confident that the day is close at hand when we will be able to obtain energy from sunlight using nano-engineered solar panels and store it for use on cloudy days in nano-engineered fuel cells for less than it costs to use environmentally damaging fossil fuels. It's important to understand that exponentials seem slow at first. In the mid-1990s, halfway through the Human Genome Project to identify all the genes in human DNA, researchers had succeeded in collecting only 1 percent of the human genome. But the amount of genetic data was doubling every year, and that is actually right on schedule for an exponential progression. The project was slated to take 15 years, and if you double 1 percent seven more times you surpass 100 percent. In fact, the project was finished two years early. This helps explain why people underestimate what is technologically feasible over long periods of time -- they think linearly while the actual course of progress is exponential. We see the same progression with other biological technologies as well. Until just recently, medicine -- like energy -- was not an information technology. This is now changing as scientists begin to understand how biology works as a set of information processes. The approximately 23,000 genes in our cells are basically software programs, and we are making exponential gains in modeling and simulating the information processes that cracking the genome code has unlocked. We also have new tools, likewise just a few years old, that allow us to actually reprogram our biology in the same way that we reprogram our computers. For example, when the fat insulin receptor gene was turned off in mice, they were able to eat ravenously yet remain slim and obtain the health benefits of being slim. They didn't get heart disease or diabetes and lived 20 percent longer. There are now more than a thousand drugs in the pipeline to turn off the genes that promote obesity, heart disease, cancer and other diseases. We can also turn enzymes off and on, and add genes to the body. I'm an adviser to a company that removes lung cells, adds a new gene, reproduces the gene-enhanced cell a million-fold and then injects it back into the body where it returns to the lungs. This has cured a fatal disease, pulmonary hypertension, in animals and is now undergoing human trials. The important point is this: Now that we can model, simulate and reprogram biology just like we can a computer, it will be subject to the law of accelerating returns, a doubling of capability in less than a year. These technologies will be more than a thousand times more capable in a decade, more than a million times more capable in two decades. We are now adding three months every year to human life expectancy, but given the exponential growth of our ability to reprogram biology, this will soon go into high gear. According to my models, 15 years from now we'll be adding more than a year each year to our remaining life expectancy. This is not a guarantee of living forever, but it does mean that the sands of time will start pouring in rather than only pouring out. What's more, this exponential progression of information technology will affect our prosperity as well. The World Bank has reported, for example, that poverty in Asia has been cut in half over the past decade due to information technologies and that at current rates it will be cut by another 90 percent over the next decade. That phenomenon will spread around the globe.

**Independently, monopoly causes Sino-Japan conflict**

**Leeb 10** [Dr. Stephen, recognized authority on the stock market, macroeconomic trends and commodities, especially oil and precious metals, founder of the Leeb Group, which publishes a line of financial newsletters, Head of the Advisory Board of Leor Exploration & Production LLC, “The First Volley in the Resource War,” Sept. 28, <http://seekingalpha.com/article/227412-the-first-volley-in-the-resource-war>]

Most of the world's concentrated rare earth deposits being mined today are located in China. Rare earth mines in North America and other places have either **never been developed** or have been shut down because they could not compete with China's lower production costs. As you can imagine, Japanese high-tech industries require rare earth elements as raw materials. It's very difficult to produce electronics, especially those involving magnets or batteries – such as the Toyota Prius hybrid car –without them. With China supplying 97% of the world's rare earth elements, Japan cannot afford to lose trade relations with China. So it's no surprise that, following the threat of an embargo, Japan released the fishing boat captain. We think the incident is the first skirmish in what may be a protracted period of mercantilist activities – if not an all-out war for resources. The reason Japan and China both insist asserting sovereignty over the particular stretch of the East China Sea is that the area is rich in undersea natural gas deposits – another vital resource. Of course these days, demand for virtually every natural resource used by industrial societies is close to exceeding what's available. Even iron ore supplies are being stretched thin by the massive construction efforts taking place in the developing world, and especially China. Of course, just mining and processing iron into steel requires large amounts of energy and other resources, which are consequently suffering from supply constraints as well. The squeeze is even greater for copper, which is less plentiful than iron but just as essential for construction and energy transmission. In order to secure the resources they need in coming years, nations around the world are likely to undergo a New Age of Mercantilism in which they try to hoard their natural resources so they can continue to produce more valuable exports. (And this is where investors who have secured a stake in resources will reap handsome rewards.)

#### Goes nuclear

**Lim 5** [Robyn Lim, 1/6/2005. Professor of International Relations at Nanzan University in Japan. “Geostrategic Trends in Asia,” http://www.icasinc.org/2005/2005l/2005lrxl.html]

For example, the hubris on display in Beijing may lead Russia and Japan to sink their differences in order to align against a "rising" China that threatens them both. It would not be the first time Russia and Japan have resolved their differences, the precedent having been set in the period from 1907 to 1916. Indeed, recent visits by senior Japanese army officers to the Russian Far East would have any old geopolitiker sniffing the breeze. As noted, the history of Whales 3: Elephants 0 stands as a warning of the difficulties that China faces in managing its "peaceful" rise. It is all starting to look redolent of what happened in Germany early last century when an arrogant and foolish young Kaiser sacked that great helmsman Bismarck. Wanting too much too soon, the Kaiser soon provoked the formation of the very coalition of the flanking powers (France and Russia) that Bismarck had laboured so hard to prevent. That soon led into a disastrous war. Currently, those advising Deng's successors are said to be studying this history. But are they learning the right lessons? If not, it will be a familiar story of greed, hubris and miscalculation leading to war. And this time with nuclear weapons as part of the equation.

#### The United States Federal Government should establish a matching funds program, increase research and development funding, and reduce licensing restrictions for thorium power production in the United States.

#### Contention two is Solvency –

#### The tech is feasible but federal action via all three planks of the plan must happen

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

WHILE A NEW MANHATTAN PROIECT is not going to happen, some¶ form of government support is necessary. Transforming the energy¶ sector is too large a project for the private sector alone. That’s the¶ fundamental dilemma that faces the thorium movement. However,¶ there is a middle way, involving higher levels of federal support, a¶ conscious industrial policy to foster advanced nuclear power, and¶ broad incentives to harness the entrepreneurial energy of the private¶ sector.¶ Congress and the White House should establish a matching funds¶ program**,** aimed exclusively at two or three technologies, including¶ thorium power, to drive the creation of a Generation IV reactor¶ industry that would swiftly within this decade—build prototypes and¶ then small commercial versions, first to supplement and later replace¶ the current collection of outmoded plants, then to replace existing coal¶ plants. The government should overhaul the NRC to streamline the¶ licensing process and favor Generation IV designs over incremental,¶ halfhearted advances. It should explicitly benefit start-ups, like¶ TerraPower and Flibe Energy, not just established vendors and¶ manufacturers like GE, and it should promote homegrown technologies¶ like the LFTR. And it should be conditional on not just submitting new¶ designs for licensing but bringing reactors into commercial production¶ in the shortest time possible. With matching investments coming from¶ the private sector, the program should provide at least $2 billion a year¶ and no more than $5 billion, for a total of $4 billion to $10 billion a¶ year.¶ Many conservatives and liberals alike scoff at the notion of¶ significant funding for new nuclear power—or, indeed, for renewable¶ energy projects such as wind farms and solar arrays. In September¶ 2011 Solyndra, the California-based maker of solar panels, filed for¶ bankruptcy protection after receiving a loan guarantee for more than¶ half a billion dollars from the federal government. Critics of¶ renewables funding, such as Robert Bryce, seized on the Solyndra¶ affair, which threatened to turn into a major political landmine for the¶ Obama administration, as evidence of why the federal government¶ should never “pick winners” in the energy sector.¶ Here it’s important to recall that, as of late 2011, investment by the¶ United States in new energy sources was paltry compared with that of¶ the countries of Western Europe, to say nothing of China. The Solyndra¶ debacle represented less than 3 percent of a loan program that had¶ delivered $19 billion in private capital for reshaping the energy¶ economy, creating thousands of jobs in the worst employment¶ environment since the Great Depression.¶ For further perspective, keep in mind that, according to the Nobel¶ Prize— winning economist ]oseph Stiglitz, in 2007 the Iraq War was¶ costing $720 million per day.“ Big Oil subsidies are also huge in¶ comparison with investment in alternative energy. In 2010 the¶ Government Accountability Office found that the oil industry’s waiver¶ for royalties for deep-water drilling in the Gulf of Mexico—originally¶ passed by Congress in 1995, when oil was selling for $18 a barrel¶ —“could cost the Treasury $55 billion or more in lost revenue over the¶ life of the leases.” The federal government is already picking winners—¶ it’s just backing the wrong horse. Simply requiring big oil companies¶ operating in the Gulf to pay half the usual royalties for extracting oil¶ from U.S. territorial waters would fully fund a nuclear power¶ transformation program through 2020, at no cost to U.S. taxpayers. The¶ tobacco industry has funded billions of dollars in health-care and¶ prevention programs to move toward a smoke-free society. Let the¶ fossil fuel industry take a large role in funding the movement toward a¶ carbon-free society based on thorium power.¶ ----¶ SO, LET US ASSUME THAT A NUCLEAR POWER transformation¶ program is fully funded. The goals are to:¶ - Build a prototype LFTR within five years¶ - Commercialize LFTRs starting in 2020¶ - Bring LFTRs on line at a rate sufficient to replace fossil fuel plants¶ with clean energy sources by 2050¶ How much power would that be? The United States consumed about¶ 3.8 million gigawatt-hours of electricity in 2010. Coal accounted for 44¶ percent of that, nuclear for 20 percent. Total U.S. electricity-generating¶ capacity is about 1,000 gigawatts. Under an optimistic scenario for¶ renewable energy production from wind, solar, biomass, geothermal,¶ and so on, let’s say that, to reduce carbon emissions enough to stave off¶ catastrophic climate change, by 2050 we must increase the portion of¶ our electricity generated by nuclear power to 50 percent. One half of¶ 1,000 gigawatts is 500 gigawatts, or 500,000 megawatts.¶ Electricity demand will grow in the next four decades, of course, by¶ as much as 50 to 60 percent in some forecasts. But I’m being optimistic.¶ So let us say that improved conservation technology and changing¶ consumer habits will limit the increase in demand, and we must build¶ enough new nuclear power plants to generate 500 gigawatts by 2050.¶ That’s the equivalent of 500 thousand-megawatt nuclear reactors.¶ Between 2020 and 2050 that means building about 17 LFTRs a year.¶ Let’s be ambitious and call it 20 new thousand-megawatt thorium¶ plants a year, for a total of 600.¶ One of the beauties of LFTRs is that they can be mass-produced.¶ Small, modular LFTRs can be built as 250 megawatt machines and¶ assembled into larger plants. Boeing builds about one $200 million jet a¶ day. A modern airliner has many, many more moving parts and¶ greater overall complexity than a 250-megawatt LFTR. If we build, say,¶ four LFTR manufacturing plants a year with each plant producing 20¶ 250-megawatt reactors (five 1,000-megawatt plants) a year (think of the¶ jobs and spillover technological benefits each plant would bring to the¶ state in which it’s located), that would just about do it. And from 2050 to¶ 2100 we can build another 400 plants, until we have created 1,000¶ gigawatts of thorium power. By the end of the century, we will have¶ built a safe, clean energy infrastructure based on a mix of offshore and¶ land-based wind farms, big solar arrays in the West, geothermal, and¶ natural gas plants, layered on top of a baseload power-generating¶ sector of thorium reactors. Particularly in the Southwest, these plants¶ will use excess heat energy to desalinate seawater.¶ How much will this cost? Technology advances will bring the cost of¶ thorium reactors down **rapidly** after commercialization, potentially to¶ the cost of a new jet. Call it $1 billion per thousand-megawatt plant. The¶ cost of building 600 thousand-megawatt LFTRs (or twenty-four hundred¶ 250-megawatt machines) would come to $600 billion. Add 15 percent¶ for start-up costs and financing and round up: $700 billion. In¶ comparison, the 2010 budget for the U.S. Department of Defense was¶ $685 billion. In other words, for about what we spend in one year on¶ defense in wartime (which, by the way, is almost as much as all other¶ countries spend on defense combined), we can lay the foundation for a¶ thorium-based, carbon-free energy economy that could last a¶ millennium. And most of that construction cost will be borne by private¶ industry, which, thanks to the expedited licensing and speedy¶ construction of LFTRs, will generate profits from this construction¶ boom in a short timeframe. Consider the costs, direct and indirect, of¶ building any other thousand-megawatt power plant (coal, conventional¶ nuclear, solar, natural gas)—or of doing nothing and allowing climate¶ change to run rampant by midcentury. Building a couple dozen LFTRs¶ a year starts to sound like a bargain.¶ Alvin Weinberg’s vision of a nuclear-powered world running on¶ molten salt reactors will become a reality a couple of generations later¶ than he foresaw.¶ These are ambitious goals. What, then, must we do to pull them off?¶ To create a thorium energy economy in the next decade, **three things**¶ **must happen at once**: funding, licensing reform, and R&D. I have¶ already described the funding mechanism that must be put in place¶ quickly, by the end of 2013. Licensing reform and R&D—including the¶ development and procurement of the needed materials and fuel—must¶ occur in parallel. The president should order the NRC to expedite its¶ licensing process so that the period from application to final approval¶ is no more than five years. That means that by 2015, while a prototype¶ LFTR is being built (at the Savannah River Site, Idaho National¶ Laboratory, or Oak Ridge), companies will begin submitting¶ applications.¶ At the same time, you must have fuel to start up all those reactors.¶ Two kinds are required: fissile fuel to ignite the chain reaction and¶ transmute thorium into uranium-233, plus the thorium itself. Luckily¶ we have plenty of both. The Department of Energy (DOE) has more¶ than a ton of U-233, produced by past thorium reactor experiments, on¶ hand. Foolishly, the DOE is planning to spend half a billion dollars to¶ blend the U-233 with U-238 and throw it away in the desert. That plan¶ must be scrapped and the U-233 put to good use as starter fuel for¶ LFTRs.¶ As for thorium, the U.S. Geological Survey estimates that total¶ thorium reserves in the United States are about 440,000 tons, mostly in¶ Montana and Idaho. If we assume that future LFTRs will achieve an¶ energy efficiency of 50 percent (half the available energy in a given¶ unit of thorium is actually converted to electricity), then a single ton of¶ thorium would produce about 12.1 billion kilowatt-hours (or 12.1¶ million megawatt-hours) of electricity. About 1,650 tons of thorium¶ would satisfy all the electricity needs of the entire world for a single¶ year. Since LFTRs can he run as breeder reactors, producing more fuel¶ than they consume, 440,000 tons is effectively a limitless supply of¶ nuclear fuel.¶ ----¶ THE NEXT STEP, once a prototype reactor has been built and tested, is¶ to build a series of liquid fuel reactors to burn up the plutonium and¶ fission products from existing spent uranium fuel. Kirk Sorensen has¶ proposed a type of liquid chloride thorium reactor, a cousin to LFTRs,¶ that will consume transuranic fission products and use plutonium to¶ create uranium-233. The U-233 will be used to start up new LFTRs.¶ Next we must create the infrastructure to manufacture LFTRs. The¶ expertise to build these machines is dispersed among a cadre of startups¶ described in chapter 9, including Elibe Energy, DBI, and so on, as¶ well as among the big nuclear suppliers like GE and Westinghouse,¶ which already, in some cases, have R&D programs for liquid-core¶ reactors. As has happened in the electric vehicle market, the actual¶ manufacturers would likely include established companies (GE), startups¶ (Flibe), and joint ventures combining the two. States will compete¶ to host the new plants with tax incentives, university-based R&D¶ support, and training programs to provide the skilled workers. (Here¶ it’s worth noting that the Navy has for years been training recruits with¶ only high school educations to be shipboard nuclear engineers. The¶ new thorium power industry will create thousands of skilled, highpaying¶ jobs that do not require a Ph.D. in nuclear physics.)¶ It does no good to build carbon-free thorium reactors if you don’t get¶ rid of the existing nuclear and coal-fired plants. Decommissioning¶ nuclear reactors is a long, involved, and costly process. A typical decom¶ costs $300 million and takes a decade; an extreme case, like the¶ Hartford Weapons Reactor, can cost billions and take many decades.¶ Ways must be found to bring down that cost. One way would be to¶ build new LFTRs on the sites of old nuclear plants and use the new¶ thorium reactors to consume the fission products from the old¶ machines.¶ As for coal plants, new regulations from the Environmental¶ Protection Agency (EPA) will lead to the retirement of dozens of aging¶ facilities in the next few decades, regardless of what type of new plants¶ come on line. In July 2011 the consulting firm ICP released a report¶ saying that, while shutting down existing coal plants will take longer¶ than foreseen in the EPA deadlines, 30 to 50 gigawatts of coal-fired¶ electricity production will be retired in the coming decade.” Total coalfired¶ generating capacity in the United States is about 314 gigawatts.¶ Shutting down 50 gigawatts of that every decade, and replacing it with¶ safe, clean thorium power, will eliminate coal from the U.S. electrical¶ portfolio by 2070.¶ These are achievable goals. Remember: the obstacles to creating a¶ thorium power economy in the next 40 years are not technological or¶ even economic. They are political and perceptual. If we don’t do it, it ¶ will be because we chose not to—not because it was impossible.¶ ----¶ HERE IS WHERE THE CURRENT nuclear power establishment—the¶ nuclearati— guffaw and roll their eyes. There are a hundred reasons¶ why the scenario I’ve laid out will not happen, they say. Uranium is¶ inexpensive (for now), the existing reactor population is safe (except¶ when it’s not—see Fukushima), plenty of new reactor designs are less¶ radical than LFTRs (which is why they won’t make enough of a¶ difference), and so forth. We can’t do it because we’ve never done it¶ before.¶ They are right about one thing: the United States is not likely to be at¶ the center of the thorium power revolution. Here’s a more likely¶ scenario.¶ Discovering the advantages of thorium technology, the Chinese¶ accelerate their program to build a dozen LFTRs in the next 15 years.¶ They recruit the top thorium talent in the world and co-opt the nascent¶ Japanese program, signing lucrative contracts with the top nuclear¶ suppliers in Japan and South Korea, thus compressing further the R&D¶ timeline. By 2030 China is the leading source of LFTR technology—and¶ of raw thorium fuel—in the world.¶ India, watching its Asian rival move rapidly to the fore in advanced¶ nuclear power, shifts its three-stage program to a more accelerated¶ development schedule based on solid fuel technology from TerraPower¶ and Lightbridge. Using its huge reserves of thorium as leverage with¶ other emerging thorium power nations, such as the United Arab¶ Emirates, India builds a thriving thorium power sector, building¶ reactors at a slower pace than China but, by 2030, becoming a leader in¶ its own right. Enhanced energy security, and the economic power and¶ diplomatic prestige that come with it, allow India to reach a lasting¶ détente with its perennial foe, Pakistan.¶ Farther east, on the Pacific Rim, both Japan and South Korea rapidly¶ build thorium reactor technology sectors, supplying China and India¶ with the advanced materials and components they need while starting¶ to build thorium reactors of their own. By 2030 the fastest-growing¶ source of electricity in Asia is thorium power; by 2050 liquid fluoride¶ thorium reactors are supplying a significant fraction of the power not¶ only in China, India, Japan, and Korea but also in secondary,¶ technology-importing countries like Vietnam, Taiwan, Singapore, and¶ Indonesia.¶ Watching this transformation unfold in Asia, the nations of Western¶ Europe -- led by France, Norway, and the Czech Republic, already in¶ 2012 the home of significant thorium R&D efforts -- belatedly¶ underwrite their own thorium power programs. While the European¶ Union attempts to establish its own thorium power technology sector,¶ low-cost equipment and fuel from Asia prove irresistible, and China¶ becomes the Saudi Arabia of the new nuclear-powered world.¶ And the United States? Saddled with debt, paralyzed by woodenheaded¶ political opposition to taking action to reverse climate change,¶ and bound to powerful fossil fuel and nuclear power sectors and their¶ well-funded lobbyists, the United States enters an irreversible cycle of¶ declining living standards, diminishing international stature, and¶ ravaged cities. Civil unrest ensues, and the collapse of our political¶ institutions accelerates. Our top graduates, unfulfilled by their¶ professional prospects at home, emigrate to booming technological¶ centers like Shanghai, Singapore, and Seoul. Our vaunted military,¶ unable to procure energy for its far-flung overseas missions, contracts.¶ As in fourth-century Rome, the roads decay, harbors silt up, the legions¶ become disaffected, and the elite retreat into their marble palaces. All¶ because we failed to capitalize on a technology that we once held in¶ our hands.¶ THAT’S A WORST-CASE SCENARIO. And it’s hardly inevitable. So what¶ are the chances that Congress will back a technology that, though¶ proven and tested decades ago by American scientists, is seen today as¶ a radical new system? What is the likelihood that the American public¶ will support a new form of nuclear power so soon after Fukushima?¶ How plausible is it that Silicon Valley venture capital funds will¶ provide billions to thorium power start-ups?¶ One answer to all those questions is: no more likely than it was, in¶ August 1939, when Albeit Einstein wrote President Roosevelt to urge¶ development of atomic weapons, that the United States would design,¶ build, test, and detonate a nuclear warhead within six years. The¶ Manhattan Project, which mobilized vast intellectual, material, and¶ technical resources in a short amount of time, is often cited as the¶ paradigm for solving big and complex problems. General Groves’s list¶ of essential requirements, born out of his Manhattan Project¶ experience, has become famous in management theory circles: “Put¶ one man in charge, give him absolute authority, keep the chief outside¶ the bureaucracy, use existing government organizations whenever¶ possible, create a small advisory committee,” and so on. To that list,¶ based on the experience of the nuclear power industry, I would add,¶ “Keep military concerns separate from economic and energy-related¶ goals.” One main lesson of the thorium power debacle is that for too¶ long we have polluted nuclear power policy with rationales and¶ missions produced in the Pentagon. What a disgrace it would be if the¶ United States—the cradle of nuclear physics, the country that first¶ designed and built liquid-fuel thorium reactors, the greatest source of¶ technological innovation the world has ever known—failed to muster¶ the resources and the will to create the energy source for the twentyfirst¶ century and beyond.¶ Forests have been consumed to produce books wondering whether¶ we, as a nation and as a people, are still capable of Manhattan Project—¶ sized achievements and, if not, why not. The declinist school, it must be¶ said, is in ascendance, exemplified most clearly in books like The End¶ of Influence by the Berkeley economists J. Bradford DeLong and¶ Stephen Cohen: “The American standard of living will decline relative¶ to the rest of the industrialized and industrializing world. . . . The¶ United States will lose power and influence.”13¶ My middle-aged, well-educated American friends unquestionably¶ have a waning confidence that they will pass on to their children and¶ their grandchildren a world as clean, safe, peaceful, and full of promise¶ as the one we grew up in. Unimaginable budget deficits; rising¶ competition from populous and dynamic Asian countries; declining¶ educational, moral, and cultural standards; the rise of seemingly¶ insurmountable environmental crises; the coarsening of public¶ discourse; and the disappearance of inspirational, admirable¶ leadership have all contributed to our sense that we now live in a¶ Spenglerian era of Western decline. A New York magazine cover line¶ actually referred to this as the era of “Post-Hope America,” the same¶ week Foreign Policy magazine’s cover headline asked, plaintively,¶ “What Ails America?”¶ So, when I think about what I’ve seen reflected in thorium’s glossy¶ surface in my three years of research, it’s simple: hope. Hope that¶ technology can lead us out of the mess into which technology has¶ gotten us. Hope that through divine Providence or intelligent design or¶ the random workings of quantum mechanics, Earth has been granted¶ an inexhaustible energy source that will not destroy the systems and¶ balances that sustain life. Hope that my son, now 12 and a gifted¶ mathematician, may help engineer a thorium power revolution that¶ will solve the energy crisis, dissipate the threat of nuclear annihilation,¶ restore a sense of higher purpose and collective endeavor, and keep¶ the lights on for another few millennia at least. In about a century and¶ a half, the Age of Hydrocarbons delivered us a world of shrinking ice¶ caps, resource wars, mass extinctions, and creeping drought. It could¶ take us less than a century to reverse those trends and usher in the Age¶ of Thorium.¶ For millions of years, thorium has been there, awaiting the right¶ time, the right circumstances, and the right minds to bring it to light¶ and enable it to provide thousands of years of clean, safe, affordable¶ energy. Alvin Weinberg was right. The time is now. The technology¶ exists, the economics are favorable, and the need is urgent. The choice¶ is ours.

#### Current support is insufficient—appropriations fast-track development

Cannarra, 5/5/11 [Engineering and Environmental Consultant Member: AAAS, IEEE, Sierra Club Supporter: EDF, Greenpeace, NAPF, Nature Conservancy, NRDC, RAN, UCS, WWF… Affiliated with the Thorium Energy Alliance Thorium – A Safe, Abundant and ‘Fertile’ Power Source Dr. Alexander Cannara,http://cybercemetery.unt.edu/archive/brc/20120627230324/http://brc.gov/sites/default/files/comments/attachments/thoriumarticle\_a\_cannara\_0.pdf]

Today, for example, we in the US have limited support for better reactor Designs. We even have little interest in utility-funded, standard reactor construction. It’s not that alternate nuclear-power paths were never opened. It’s that Cold War policies dampened our own research, leaving the world with few developed options now that they’re essential. There is no source of power as dense and environmentally friendly as properly-chosen nuclear power. There’s no fission source as cheap or as lasting as the Thorium breeder. Yet, we in the US also have a regulatory agency, the NRC, holding just a few basic LWR power-plant designs for prospective builders to choose from, with some mix and match of components. And, each of those designs requires about $10 billion and many years to complete. No utility can invest that, which is why our present administration has promoted loan guarantees to get new plants built. Yet, even that hasn’t worked. Furthermore, the US NRC reports to Congress and can do only what that body mandates and funds**.** No work on alternative reactor designs, fuel cycles and rules can be expected from the NRC itself without new appropriations. Even a 1977 EPRI report(8) on the usefulness of Thorium in LWRs gained no industry action. Some new work has been funded by DoE (7), but not yet near the level needed, even if it continued from the excellent decades of work funded by the AEC and DoD at ORNL(5). Similarly, private investors see no near-term return, but great risk, because nuclear reactors require extensive design for safety and regulation – the function of government agencies andresearch**.** The present situation is odd, yet with some hope, as will be explained. “Nowadays [1994] I often hear arguments about whether the decision to concentrate on the LWR was correct. I must say that at the time I did not think it was; and 40 years later we realize, more clearly than we did then, that safety must take precedence even over economics—that no reactor system can be accepted unless it is first of all safe. However, in those earliest days we almost never compared the intrinsic safety of the LWR with the intrinsic safety of its competitors. We used to say that every reactor would be made safe by engineering interventions. We never systematically compared the complexity and scale of the necessary interventions for [different] reactors. So in this respect I would say that [AEC head] Ken Davis’ insistence on a single line, the LWR, was premature.” (Weinberg (5)) In this light, consider the reality all peoples of the world now share, though disproportioned by wealth. To meet just the internationally-estimated need to reduce greenhouse-gas (GHG) emissions now (January 2011) by a modest 4% per year, 2050 must see our (then) 9 billion souls emitting just 1 ton of CO2 per capita per year(1). And, with sea acidification and rise (see Rignot)(1) soon threatening over 100 million people, we need to be building and running one new, 1GWe emissions-free power plant each week for decades. A city-bound New Yorker currently causes emissions of 10 tons/year. A car-using Denver-ite 5/6/2011 Page 7 causes twice that. And, an average California home causes 7 tons of CO2 per year to be emitted, just from its internal energy use (see CEC reports). Only in remote, poor communities in Africa does any person now cause just 1 ton of CO2 to be added to Earth’s atmosphere each year. Sustainability, even at 1-ton per capita per year, is far from our reach. Regardless of pro/con debates on climate change, we are collectively making a Pascal Wager against already evident climate change growing worse due to our emissions – we’re “betting the farm” despite good hints as early as Nobel Laureate S. Arrhenius’ 1896 and 1905 papers on possible effects of unnatural CO2 emissions(1). Later, we didn’t listen to post-WWII analytical reports to governments; and our governments didn’t even follow up on research we’d paid for that pointed the way to safe, non-emitting nuclear power -- 50 years before this writing. Some Generation IV (8) efforts are finally in motion, but another decade will pass before any demonstration system will run. The emissions-free power debt will then be 1GWe x 10 x 52 (a plant a week unbuilt) or more, just for US needs. Perhaps the new Chinese commitment(4) will be speedier, but the shortfall will remain stupendous, worldwide. We need serious efforts today, if we wish to leave a future to our descendants. This article will explain why what has long been known about Thorium as a fertile nuclear fuel leads us to a viable future for Earth’s power and water needs. And, it will use as example the complementary reactor architecture designed by the same people who gave us the LWR, but who knew better was needed. Thus, this article is dedicated to Alvin Weinberg, H. MacPherson and their ORNL teams, who were aware of global warming before Wikipedia and spent 20 years (1954-1974) designing and operating MSRs. They led the way to safely fuelling our future via Thorium (3,4).

### 2ac prolif

#### Numerous proliferation barriers make Thorium superior

IAEA 12 (IAEA Nuclear Energy Series No. NF-T-2.4, “Role of Thorium to Supplement Fuel Cycles of Future Nuclear Energy Systems,” May, <http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1540_web.pdf>)

From the point of view of technology amenability, there are fewer conversion processes required from converting mined thorium ore into fuel forms ready for first use in a reactor than with conversion of mined uranium into the (currently most used) conventional fuel form of enriched UO2. The enrichment of uranium — a rather sophisticated technological process with a significant proliferation threat — is not needed in a pure ThFC; however, instead of enrichment, a reprocessing step is necessary.

In addition to the elimination of enrichment, a fuel cycle based on thorium/233U has other proliferation resistance related peculiarities. To create one more barrier to potential proliferation, 233U — unlike plutonium — can be mixed with the non fissile isotope 238U (in practice, with depleted uranium) to create a ‘reactor grade’ 233U/238U mixture not adherent to chemical separation. The critical configuration (i.e. mass, geometry, etc. needed for a nuclear weapon) of a mixture of 12% 233U with 238U approximately corresponds to a 20% enriched 235U/238U compound [3].

Once irradiated in a reactor, the fuel of a thorium–uranium cycle contains an admixture of 232U (half-life 68.9 years) whose radioactive decay chain includes emitters (particularly 208Tl) of high energy gamma radiation (2.6 MeV). This makes spent thorium fuel treatment more difficult, requires remote handling/control during reprocessing and during further fuel fabrication, but on the other hand, may be considered as an additional non-proliferation barrier.

#### Domestic nuclear decisions have widespread international ramifications – historical examples

Sagan, 11 [April, The International Security Implications Of U.S. Domestic Nuclear Power Decisions Prepared for the Blue Ribbon Commission on America’s Nuclear Future1 Scott D. Sagan Caroline S.G. Munro Professor of Political Science Co-Director, Center for International Security and Cooperation Stanford University Co-Chair, Global Nuclear Future Initiative American Academy of Arts and Sciences [ssagan@stanford.edu](mailto:ssagan@stanford.edu), <http://cybercemetery.unt.edu/archive/brc/20120621005012/http://brc.gov/sites/default/files/documents/sagan_brc_paper_final.pdf>]

There is a wide-spread tendency in the United States to underestimate the degree of influence – which can be both positive and negative – that our policies haveon foreign governments’ decision-making regarding the nuclear fuel cycle and potential nuclear weapons proliferation. Indeed, some U.S. policy-makers and scholars have expressed deep skepticism whether the NPT itself has had a valuable role in reducing global nuclear proliferation.8 Richard Betts has made the most extreme argument about the alleged irrelevance of the NPT:¶ As useful as treaties are, it is a misconception to see them as a solution. They are effects of nonproliferation, not causes of it. The NPT and CTBT (Comprehensive Test BanTreaty) reflect the intent of their adherents to abjure nuclear weapons. To date, the countries considered problematic – those that might acquire nuclear weapons – simply did not join the NPT (South Africa stayed out while it had a nuclear weapons program and joined when it decided to get rid of it). Or else they joined and cheated (Iraq and North Korea).¶ 9¶ This statement ignores how many states not considered “problematic” today were in fact feared potential proliferators in the past. In 1963, for example, National Intelligence Estimate 4-63 and a Robert McNamara Department of Defense report predicted that eight countries could develop nuclear weapons by 1973: China, India, Sweden, Australia, Israel, South Africa, Japan, and West Germany.10 Egypt was considered to have “moderate to high” motivation and a capability to acquire nuclear weapons later in the 1970s; Argentina, Brazil, Romania, Bulgaria, Hungary, and Yugoslavia were all feared to be able and interested in nuclear weapons development by the 1980s.11 To understand the impact of the NPT, however, one needs to focus beyond the current “problematic” states that have recently acquired or are trying to acquire the bomb, and appreciate the much larger number of cases of “nuclear abstinence” (the estimated 160 states that refrained from ever starting a nuclear weapons program) and the many states (15 by my estimate) that gave up their early and experimental nuclear weapons programs, in many cases in anticipation of joining the treaty.12¶ Moreover, the NPT includes requirements for NNWS members to accept safeguards –inspections run by the IAEA – on their nuclear power facilities as a precondition for receiving peaceful nuclear assistance. This IAEA inspection system has caught a number of states (including Iran, North Korea, South Korea, and Egypt) either cheating on their NPTcommitments or engaging in ambiguous but suspicious weapons-related activities.¶ 13 Thus, the NPT should not be seen as ineffective or irrelevant because some states have not complied with their commitments, for it is the treaty that legitimizes the inspections that can catch violators.¶ It is important to note that NPT Article VI did not state that the U.S. and other nuclear weapons states must successfully complete the quest for nuclear disarmament; instead, the carefully negotiated language called for all states to “pursue negotiations in good faith” toward that lofty objective.14 At every NPT Review Conference (Rev-Con) – meetings held every five years to review recent successes and failures of the treaty – many of the NNWS have complained that the NWS have made insufficient progress toward their objectives, and the willingness of individual states to accept additional constraints on their nuclear policies (such as the Additional Protocol of the IAEA or reinterpretations of the Article X withdrawal clause) have been strongly influenced by their perceptions of how well the NWS have been keeping their commitments. The United States has played an especially important role in this regard. The failure to reach any agreement on steps to strengthen the treaty at the 2005 NPT Rev-Con was caused by widespread perceptions among the NNWS that the Bush Administration was not serious about pursuing arms control and disarmament. In contrast, the Obama Administration is credited with the successes of the 2010 NPT Rev-Con due to perceptions that the U.S. was now seriously working in good faith toward “a nuclear weapons free world.”15 When analysts complain that NNWS have not accepted all of the constraints on their freedom of action that the NWS would prefer, they fail to take into account the likely results of the U.S. being seen as not meeting its Article VIcommitments in recent years. In short, success should be measured, not with respect to the failure to achieve idealized objectives, but rather against the more difficult counterfactual measure of how much worse the situation would have been without a vigorous U.S. disarmament diplomacy policy.¶ 16¶ A similar phenomenon occurs when policy makers and scholars underestimate the international effect of the U.S. decision to abandon plutonium reprocessing in the 1970s. Skeptics claim that the fact that France and Japan, especially, went forward with their ambitious plutonium reprocessing efforts somehow demonstrates that U.S. efforts to constrain the global growth were a failure. But a more appropriate standard (but again more difficult to measure) for assessing our influence would estimate the number of states that would have developed plutonium reprocessing capabilities if the U.S. had not actively discouraged such fuel cycle activities after Jimmy Carter’s April 1997 order to cancel construction of commercial breeder reactors that employed a closed fuel cycle with plutonium reprocessing. The primary motivation behind the decision to postpone the development of this technology was a concern for the proliferation implications of the U.S. use of a closed fuel cycle.17 The Carter administration reasoned that the decision to end reprocessing in the U.S. would have two effects: first, the U.S. could no longer act as an exporter of related technologies, limiting their availability; and second, it would create a normative change that would redefine the behavior of a responsible nuclear power state.¶ Because we are estimating a counterfactual condition, it is not possible to measure definitively the effects of the Carter policy on the actual spread of reprocessing facilities aroundthe world. Of the twenty-one countries that at some point in their history pursued plutonium reprocessing, ten have finished large-scale facilities and use them today: U.S., China, Israel, France, UK, India, Japan, Pakistan, Russia, and North Korea.¶ 18 Algeria and the Czech Republic have a pilot-scale reprocessing plants, but have not moved towards further industrial development.19 Nine countries abandoned their reprocessing programs: South Korea, Taiwan, Germany, Iraq, Italy, Argentina, Brazil, Belgium, and Yugoslavia.20 The causes of these reversal decisions were complex, but in many of the cases U.S. diplomatic pressure was an important factor and that pressure was made more credible and acceptable because the U.S had given up its own civilian plutonium reprocessing programs. This “credibility” factor continues to be important today. South Korea is lobbying to renegotiate its agreements with the U.S. to be able to develop “pyro-processing,” a form of spent fuel reprocessing that supporters claim poses fewer proliferation risks than standard PUREX acqueous reprocessing. While this appears a challenge to the claim that the U.S. policy has had a positive influence, the very fact that the South Koreans are actively arguing that pyro-processing – unlike the PUREX process – does not separate out plutonium shows their awareness of the power of the norm against developing such technologies. While the U.S. government initially cooperated with South Korea on pyro-processing research, Richard Stratford (Director of the Office of Nuclear Energy Affairs in the Bureau of Nonproliferation, U. S. Department of State) recently stated that the technology“moved to the point that the product is dangerous from a proliferation point of view,” and that the DOE now “states frankly and positively that pyro-processing is reprocessing.” The U.S. government position against pyro-processing in South Korea today is made more credible by the fact that the U.S. does not reprocess spend fuel for commercial purposes.¶ 21¶ Current Policies and Global Security¶ As demonstrated above, what the U.S. does (and does not do) in the realm of nuclear power and nuclear diplomacy impacts the strength of the nuclear nonproliferation regime as a whole. What are specific examples today where potential changes in U.S. nuclear policy could have a positive influence on nonproliferation and physical security around the world? How could the BRC encourage decisions that are consistent with and supportive of our national security interests regarding nuclear proliferation and nuclear terrorism?

### 2ac topicality

#### The wording of the plan ensures that we get an exemption from Class 104 licenses and do not require research or demonstration reactors

Code of Federal Regulations 10 CFR 50 2012

Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part 50--Domestic Licensing of Production and Utilization Facilities

http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/full-text.html#top

§ 50.12 Specific exemptions.¶ (a) The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are--¶ (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.¶ (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever--¶ (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or¶ (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or¶ (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or¶ (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or¶ (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or¶ (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.¶ (b) Any person may request an exemption permitting the conduct of activities prior to the issuance of a construction permit prohibited by § 50.10. The Commission may grant such an exemption upon considering and balancing the following factors:¶ (1) Whether conduct of the proposed activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact, if any;¶ (2) Whether redress of any adverse environment impact from conduct of the proposed activities can reasonably be effected should such redress be necessary;¶ (3) Whether conduct of the proposed activities would foreclose subsequent adoption of alternatives; and¶ (4) The effect of delay in conducting such activities on the public interest, including the power needs to be used by the proposed facility, the availability of alternative sources, if any, to meet those needs on a timely basis and delay costs to the applicant and to consumers.

#### Counter interp – R&D is topical and the following laundry list

US Energy Information Administration, 1 (Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, “Incentives, Mandates, and Government Programs for Promoting Renewable Energy”, http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels.1 This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and develop- ment (R&D),2, 3 and (2) their effectiveness in promoting renewables. A financial incentive is defined in this report as providing one or more of the following benefits: • A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; • Reducing the cost of production of the good or service; or, • Creating or expanding a market for producers. The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.4 Regulatory mandates include both actions required by legislation and regulatory agencies (Federal or State). Examples of regulatory mandates are: requiring utilities to purchase power from nonutilities and requiring the incorporation of environmental impacts and other social costs in energy planning (full cost pricing). Another example is a requirement for a minimum percentage of generation from renewable energy sources (viz., a “renewable portfolio standard,” or, RPS). Regulatory mandates and financial incentives can produce similar results, but regulatory mandates generally require no expenditures or loss of revenue by the Government.

Batelle (the world’s largest nonprofit research and development organization, specializing in global science and technology) 1980 “An Analysis of Federal Incentives Used to Stimulate Energy Production” p 22 http://www.scribd.com/doc/67538352/Federal-Incentives-for-Energy-Production-1980

Discussing governmental actions in a field that lacks consistent Policy is difficult, since boundaries defining energy actions are unclear. All governmental actions probably have at least some indirect relevance to energy. if a consistent Policy did exist, the discussion could focus on those actions that are part of the planned and consistent program. For this analysis, however, boundaries must be somewhat arbitrarily defined. First, this discussion will include only those actions taken by the Federal Government; relevant actions of state and local governments are not considered. Second, the discussion covers only those Federal Government actions In which major causes include to influence energy or major effects included some Influence on energy. Within those limits, the discussion considers actions related to both production arid consumption, although production receives the most emphasis. It also includes actions relating to both increases and decreases in energy consumption or production. Energy production is defined as the transformation of natural resources into commonly used forms of energy such as heat, light, and electricity. By this definition, the shining of the sun or the running of a river are not examples of energy production, but the installation of solar panels or the construction of a hydroelectric dam are. Energy consumption is defined is the use of one of these common, manufactured forms of energy. Under this definition sunbathing Is not energy consumption, but heating water by means of a solar panel is In both definitions, the crucial ingredient is the application of technology and resources to change a natural resource into a useful energy form.

### 2ac Kazakh DA (1)

#### No Kazak escalation

**Stratfor, 12** [1/18/12, “Annual Forecast 2012”, global intelligence company, http://www.stratfor.com/forecast/annual-forecast-2012]

Numerous factors will undermine Central Asia's stability in 2012, but they **will not lead to a major breaking point** in the region this year. Protests over deteriorating economic conditions will occur throughout the region, particularly in Kazakhstan, though these will be contained to the region and will not result in overly disruptive violence. Serious issues in Kazakhstan's banking sector could lead to a financial crisis, though the government will be able to manage the difficulties and contain it during 2012 by using the oil revenues it has saved up.

#### Great powers don’t want to antagonize each other—checks outside escalation

**Kucera 10**—regular contributor to U.S. News and World Report, Slate and EurasiaNet. (Joshua, Central Asia Security Vacuum, 16 June 2010, <http://the-diplomat.com/2010/06/16/central-asia%E2%80%99s-security-vacuum/>)

Note – CSTO = Collective Security Treaty Organization

Yet when brutal violence broke out in one of the CSTO member countries, Kyrgyzstan, just days later, the group didn’t respond rapidly at all. Kyrgyzstan’s interim president, Roza Otunbayeva, even asked Russia to intervene, but Russian President Dmitry Medvedev responded that Russians would only do so under the auspices of the CSTO. And nearly a week after the start of the violence—which some estimate has killed more than 1000 people and threatens to tear the country apart—the CSTO has still not gotten involved, but says it is ‘considering’ intervening. ‘We did not rule out the use of any means which are in the CSTO’s potential, and the use of which is possible regardless of the development of the situation in Kyrgyzstan,’ Russian National Security Chief Nikolai Patrushev said Monday. On June 10-11, another regional security group, the Shanghai Cooperation Organisation, held its annual summit in Tashkent, Uzbekistan. The SCO has similar collective security aims as the CSTO, and includes Russia, China and most of the Central Asian republics, including Kyrgyzstan. But despite the violence that was going on even as the SCO countries’ presidents met in Uzbekistan, that group also didn’t involve itself in the conflict, and made only a tepid statement calling for calm. Civil society groups in Kyrgyzstan and Uzbekistan (much of the violence is directed toward ethnic Uzbeks in Kyrgyzstan, and the centre of the violence, the city of Osh, is right on the border of Uzbekistan) called on the United Nations to intervene. And Otunbayeva said she didn’t ask the US for help. Even Uzbekistan, which many in Kyrgyzstan and elsewhere feared might try to intervene on behalf of ethnic Uzbeks, has instead opted to stay out of the fray, and issued a statement blaming outsiders for ‘provoking’ the brutal violence. The violence has exposed a security vacuum in Central Asia that no one appears interested in filling. In spite of all of the armchair geopoliticians who have declared that a ‘new Great Game’ is on in Central Asia, the major powers seem distinctly reluctant to expand their spheres of influence there. Why? It’s possible that, amid a tentative US-Russia rapprochement and an apparent pro-Western turn in Russian foreign policy, neither side wants to antagonize the other. The United States, obviously, also is overextended in Iraq and Afghanistan and has little interest in getting in the middle of an ethnic conflict in Kyrgyzstan. It’s possible that the CSTO Rapid Reaction Force isn’t ready for a serious intervention as would be required in Kyrgyzstan. (It’s also possible that Russia’s reluctance is merely a demure gesture to ensure that they don’t seem too eager to get involved; only time will tell.)

#### Their internal link evidence concedes

McDermott 11 (Roger, Senior Fellow, Foreign Military Studies Office, Fort Leavenworth, “Kazakhstan: Countering nuclear proliferation, Action to develop a nuclear and terrorist-free world,” in Kazakhstan 2011: Twenty Years of Peace and Creation, *First: The Forum for Global Decision Makers*, 2011, <http://www.firstmagazine.com/Publishing/SpecialReportsDetail.aspx?RegionId=4&SpecialReportId=96>)

Kazakhstan’s ambitions are likely to be realized if uranium prices stay high and Kazatomprom is successful in further expanding its international partnerships. Kazatomprom’s most immediate task is to secure customers for its final nuclear fuel product--fuel assemblies, an extra fuel fabrication stage which Kazatomprom plans to start carrying out domestically. Having a nearly complete nuclear fuel cycle, save for enrichment, will ensure a stable cash flow for Kazatomprom and limit its dependence on the fluctuating market price of raw uranium. In the meantime, increased uranium sales will help alleviate the country’s overdependence on oil exports and help modernize its nuclear sector. If Kazakhstan does become the world’s leading uranium and nuclear fuel supplier, the ramifications for the country both in terms of increased gross domestic product and status on the world stage will be profound.

### 2ac Namibia da

**No impact or scenario for Amazon collapse**

**Wigmore 5** – quoting biogeography professor at London University who edits the Journal of Biogeography and a Canadian co-founder of Greenpeace (6/9, Barry, New York Post, Posted at Cheat Seeking Missiles, date is date of post, <http://cheatseekingmissiles.blogspot.com/2005/06/stop-global-whining-2.html>)

"One of the simple, but very important, facts is that the rainforests have only been around for between 12,000 and 16,000 years. That sounds like a very long time but, in terms of the history of the earth, it's hardly a pinprick. "Before then, there were hardly any rainforests. They are very young. It is just a big mistake that people are making. "The simple point is that there are now still - despite what humans have done - more rainforests today than there were 12,000 years ago." "This lungs of the earth business is nonsense; the daftest of all theories," Stott adds. "If you want to put forward something which, in a simple sense, shows you what's wrong with all the science they espouse, it's that image of the lungs of the world. "In fact, because the trees fall down and decay, rainforests actually take in slightly more oxygen than they give out. "The idea of them soaking up carbon dioxide and giving out oxygen is a myth. It's only fast-growing young trees that actually take up carbon dioxide," Stott says. "In terms of world systems, the rainforests are basically irrelevant. World weather is governed by the oceans - that great system of ocean atmospherics. "Most things that happen on land are mere blips to the system, basically insignificant," he says. Both scientists say the argument that the cure for cancer could be hidden in a rainforest plant or animal - while plausible - is also based on false science because the sea holds more mysteries of life than the rainforests. And both say fears that man is destroying this raw source of medicine are unfounded because the rainforests are remarkably healthy. "They are just about the healthiest forests in the world. This stuff about them vanishing at an alarming rate is a con based on bad science," Moore says.

**Amazon resilient**

**Budiansky 93** – Atlantic Monthly correspondent (Stephen, 12/5, The Doomsday Myths, http://www.usnews.com/usnews/culture/articles/931213/archive\_016280\_print.htm)

Similarly, the Atlantic coastal forests of Brazil have been cut to about 12 percent of their original size, yet a team of Brazilian zoologists that combed the forests recently could not confirm a single case of extinction. Instead, they rediscovered several birds and six species of butterfly considered extinct 20 years ago. And a survey by the Flora Meso-Americana project found increased abundance of some species considered threatened. "Despite extensive inquiries, we have been unable to obtain conclusive evidence to support the suggestion that massive extinctions have taken place in recent times," writes Vernon Heywood, a former chief scientist of the International Union for the Conservation of Nature and Natural Resources, which works with governments to protect endangered species and habitats.

Natural resilience. Biologists offer several explanations for such "unreasonable" tenacity of species. Many tropical species are widely dispersed, so the loss of one chunk of a forest does not doom them to extinction. Moreover, ecosystems like the Brazilian Atlantic forests may be naturally resilient, having evolved mechanisms to cope with the severe natural upheavals that are endemic to a mountainous climate subject to heavy rains and sudden cold spells.

#### Uranium prices are low now – post Fukushima recovery

**Bloomberg 12** [“Uranium Recovery Postponed as Price Drops to 2-Year Low”, Christopher Donville, Sep 19, 2012]

Uranium’s recovery from the Fukushima nuclear accident may take one or two years longer than analysts estimated as stockpiles in Japan and Germany keep prices low and cause mining companies to defer new development.¶ The price of uranium for immediate delivery declined to $47 a pound as of Sept. 17, its lowest in two years, according to Ux Consulting, a Roswell, Georgia-based uranium information provider. BHP Billiton Ltd. (BHP) and Paladin Energy Ltd. (PDN) have slowed or deferred development this year of some projects to produce the raw material in nuclear reactor fuel.¶ Japan temporarily shut all of its nuclear reactors after the disaster at Tokyo Electric Power Co.’s Fukushima Dai-Ichi plant. That nation’s return to nuclear power and demand for electricity in China, which is building 25 reactors, was supposed to help drive prices for the fuel back up in 2015, said Thomas Neff, a retired physicist at the Massachusetts Institute of Technology. That date that may be pushed back a year or two.¶ “There was a wave of optimism the Japanese would come back on fast and that China would resume rapid development,” Neff, who now works as an energy industry researcher for the university’s Center for International Studies, said yesterday by phone from Jackson, Wyoming. “Day-to-day spot prices are reflecting the belief that the short-term outlook -- at least two to three years out -- is less certain than it was.”¶ Japan will end the use of atomic power by the 2030s, the government said Sept. 14, and Germany’s government has also decided to phase out nuclear energy. China continues to review approvals for new reactors amid concerns about safety, Heenal Patel, a London-based energy analyst with Bloomberg Industries, said yesterday.¶ Net Demand¶ “Japanese and German inventories and displaced supply would result in no net new demand until after 2015,” Neff said, citing a January study his group did. The new target for a return to uranium demand is 2016 or 2017, he said.

#### Massive declines over the past 5 years should have triggered the link

KIDD 9/18/12 (Steve; Deputy Director-General – World Nuclear Association, “Uranium Supply – how has Fukushima changed the market?” Nuclear Engineering International, l/n)

Interest in the world uranium market has undoubtedly subsided since the period in 2007 when prices spiralled rapidly upwards to over US$100 per pound. The price level soon fell back and spot prices have fluctuated around the $50 per pound level during 2012 to date. When the price rose above $50, demand rapidly disappeared; prices in the $40s attracted more buyers. Hence something like market equilibrium appears to have been achieved. The crazy period in 2007 had at least one good feature as the level of knowledge about uranium in the financial sector has undoubtedly increased. The fundamentals of the market are now much better understood, although another turbulent period cannot be ruled out. Although the market may still be somewhat imperfect, it is much less so than in the past.

#### No demand increases until at least 2016 or 2017

**Pistilli 12** [“Uranium Market Headed Toward Supply Deficit”, September 20, 2012, Melissa Pistilli, Exclusive to Uranium Investing News]

Market watchers are forecasting a uranium supply deficit that should push spot prices higher in the coming years. But for now, “off-putting” best describes prices, as many uranium resource companies are delaying new development until economies improve.¶ Uranium spot prices continued to fall this week as analysts called for no new net demand until 2016 or 2017, a slower market recovery than expected. TradeTech is reporting a U308 spot price of $48 per pound while Ux Consulting puts the price at $47/lb.¶ Reports blame Japanese and German stockpiles as both nations have announced plans to phase out their civilian nuclear porograms.

#### Namibia says some drugs – not all drugs

#### Africa instability inevitable

**Brower and Chalk** 2o0**3** – RAND Co-Project Director & RAND Political Scientist specializing in emerging threats [Jennifer Brower & Peter Chalk, The Global Threat of New and Reemerging Infectious Diseases: Reconciling U.S. National Security and Public Health Policy, www.rand.org/pubs/monograph\_reports/MR1602/]

Fifth, the spread of infectious diseases can act as a catalyst for regional instability. Epidemics can severely undermine defense-force capabilities (just as they distort civilian worker productivity). By galvanizing mass cross-border population flows and fostering economic problems, they can also help create the type of widespread volatility that can quickly translate into heightened tension both within and between states. This combination of military, demographic, and fiscal effects has already been created by the AIDS crisis in Africa. Indeed, the U.S. State Department increasingly speculates that the disease will emerge as one of the most significant “conflict starters” and possibly even “war outcome determinants” during the next decade.29

### 2ac counterplan (1)

#### And, only Thorium based LFTR reactors solve – doesn’t produce plutonium

**Halper, 11** [“The new face of safe nuclear”, By [Mark Halper](http://www.smartplanet.com/search?q=mark+halper) | July 21, 2011, 3:56 AM PDT, <http://www.smartplanet.com/blog/intelligent-energy/the-new-face-of-safe-nuclear/7712>]

Today, other countries including China and India are pursuing thorium nuclear projects. Sorensen believes that thorium should be the pillar of an Americannuclear future, because thorium “is so fundamentally different than every other nuclear story out there right now.” Because his thorium reactor would not produce plutonium, it would mitigate the chance of nuclear weapons proliferation and eliminate the need for utilities to bury plutonium waste. Although thorium in some designs does produce plutonium waste, that waste is less hazardous than other mixes of plutonium waste, there’s less of it, and it decomposes much faster than conventional waste – hundreds of years rather than thousands or more, according to various thorium proponents. And thorium-based fuel fissions much more efficiently than does uranium 235, meaning a thorium reactor requires less fuel. That is in part because the fission cycle runs hotter than conventional uranium cycles, said Sorensen. In the Flibe design, thorium reaction temperatures rise to about 750 degrees Celsius to drive gas turbines, compared to conventional reactors, which tend to reach less than half that temperature and drive less efficient steam turbines, he said. “The hotter you can get, the more efficiently you can turn heat into electricity,” said Sorensen. “Typical reactors today, they only get about one third conversion efficiency. We can get about half.” He also claims that in his design, thorium “isobreeds”, meaning it creates as much fissile fuel as it burns up. For Sorensen, the key to making it happen is to deploy an unconventional reactor technology, called a Liquid Fluoride Thorium Reactor (LFTR, pronounced “lifter”). It is a type of molten salt reactor, which uses liquid salt rather than water as its coolant, akin to what Oak Ridge developed. Flibe’s LFTR uses a liquid fluoride salt to serve both as fuel carrier and coolant. The fuel consists of thorium and uranium 233 – different from the uranium 235 used in conventional reactors. It fissions in the liquid, heats up, and passes through a heat exchanger that conveys the heat to fuel-free liquid fluoride salt that eventually drives the gas turbine. In the event of a total power loss, a frozen plug melts, allowing the fuel to drain into a passively cooled tank where fission stops. Normally, the plug is kept frozen by an external cooling fan. The company name, Flibe, comes from the scientific term FLiBe, an anagram and acronym for the molten salt that Sorensen uses, which consists of lithium fluoride (LiF) and beryllium fluoride (BeF2). Another inherent safety feature of the LFTR is that it runs at normal atmospheric pressure, rather than at the 3000-psi that many conventionally cooled reactors require to keep cooling water in liquid state, Sorensen claimed. Conventional cooling systems can also require external generators to help pump and recombine water, and those generators can fail such as at Fukushima. Some of Sorensen’s thorium competitors advocate using thorium in conventional reactors like pressurized water reactors, using thorium in solid fuel form, not liquid. They say that would substantially lower the costs of moving to a new fuel, because it would not entail the high-priced development of new reactors. Sorensen countered that you only get the full benefits of thorium by applying it in a LFTR type reactor.

**LFTR construction is best – safety, meltdowns, accidents, and economics**

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

SECOND, YOU’D MAKE YOUR NEW REACTOR a breeder, preferably a thermal breeder. The failure of fast breeders to fulfill their promise has not erased their appeal; it has just caused the quest for a fast breeder to go in (slightly) new directions. Breeders would be advantageous not only because, theoretically, you’d never run out of fuel, but also because you can use them to process nuclear waste from conventional reactors. At least in the United States, the question of how to store nuclear waste has no clear answer, and there may not be one for the next decade. Building self-sustaining breeder reactors would, as the nuclearati like to say, “close the fuel cycle”; little radioactive material would be left over to dispose of. Then you’d want to make your reactor inherently safe. Inherent safety — not to be confused with passive safety, a very different thing — is a term much beloved by nuclear engineers‘; It has been applied to just about every reactor design, including the uranium-fueled lightwater reactor and the sodium-cooled fast breeder, machines whose inherent safety is, to say the least, questionable. Traditionally, the solution to this problem has been external safeguards, also called overengineering: add more controls, more redundancy, more miles of piping, more plumbing and alarms and sensors and gauges, and the inherent twitchiness of the world’s most volatile energy source could be contained and controlled. Unfortunately, all that engineering brings more complexity, and complexity in itself adds risk. Virtually all the reactor accidents that have ever occurred have had one of two causes: either a fiendishly complex mechanism failed because of a simple mishap (like a loose chunk of zirconium) or a human being failed at the task of monitoring and managing a fiendishly complex mechanism. The only truly inherently safe reactor is a liquid-core reactor, like the molten salt reactor that was created at Oak Ridge in the 1960s. For the purposes of a reactor designer, liquid—whether it’s water, liquid metal, or some type of liquid fluoride — has a marvelous characteristic: it expands rapidly when it gets hot. All materials expand when heated, of course. In a liquid-core reactor, as the energy of the liquid rises, it expands and naturally, passively, slows down the reaction, making a runaway accident nearly impossible. In technical terms, this is known as a “negative temperature coefficient of reactivity.” That means that as the temperature rises (which typically is what happens when something goes wrong in a nuclear reactor), the reactivity goes down. When the reactivity goes down, the reactor is essentially turning itself off. Liquid fuels have several other characteristics that make them safer than conventional solid fuel reactors. This is where the benefits of thorium, which for a variety of reasons is uniquely well suited to liquid fuel reactors, extend beyond the nature of the element itself. No matter how you use it—in a light-water reactor, in a pebble bed reactor— thorium offers advantages over uranium. But in a liquid fuel reactor, that advantage is magnified. If you put high-octane gas in a 1975 Ford Pinto, you’ll see some marginal performance enhancement. To get the full benefit, though, you should put it in a Ferrari Testarossa. Using thorium in a liquid fuel reactor is similar: its unique qualities as an energy source are fully exploited. For example, in liquids—particularly in molten salts—fission products tend to be stable, making it easier to isolate and remove them. One of these fission products, xenon-135, is a nuclear poison that tends to build up in conventional reactors, slowing down the reactions. It renders the fuel unusable after only a small percentage of the potential energy has been used, and it’s hideously difficult to handle as part of the nuclear waste stream. In fluid fuels, because xenon forms a noble gas (one that is impervious to chemical reactions), xenon is easy to remove. In a LFTR it can be boiled off as a gas and processed while the reactor continues operating, reducing downtime and increasing the amount of the potential energy that can be extracted from the thorium fuel. A ton of thorium can produce energy equivalent to that produced by 200 tons of uranium in a conventional light-water reactor. Liquid fuels are also impervious to radiation damage, solving one of the thorniest problems in solid fuel reactors. Continuous bombardment by neutrons over periods of weeks or months wears down not only the solid uranium pellets in a light-water reactor but also the cladding (usually made of zirconium) that contains them. Because of radiation damage and the buildup of fission poisons like xenon, fuel rods age quickly; they have to be replaced every few years, even though only 3 to 5 percent of their energy has been consumed. Liquid fuels have one other characteristic that makes them ideal for reactor cores: they flow. Gravity, not elaborate control systems or so called passive safety systems, gives LFTRs their ultimate protection against a serious nuclear accident. In a criticality accident (i.e., if the fission reaction in the core starts to get out of control), a specially designed freeze plug in the reactor vessel melts and the liquid core simply drains out of the reactor into an underground shielded container, like a bathtub when the drain plug is pulled. The fission reactions quickly cease, and (thanks to the expansive quality noted earlier) the fluid cools rapidly. Decay heat is contained harmlessly. Meltdown is impossible, and there are no solid fuel rods too radioactive to remove. Inherently safe, LFTRs pose less threat than light-water reactors, coal-fired power plants, oil refineries, or just about any other form of large energy or chemical plant. Built small and modular, they will be less expensive to build and operate than just about any other energy source.

#### And, the cp isn’t economically feasible - new fourth gen reactors are key

Silverstein, 12 [4/18/12, Ken, [Ken Silverstein](http://blogs.forbes.com/kensilverstein/), Contributor Energy Central Editor , “Nuclear Energy Accidents May Become Thing of Past”, <http://www.forbes.com/sites/kensilverstein/2012/04/18/nuclear-energy-accidents-may-become-thing-of-past/2/>]

Today, the U.S. might have chosen a different path. But it would be too costly to retrofit the existing nuclear energy infrastructure to comport with the thorium fuel cycle. The supply chain is now fully stocked and includes everything from uranium suppliers to reactor designers. “It is possible to convert the existing reactors to thorium reactors over time,” says Thomas Drolet, a nuclear energy expert with his own consulting firm in Englewood, Fla., in a phone interview. “But it would be high capital costs. What you really want to do is to start from scratch.” The [104 nuclear power plants operating](http://www.energybiz.com/article/12/03/ceos-odds-over-nuclear-energy-future) in the United States today use so-called second generation light water, solid fuel reactors. They operate, on average, at more than 90 percent capacity and have been working safely for at least 36 years. “Third generation” light water reactors are going up predominately in India and China and they are the ones that are to be constructed by [Southern Company](http://www.forbes.com/sites/kensilverstein/2012/02/19/how-many-lives-does-nuclear-energy-have/) and[Scana](http://www.forbes.com/companies/scana/), both of which were recently approved to build by the U.S. Nuclear Regulatory Commission. Those third generation reactors have superior fuel technology, thermal efficiency and safety features. The next-generation reactors, called “fourth generation,” are those that run at much higher temperatures. They are even more efficient than those in the third generation, giving them the potential to produce more electricity at less cost. The high temperatures also enable hydrogen production as well as a variety of industrial applications. Thorium is most suited to run in fourth generation “liquid fuel” reactors, which operate at lower pressures and which are therefore safer. Such molten salt reactors must reach high level temperatures to melt a salt solid. That liquid and fuel mixture is then used as a coolant in the fuel cycle. Critics say that it is still difficult to maintain high thermal efficiencies, which diminishes the economic case for those liquid fuel reactor’s over today’s technologies. “All fourth generation reactors make much less waste and run at higher temperatures,” says John Kutsch, executive director of the [Thorium Energy Alliance](http://www.thoriumenergyalliance.com/) in [Chicago](http://www.forbes.com/places/il/chicago/), who spoke with this writer by phone. “But the similarity ends there. Inherently, thorium is much more abundant and easier to handle.”

### 2ac Obama good – (1)

#### No impact – Romney will copy Obama on foreign policy

Aaron David Miller, 5-23-2012; distinguished scholar at the Woodrow Wilson International Center for Scholars; Barack O'Romney http://www.foreignpolicy.com/articles/2012/05/23/barack\_oromney

And that brings up an extraordinary fact. What has emerged in the second decade after 9/11 is a remarkable consensus among Democrats and Republicans on a core approach to the nation's foreign policy. It's certainly not a perfect alignment. But rarely since the end of the Cold War has there been this level of consensus. Indeed, while Americans may be divided, polarized and dysfunctional about issues closer to home, we are really quite united in how we see the world and what we should do about it. Ever wondered why foreign policy hasn't figured all that prominently in the 2012 election campaign? Sure, the country is focused on the economy and domestic priorities. And yes, Obama has so far avoided the kind of foreign-policy disasters that would give the Republicans easy free shots. But there's more to it than that: Romney has had a hard time identifying Obama's foreign-policy vulnerabilities because there's just not that much difference between the two. A post 9/11 consensus is emerging that has bridged the ideological divide of the Bush 43 years. And it's going to be pretty durable. Paradoxically, both George W. Bush's successes and failures helped to create this new consensus. His tough and largely successful approach to counterterrorism -- specifically, keeping the homeland safe and keeping al Qaeda and its affiliates at bay through use of special forces, drone attacks, aggressive use of intelligence, and more effective cooperation among agencies now forms a virtually unassailable bipartisan consensus. As shown through his stepped-up drone campaign, Barack Obama has become George W. Bush on steroids. And Bush 43's failed policies -- a discretionary war in Iraq and a mismanaged one in Afghanistan -- have had an equally profound effect. These adventures created a counter-reaction against ill-advised military campaigns that is now bipartisan theology as well. To be sure, there are some differences between Romney and Obama. But with the exception of Republicans taking a softer line on Israel and a tougher one on Russia -- both stances that are unlikely to matter much in terms of actual policy implementation -- there's a much greater convergence.

#### Romney win won’t hurt relations

The Economist 9/1 (9/1/12, Romney Could Screw Up US Relations With Russia, <http://www.businessinsider.com/mitt-romneys-foreign-policy-chops-come-into-light-2012-9>, RBatra)

At the same time, the potential impact of a Romney presidency should not be exaggerated. Mr Romney is not an ideological politician, and he will have solid reasons to maintain a working relationship with Russia. These include reliance on Russian transit corridors to support US forces in Afghanistan to 2015 and beyond, Russia's veto in the UN Security Council, and its potential to act as interlocutor between the US and rogue states. Finally, there is a significant element of uncertainty that stems from the lack of clarity about what Mr Romney, who has often changed his position, actually stands for. In particular, the extent of the influence on him of several competing Republican foreign policy schools (neo-conservativism, populist isolationism, realism, liberal internationalism) is unclear.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

#### Not tied to Obama

Caruso, ‘10

[Doug, The Colombus Dispatch, 3-7, “The mighty thorium: The nearly perfect energy source nobody has heard of,” http://www.dispatch.com/content/stories/science/2010/03/07/thorium-art-gc67nvgb-1.html]

The Department of Energy approved $200,000 in funding at Oak Ridge for analytical studies this year of molten salt reactors using thorium and uranium, a department spokeswoman said. In 2008, Sen. Orrin Hatch, R-Utah, and Sen. Harry Reid, D-Nevada., introduced a bill that would direct thorium research begin at the Idaho National Laboratory. They introduced a new bill last week.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Romney will win because Obama’s approval ratings are too low

**Talgo, 9/16/12 –** commentator for Neon Tommy, a Los Angeles-based news source sponsored by the Annenberg School for Communication and Journalism covering breaking news (Tyler, “Why Romney Will Win The Election” <http://www.neontommy.com/news/2012/09/why-romney-will-win-election>)

Given the post-convention polling bounces, some may give Obama the advantage at this stage of the race, although the bounces are subsiding. For example, new NBC/WSJ polls of three swing states have Obama leading Romney by 49 to 44 percent in Florida and Virginia, and by 50 to 43 percent in Ohio. However, when we take a closer look at the numbers, a different story is revealed. In the Florida and Virginia polls, Democrats were oversampled by 5 percent, and in Ohio they were oversampled by 10 percent. Not convinced? Here’s another fact: recent CBS/NYT/Quinnipiac polls oversampled Democrats by nine percent in Florida and by eight percent in Ohio. The Florida poll had Obama at 51 percent and Romney at 45 percent, and the Ohio poll had Obama at 50 percent and Romney at 44 percent; so, both leads were smaller than the oversampling gap. If you ask me, the advantage here clearly goes to Romney; and, believe me, these are not the only examples.¶ All of this is revealed in the context of a time in which Republicans are much more enthusiastic than Democrats. Last month the number of Americans who consider themselves Republicans was the highest ever recorded since 2002 at 37.6 percent, compared to only 33.3 percent who consider themselves Democrats.¶ So, assuming that all else is equal, what does it mean when a national poll says something like 47 percent for Obama and 44 percent for Romney, or vise versa? The nature of the missing 10 percent is one of the most important factors that come to play in all presidential reelection campaigns. Historically, the final results in an election are almost always worse than polling suggests for an incumbent president. If you took the undecided vote, according to Gallup, from every general election since 1964 that featured an incumbent president seeking reelection, 89 percent of it went to the president’s challenger. You can bet that the Obama camp understands that a 47-44 poll in its favor is not good news at all. This is why it’s virtually unheard-of for an incumbent president to win reelection when he's polling below 50 percent.

#### The plan creates jobs in key swing states -- boosts reelection probability.

Korte, 4-27-12

[Gregory, USA Today, “Politics stands in the way of nuclear plant's future,” http://www.usatoday.com/money/industries/energy/story/2012-04-13/usec-centrifuges-loan-guarantees/54560118/1]

. USEC estimates the project at its peak will generate 3,158 jobs in Ohio, and 4,284 elsewhere. Pike County, home to the centrifuges, has a 13% unemployment rate — the highest in Ohio. The median household income is about $40,000. The average job at USEC pays $77,316. Centrifuge parts are stacked up in Piketon. "It's as shovel-ready as they come," says spokeswoman Angela Duduit. Indeed, the project has enjoyed bipartisan support. A USA TODAY review of DOE records shows that no fewer than 46 members of Congress — 32 Republicans and 14 Democrats — have pressured the Obama administration to approve the loan guarantee for USEC. "Quick action is paramount," said one bipartisan letter. "It is imperative that this application move forward now," said another. The congressional support comes from states such as Ohio, Pennsylvania, Tennessee, Kentucky, West Virginia, Missouri, Alabama, Indiana, Maryland, North Carolina and South Carolina— an almost exact overlay of the states that would benefit from the 7,442 jobs the company says would be created.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### Energy not key to the election

Mike Shedlock, 7-31-2012; registered investment advisor representative for SitkaPacific Capital Management, “Is global trade about to collapse? Where are oil prices headed? A chat with Mish Shedlock by James Stafford” http://energybulletin.net/stories/2012-07-31/global-trade-about-collapse-where-are-oil-prices-headed-chat-mish-shedlock

Oilprice.com: You just mentioned that we don’t know who the next president is going to be and sticking to this topic how big an impact do you see energy prices having on this year's presidential elections? Mish: I don’t think energy prices are what's on people's minds. What's on people's minds right now are jobs. Oil prices have kind of stabilized and in the very short-term they are likely to stay stable unless there are some dramatic results in the Mid-East or a dramatic slowdown in the US economy. Both are possible, but a major US slowdown is arguably more likely. Regardless, I think energy prices are going to be a minor election issue.

#### The debates and labor statistics will determine the election

**Lombardo, 9/12**/12 - Global CEO, StrategyOne (Steve, “Why This Election Comes Down to Two Days in October,” Huffington Post, <http://www.huffingtonpost.com/steve-lombardo/election-monitor-why-this_b_1877815.html>)

Several national polls released this week show that President Obama received a small but meaningful bounce after the conventions. The bounce -- in the 3-5 point range -- is within the median for convention bounces since 1964. The problem for Republicans is that Romney got no bounce from his convention. In fact, his vote share likely shrunk a point or two in the last two weeks. While the Republican convention may have strengthened Romney's position with the base, it did little to expand his coalition. The momentum from "You didn't build that" has been halted. ¶ However, we see nothing in the data yet to suggest this is anything but a dead heat. For all the hand wringing over the GOP convention and the Romney campaign they are in a dead heat with an incumbent President with 55 days to go. When you look at likely voters in key swing states, this thing is truly 50/50. ¶ Here is our take as of 12 a.m. EST: ¶ The murder of Ambassador Stevens and the unrest in Libya will thrust both candidates into the foreign policy fray. It will be very interesting to see how each handles the coming hours and days and how much the media -- and ultimately voters -- focuses on the issue.¶ Look for a higher level of advertising spend from the Romney campaign in key battleground states over the next two weeks. History has shown that the candidate who is clearly in the lead by mid to late September will likely be the winner in November. That doesn't mean things can't change in October -- they can. But sentiment will start to firm up in the next two weeks. The Romney campaign has a $60 million cash-on-hand advantage, and they should use it now. Team Obama defined Romney in the spring using their cash advantage; the Romney campaign should not wait until October. They need to change the dynamic before October 1.¶ The two biggest dates of the campaign are October 3rd and October 5th. The first debate will be held on Wednesday, October 3rd at the University of Denver at 9 p.m. EST. For three reasons this will be far and away the most important debate:¶ It is the first and therefore, unless there is a major blunder, is likely to be the one that sets the image of Romney in stone.¶ We really do not believe that the other two will matter if Romney has a poor debate performance here. Romney has to win this debate pure and simple.¶ This one is purely on domestic policy, i.e. the economy. If Romney can't win this one, he is unlikely to win the other two, barring a miscue by the President.¶ On October 5th at 8:30 a.m. EST the Bureau of Labor Statistics will release the September unemployment numbers. This will be the most impactful announcement of the campaign. If the unemployment rate goes up it could be devastating for the president's reelection chances. Similarly, if it goes down -- especially if it goes below 8 percent -- it may pretty much secure an Obama victory in November.

#### Public supports nuclear power expansion -- no safety concerns.

Bowman, 4-18-12 [Karlyn, American Enterprise Institute, “Polls on the environment, energy, global warming and nuclear power,” http://www.aei.org/papers/politics-and-public-opinion/polls/polls-on-the-environment-energy-global-warming-and-nuclear-power-april-2012/]

\* President Obama is getting low marks on his handling of gas prices. In a February 2012 AP/GfK-Roper poll, 39 percent approved of the job he is doing in this area. Significant majorities say rising gas prices have caused difficulties in their households. \* The majority of Americans still think nuclear power is safe. In a March 2012 Gallup poll, 57 percent favored using nuclear energy as one way to provide electricity for the United States. But people still wouldn’t want to build a nuclear plant in their backyard. Only 35 percent told CBS pollsters in March 2011 that they would approve of a nuclear power plant in their community, and 62 percent disapproved. \* Americans like an “all-of-the-above” energy strategy that includes more energy production, developing alternative energy sources, more conservation and nuclear power.

### 1ar

#### U 233, 235 and Pu 239 can start the reaction

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

LFTRs can be started with U-233, U-235, or Pu-239. A 100 MW LFTR requires 100 kg of fissile material to start the chain reaction and the neutron flux that converts fertile Th-232 to fissile U-233. Uranium-233 can start a LFTR, but U-233 is not found in nature because its half-life of 159,000 years is short compared to the time of its creation by a supernova 5 billion years ago. The US government owns over 500 kg of U-233, which could be used for starting up a few experimental LFTRs. Unfortunately the Department of Energy is about to destroy this asset by diluting it with U-238 and burying it, at a cost of $511 million. It is possible to design LFTRs that can be started with uranium enriched to 20% U-235. Because such fuel contains 80% U-238 it will initially make long-lived radioactive transuranics such as plutonium. With a different LFTR design, plutonium-239 can be another possible start-up fissile material, and it can be obtained from the stored spent fuel rods produced by LWRs. All the troublesome transuranics (neptunium, plutonium, americium, californium) can be used. The world now has 340,000 tonnes of spent LWR fuel containing approximately 3,400 t of fissile plutonium, enough to start one 100 MW LFTR each day for 93 years.

#### And, only thorium sets an international prolif standard best data proves

Grae, 08 [Seth Grae, President and CEO, Thorium Power Ltd'Thorium Power can play a key role in India's nuclear industry', <http://www.ltbridge.com/assets/7.pdf>]

Why is efficient and modern nuclear fuel technology important? Modern fuel technology is vitally important because the future of nuclear power depends on the industry's ability to address the lingering concerns—proliferation, waste and operating economics. All across the world, there are hundreds of new reactors in planning or at different stages of development. But everyone acknowledges the concerns and almost everyone agrees that we can't deploy 20th century technology in order to build a 21st century industry. We need advanced nuclear fuel technology that is safe, viable and economical. The IAEA and World Nuclear Association agree that thorium is an optimal alternative to uranium fuel and there is a clear movement towards thorium fuel. Also, India has always been at the scientific and technological forefront, and India's experts understand the distinct advantages of using thorium in the nuclear fuel cycle. Thorium Power is uniquely positioned to establish a new standard in non-proliferation because we know that the promise of safe nuclear power will only be realised if and when we deploy advanced, non-proliferative fuel-based solutions.

#### They create better international solutions to proliferation -- allows peaceful development without nuclearization.

Katusa, ‘12

[Marin, Chief Energy Investment Strategist, Casey Research, Market Oracle, 2-14, “Why Not Thorium Fueled Nuclear Reactors Instead of Uranium?” http://www.marketoracle.co.uk/Article33137.html]

Thorium is three times more abundant in nature than uranium. All but a trace of the world's thorium exists as the useful isotope, which means it does not require enrichment. Thorium-based reactors are safer because the reaction can easily be stopped and because the operation does not have to take place under extreme pressures. Compared to uranium reactors, thorium reactors produce far less waste and the waste that is generated is much less radioactive and much shorter-lived. To top it all off, thorium would also be the ideal solution for allowing countries like Iran or North Korea to have nuclear power without worrying whether their nuclear programs are a cover for developing weapons… a worry with which we are all too familiar at present.

#### Can’t make weapons from thorium reactors.

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

Thorium offers some other important aspects, it does not require isotope separation, the process of separating the desired reactable forms of uranium and plutonium from the decayed ore, a big cost saving. Weapons made from thorium are impractical.

#### Using water means it doesn’t achieve the required efficiency

Song, 11 [5/9/11, Lisa, Inside Climate News, “Next-Generation Nuclear Energy Reactors: A Primer”, <http://insideclimatenews.org/news/20110505/next-generation-nuclear-reactors?page=3>]

Water as Coolant Despite variations in age and design, most of the pre-Gen IV plants have one thing in common: They all use water as a coolant. A coolant is the fluid that brings heat from the reactor core to other parts of the plant. The heat boils water into steam, which spins turbines to generate electricity. Then the steam is either condensed by pumping in cold water, or cooled through cooling towers. Increasingly, reactors' dependence on water is making them vulnerable to climate change impacts. Nuclear plants have been forced to [decrease capacity](http://solveclimatenews.com/news/20110504/nuclear-power-water-climate-change-heat-cooling) due to heat waves, while drought and water scarcity are adding new constraints. The Gen IV reactors could help mitigate that problem. Five of the six designs use hot gas, molten salt or liquid metal as a coolant. Tim Leahy, senior adviser at [Idaho National Laboratory](https://inlportal.inl.gov/portal/server.pt/community/home), which is part of the U.S. Energy Department, said vulnerability to drought wasn't a big concern when developing the Gen IV reactors. As it turns out, most of them operate at very high temperatures, making it impractical to use water as a coolant. This design change has the advantage of increasing efficiency, said Leahy. Today's reactors are about 33 percent efficient, meaning that for every three units of thermal energy produced by the reactor core, two units are rejected as waste heat and only one unit gets converted into electricity. With a new type of coolant and reactor design, the Gen IV plants can reach nearly 50 percent efficiency.

#### That means water reactors don’t cause criticality

Beebe, 09 [“Thorium: the Nuclear Frontier”, Shannon, Kent Law Professor, Energy Law Class, http://www.kentlaw.edu/faculty/fbosselman/classes/energyF09/Coursedocs/BeebeShannonThorium%E2%80%93theNuclearFrontier.pdf

A higher burnup is necessary to achieve criticality 􀂃 Depending on your source, it sounds as though Light Water Reactors, the most common reactors, are difficult to retrofit for thorium use because they have difficulty achieving the high burn up; so a total switchover might not be feasible in the short term

#### Numerous proliferation barriers make Thorium superior

IAEA 12 (IAEA Nuclear Energy Series No. NF-T-2.4, “Role of Thorium to Supplement Fuel Cycles of Future Nuclear Energy Systems,” May, <http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1540_web.pdf>)

From the point of view of technology amenability, there are fewer conversion processes required from converting mined thorium ore into fuel forms ready for first use in a reactor than with conversion of mined uranium into the (currently most used) conventional fuel form of enriched UO2. The enrichment of uranium — a rather sophisticated technological process with a significant proliferation threat — is not needed in a pure ThFC; however, instead of enrichment, a reprocessing step is necessary.

In addition to the elimination of enrichment, a fuel cycle based on thorium/233U has other proliferation resistance related peculiarities. To create one more barrier to potential proliferation, 233U — unlike plutonium — can be mixed with the non fissile isotope 238U (in practice, with depleted uranium) to create a ‘reactor grade’ 233U/238U mixture not adherent to chemical separation. The critical configuration (i.e. mass, geometry, etc. needed for a nuclear weapon) of a mixture of 12% 233U with 238U approximately corresponds to a 20% enriched 235U/238U compound [3].

Once irradiated in a reactor, the fuel of a thorium–uranium cycle contains an admixture of 232U (half-life 68.9 years) whose radioactive decay chain includes emitters (particularly 208Tl) of high energy gamma radiation (2.6 MeV). This makes spent thorium fuel treatment more difficult, requires remote handling/control during reprocessing and during further fuel fabrication, but on the other hand, may be considered as an additional non-proliferation barrier.

**No escalation—shared interests**

**Collins and Wohlforth 4** (Kathleen, Prof PoliSci–Notre Dame and William, Prof Government–Dartmouth, “Defying ‘Great Game’ Expectations”, Strategic Asia 2003-4: Fragility and Crisis, p. 312-3)

Conclusion The popular great game lens for analyzing Central Asia fails to capture the declared interests of the great powers as well as the best reading of their objective interests in security and economic growth. Perhaps more importantly, it fails to explain their actual behavior on the ground, as well the specific reactions of the Central Asian states themselves. Naturally, there are competitive elements in great power relations. Each country’s policymaking community has slightly different preferences for tackling the challenges presented in the region, and the more influence they have the more able they are to shape events in concordance with those preferences. But these clashing preferences concern the means to serve ends that all the great powers share. To be sure, policy-makers in each capital would prefer that their own national firms or their own government’s budget be the beneficiaries of any economic rents that emerge from the exploitation and transshipment of the region’s natural resources. But the scale of these rents is marginal even for Russia’s oil-fueled budget. And for taxable profits to be created, the projects must make sense economically—something that is determined more by markets and firms than governments. Does it matter? The great game is an arresting metaphor that serves to draw people’s attention to an oft-neglected region. The problem is the great-game lens can distort realities on the ground, and therefore bias analysis and policy. For when great powers are locked in a competitive fight, the issues at hand matter less than their implication for the relative power of contending states. Power itself becomes the issue—one that tends to be nonnegotiable. Viewing an essential positive-sum relationship through zero sum conceptual lenses will result in missed opportunities for cooperation that leaves all players—not least the people who live in the region—poorer and more insecure. While cautious realism must remain the watchword concerning an impoverished and potentially unstable region comprised of fragile and authoritarian states, our analysis yields at least conditional and relative optimism. Given the confluence of their chief strategic interests, the major powers are in a better position to serve as a stabilizing force than analogies to the Great Game or the Cold War would suggest. It is important to stress that the region’s response to the profoundly destabilizing shock of coordinated terror attacks was increased cooperation between local governments and China and Russia, and—multipolar rhetoric notwithstanding—between both of them and the United States. If this trend is nurtured and if the initial signals about potential SCO-CSTO-NATO cooperation are pursued, another destabilizing shock might generate more rather than less cooperation among the major powers. Uzbekistan, Kyrgyzstan, Tajikistan, and Kazakhstan are clearly on a trajectory that portends longer-term cooperation with each of the great powers. As military and economic security interests become more entwined, there are sound reasons to conclude that “great game” politics will not shape Central Asia’s future in the same competitive and destabilizing way as they have controlled its past. To the contrary, mutual interests in Central Asia may reinforce the broader positive developments in the great powers’ relations that have taken place since September 11, as well as reinforce regional and domestic stability in Central Asia.

**Instability doesn’t escalate—history proves**

Irina **Zviagel'skaia**, leading research fellow at the Institute of Oriental Studies, the Russian Academy of Sciences, Moscow, June **2005**. “Russia and Central Asia: Problems of Security,” Central Asia at the End of the Transition, ed. Boris Rumer, <http://books.google.com/books?id=cnXVyW1QIIYC&pg=PA86&lpg=PA86&dq=%22central+asia%22+numerous+challenges+stability&source=web&ots=-3Uve6KFdU&sig=62TKLdSLAgBp6rszCPvbUBtjjVY&hl=en#PPR5,M1>.

Notwithstanding these numerous challenges, in general the countries of Central Asia have demonstrated stability in the course of their existence as independent states. This region, in contrast to the Caucasus, has not witnessed armed conflicts between states, or wars driven by separatist or irredentist movements. To be sure, such movements do in fact exist, and interethnic tensions are constantly felt. The exception, as already noted, is Tajikistan, where a civil war unfolded in the early 1990s. However, it was precisely the lessons of Tajikistan that have been learned by the regimes in other states. Nowhere else has a single leader permitted the creation of organized opposition. Although differing in the degree of harshness used to repress political opponents, these former leaders of the Communist Party of the Soviet Union are well versed in political-bureaucratic games and have demonstrated a high level of survivability.

## octos—aff v. georgetown am

### 2ac case

**No risk of South China Sea conflicts—China is now backing off**  
**Haddick 10/15/2010** [Robert—managing editor of Small Wars Journal and writer for Foreign Policy, “This Week at War: China Backs Down for Now”, http://www.foreignpolicy.com/articles/2010/10/15/this\_week\_at\_war\_china\_backs\_down\_for\_now, ZR]

An unexpectedly strong backlash in the region may have prompted the Chinese to retreat. Chinese leaders may have been surprised by the resistance of ASEAN's leaders and the sharp response in Tokyo over the recent Chinese fishing boat incident in the Senkaku Islands. Chinese leaders have likely concluded that a tactical retreat is wiser than risking stiffening resistance in the region. China took steps to patch up its relationship with Japan; after Japan released the Chinese fishing boat captain, China released four Japanese workers it had seized. China also unfroze diplomatic contact when Chinese Premier Wen Jiabao agreed to meet on Oct. 4 with Japan Prime Minister Naoto Kan in Brussels.

### 2ac topicality

#### We get to define the plan – removing restrictions on licensing for “thorium power production” takes out your distinctions between licensing – we fiat through that – here’s evidence that those exceptions can be made

Code of Federal Regulations 10 CFR 50 2012

Home > NRC Library > Document Collections > NRC Regulations (10 CFR) > Part 50--Domestic Licensing of Production and Utilization Facilities

http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/full-text.html#top

§ 50.12 Specific exemptions.¶ (a) The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are--¶ (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.¶ (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever--¶ (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or¶ (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or¶ (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or¶ (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or¶ (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or¶ (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.¶ (b) Any person may request an exemption permitting the conduct of activities prior to the issuance of a construction permit prohibited by § 50.10. The Commission may grant such an exemption upon considering and balancing the following factors:¶ (1) Whether conduct of the proposed activities will give rise to a significant adverse impact on the environment and the nature and extent of such impact, if any;¶ (2) Whether redress of any adverse environment impact from conduct of the proposed activities can reasonably be effected should such redress be necessary;¶ (3) Whether conduct of the proposed activities would foreclose subsequent adoption of alternatives; and¶ (4) The effect of delay in conducting such activities on the public interest, including the power needs to be used by the proposed facility, the availability of alternative sources, if any, to meet those needs on a timely basis and delay costs to the applicant and to consumers.

#### Counter interp – R&D is topical and the following laundry list

US Energy Information Administration, 1 (Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, “Incentives, Mandates, and Government Programs for Promoting Renewable Energy”, http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels.1 This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and develop- ment (R&D),2, 3 and (2) their effectiveness in promoting renewables. A financial incentive is defined in this report as providing one or more of the following benefits: • A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; • Reducing the cost of production of the good or service; or, • Creating or expanding a market for producers. The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.4 Regulatory mandates include both actions required by legislation and regulatory agencies (Federal or State). Examples of regulatory mandates are: requiring utilities to purchase power from nonutilities and requiring the incorporation of environmental impacts and other social costs in energy planning (full cost pricing). Another example is a requirement for a minimum percentage of generation from renewable energy sources (viz., a “renewable portfolio standard,” or, RPS). Regulatory mandates and financial incentives can produce similar results, but regulatory mandates generally require no expenditures or loss of revenue by the Government.

### 2ac recommend cp

#### Permutation do the cp – the aff should get to define the scope and the mandate of the plan – normal means is infinitely regressive and kills aff ground

#### Doesn’t sever should

**Green, 89 – US District Judge (**EMERSON EMORY, Captain, USNR (Ret.), Plaintiff v. SECRETARY OF THE NAVY, Defendant Civil Action No. 83-2494 UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA 708 F. Supp. 1335; 1989 U.S. Dist. LEXIS 2993; 49 Fair Empl. Prac. Cas. (BNA) 677; 51 Empl. Prac. Dec. (CCH) P39,276 March 22, 1989, Decided March 22, 1989, Filed, lexis)

Defendant argues that the "should" and "also desired" is "plainly permissive," [5](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote5) while plaintiff points out that "should" is a past tense of "shall." While "shall" denotes a mandatory action when used in statutes and contracts, "should" does not ordinarily  [\*\*10]  express such certainty. [6](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote6) By examining the context in which "should" is used within the policy statements, this Court concludes that it is not used in a mandatory manner. In setting out the requirements of board membership at that time, the Navy consistently used "will" or "must." The subsection addressing minority officers was the only one in this memorandum that used "should," instead of "will" or "must."

#### OR resolved

Webster’s Guide to Grammar and Writing – 2000

[http://ccc.commnet.edu/grammar/marks/colon.htm]

Use of a colon before a list or an explanation that is preceded by a clause that can stand by itself. Think of the colon as a gate, inviting one to go on… **If the introductory phrase preceding the colon is very brief** and **the clause following the colon represents the real business of the sentence**, begin the clause after the colon with a capital letter.

#### Permutation do both

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of **political will and** government policy is essential**,** it is nuclear power**.** High up front costs for the **private** industry**,** extreme regulatory oversightand public wariness necessitate a committed government partner for private firms investing in nuclear technology**. In a new** [**report**](http://www.thirdway.org/publications/370) **on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy.** The report**, “The Future of Nuclear Energy,”** makes the case for **political** certainty**: “**It is difficult for energy producers **and users** to estimate the **relative** price for nuclear**-generated** energy compared to fossil fuel alternatives **(e.g. natural gas)–**anessential consideration in making the major capital investment decision necessary for new energy production that will be in place for **decades.”** Are our politicians willing to match the level of certainty that the nuclear industry demands**? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to** [**supply-side “push” policies**](http://leadenergy.org/2010/09/supply-demand-energy-innovation/)**, or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill** [**included**](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) **provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times** [**piece**](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) **in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably** [**Lindsey Graham**](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) **and** [**Richard Lugar**](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293)**, would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined** [**“innovation hawks,”**](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) **among them Steven Hayward, David Brooks and George Will. Will has been** [**particularly outspoken**](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) **in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post** [**reports**](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) **that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct** [**Section 48C**](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) **of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one.** The politician with **perhaps** the **single** greatest leverage over the future of nuclear energy is **President** Obama**, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his** [**State of the Union**](http://www.slate.com/id/2281847/) **podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term.** The eagerness of the President tocombine **left and right** agendas can **hopefully** match the hyper-partisan bitterness **that dominates our political culture,** and nuclear power maybe one sector of our economy to benefit from his political leadership**.**

#### The plan is key to self-sufficient forward operating bases

Ackerman, 11 [Spencer, February 18th, Latest Pentagon Brainstorm: Nuke-Powered War Bases, Wired. Com. http://www.wired.com/dangerroom/2011/02/nuke-bases/]

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.¶ Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the [solar-powered Marine company](http://www.wired.com/dangerroom/2011/01/afghanistans-green-marines-cut-fuel-use-by-90-percent/) in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.¶ To fit on a FOB, which can be anywhere from Bagram Air Field’s [eight square miles](http://www.wired.com/dangerroom/2010/08/u-s-afghan-mega-base/) to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.¶ That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has [partnered with Toshiba](http://news.bbc.co.uk/2/hi/8582692.stm) to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors [suspended its operations](http://www.greentechmedia.com/articles/read/nuclear-startup-nuscale-suspends-operation/) after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.¶ But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hos tile acts may compromise operations.”¶ Sensible, sure. But it limits your options: outside of uranium or plutonium, [thorium](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

Solves effective peacekeeping

Mosher et al., 8 (David E., Senior Policy Analyst @ RAND, Green Warriors: Army Environmental Considerations for Contingency Operations from Planning Through Post-Conflict, RAND)

The environment may also be important during the post-conflict phase of an operation,9 or even before combat operations end. Providing clean water, managing sewage, or providing irrigation water can be important for convincing the local populace to support the U.S. mission **and not an insurgency**, according to some commanders.10 Although these are not traditional Army missions, they can have an important effect on the outcome of an operation, from both a military and a political perspective. Addressing legacy problems can also help **a new government develop legitimacy and can enable U.S. forces to withdraw from the country sooner.** Indeed, many of the goals of stability operations defined in the 2006 edition of JP 3.0, Joint Operations, can have environmental components. Operational effectiveness can be hampered by poor environmental practices or helped by good ones. Logistics requirements and costs can be reduced by good practices, for instance, applying technologies to **reduce operational requirements for petroleum, oil,** and lubricants (POL) or field water treatment systems, or reducing acute threats to soldier health. Good environmental practices can also reduce the resources that must be diverted to address environmental issues. Commanders may also want to reduce or prevent liabilities, either financial or diplomatic. Good environmental awareness and practices during contingency operations can reduce the financial liabilities the Army and the United States may face. On more than one occasion in recent operations, contractors have removed hazardous wastes from base camps and, without Army knowledge, dumped them along the side of a road or in other inappropriate locations, sometimes to avoid disposing of them properly or to sell the drums that hold the wastes. These actions have created cleanup costs for the Army that are many times higher than the original price of the contract. In other cases, the Army has had to spend large sums to remediate serious preexisting environmental contamination at base camps, expenses that could have been avoided if the base camps had been located elsewhere. Financial liabilities can also arise from claims brought by U.S. soldiers who believe they were exposed to hazardous substances, as the Army’s past experiences with Agent Orange and Gulf War Illness illustrate. 11 Members of the local populace may also bring claims against the Army for environmentally related damage, draining funds that could be more effectively used for reconstruction or stabilization activities. Inadequate attention to environmental issues can also create diplomatic liabilities. Illegal dumping by contractors and poor waste management practices by soldiers have caused immediate diplomatic problems with host nations whose support has been critical. Long-term diplomatic problems from environmental problems can also emerge years after an operation is over. Perhaps most important are the environmental issues that can affect U.S. national objectives, those strategic political and economic objectives that U.S. leaders established when they committed forces to the contingency operation in the first place. One such national objective may be winning and maintaining support of the local populace. Although environmental conditions may be poor and national environmental laws may be weak or nonexistent, our research indicates that locals often care deeply about the environment, which can be critical to their survival, livelihood, and well-being. Vital environmental issues can include access to clean drinking water, effective sewage systems, and viable farmland (see Box 1.1). Restoring or building these basic infrastructures is often essential for the economic and social development necessary for stability. To the extent that such projects improve cooperation with locals, they can lower security risks, improve intel- ligence, and speed reconstruction. National objectives that have environmental components also include preserving natural resources that have important economic value (such as oil fields or fisheries) and even preserving cultural resources that are a matter of national, regional, religious, or cultural pride. If long-term stability of a country is a mission objective, sustainability and the long-term health of nbatural systems, including watersheds, forests, ecosystems, biodiversity, and farmlands, are also important. Local customs and practices can take the place of laws, and therefore military leaders, when designing plans and conducting operations, should understand how the local people interact with their environment. The environmental components of national objectives are often seen as falling outside the normal conception of the military mission. Because they have little to do with combat operations or military objectives, they are often not taken into consideration during the Army’s planning, training, or operations. Yet ignoring these broader political objectives **can lead to failure**, as Prussian military writer Carl von Clausewitz warned.12 Thus, the environmental dimensions of national objectives should be carefully considered. The manner in which the military conducts its operations can affect environmental outcomes upon which the success of the overall mission may depend. There is some evidence that national objectives such as stabilizing societies after conflict are now being emphasized at the Army’s combat training centers, but the degree to which environmental considerations are included is unclear.

**Global nuclear war**

Dean 95 [Jonathan, former ambassador to NATO, The Bulletin of Atomic Scientists, p. google]

IN ANY EVENT, in a world of interconnecting COMMUNICATIONS AND ENVIRONMENTAL, TRADE, AND FINANCIAL LINKS, the United States, a leading industrial trading country that needs access to raw materials and markets, usually ends up paying in one way or another when a major regional conflict erupts. IN PRACTICAL TERMS, it is impossible for the United States to avoid some degree of involvement when major regional conflicts break out. FOR 200 YEARS, THE UNITED STATES HAS BEEN URGING LIBERTY, FREEDOM, DEMOCRACY, HUMAN RIGHTS, FREE MARKET VALUES, VOLUNTARY MUTUAL AID AND COLLECTIVE SECURITY ON THE OUTSIDE WORLD. THE UNITED STATES IS THE SOLE SURVIVING WORLD-CLASS POWER, WITH MILITARY STRENGTH AND GNP FAR LARGER THAN ANY OTHER COUNTRY. AS A RESULT, when large-scale conflict erupts, the United States cannot avoid being called on for help, as it was in Somalia, Bosnia, Rwanda, and Haiti. For the United States to seek to stand aside or to respond only weakly in such cases is to risk damage to its credibility AND WORLDWIDE INFLUENCE. PRESIDENT CLINTON JUSTIFIED THE NATO BOMBING OF SERBIAN POSITIONS IN BOSNIA AND THE U.S. INVASION OF HAITI BY SAYING THAT THE CREDIBILITY AND RELIABILITY OF THE U.S. WAS AT STAKE, AS IT WAS. IT IS TRUE THAT PAST ADMINISTRATIONS USED SIMILAR ARGUMENTS TO JUSTIFY CONTINUED U.S. INVOLVEMENT IN VIETNAM LONG AFTER IT WOULD HAVE BEEN WISE TO WITHDRAW. NONETHELESS, WHEN THE COLLECTIVE DISAPPOINTMENT OF WORLD OPINION OVER THE BEHAVIOR OF THE UNITED STATES (OR OF ANY MAJOR COUNTRY) BECOMES INTENSE AND ENDURING, IT BEGINS TO UNDERMINE THE INTERNATIONAL PRESTIGE AND STANDING OF THE ENTIRE NATION CONSIDERABLE DIMINUTION OF U.S. STATURE AND INFLUENCE HAS ALREADY TAKEN PLACE OVER THE PAST FOUR OR FIVE YEARS IN CONNECTION WITH FALTERING U.S. POLICIES TOWARD BOSNIA, SOMALIA, AND RWANDA. FORTUNATELY, AMERICANS ARE NOT SPARTANS, ROMANS OR PRUSSIANS-SELF-DISCIPLINED MILITARISTIC PEOPLES WHO CONSIDERED IT A MATTER OF NATIONAL PRIDE NOT TO RECOIL FROM CONFLICT BECAUSE OF CASUALTIES AMONG THEIR FORCES. HOWEVER, IF THE TRENDS CONTINUE THAT UNDERLIE THE PUBLIC OUTRAGE THAT FOLLOWED THE DEATH OF U.S. SERVICEMEN IN SOMALIA, AND U.S. ADMINISTRATIONS CONTINUE TO ABSTAIN FROM PEACEKEEPING ACTIVITIES BECAUSE THEY COULD ENTAIL CASUALTIES, THE UNITED STATES WILL NOT LONG REMAIN A WORLD POWER. If U.S. national prestige declines further under conditions like these, the U.S. capacity to constructively influence the course of events without the use of force will decrease. And when force must be used, the United States may have to use more of it to be effective. EXPERTS THROUGHOUT THE WORLD EXPECT GROWING POPULATION PRESSURES AND INCREASING ENVIRONMENTAL STRESS TO DEVELOP OVER THE COMING DECADES INTO INTENSE, FAR-REACHING SOCIAL UNREST AND REGIONAL CONFLICT. ECONOMIC DEVELOPMENT IS THE SOLUTION, HOWEVER SLOW AND UNCERTAIN IT MAY BE IN COMING. BUT the world also needs effective regional conflict-prevention procedures. Left on its own, regional violence can lead to **confrontation** and even **war between the great powers**, including the United States, AS MIGHT OCCUR, FOR EXAMPLE, in the event of conflict between Ukraine and Russia or between China and its neighbors. IN THE FINAL ANALYSIS, unchecked regional violence and the fear of further violence will lead **more states to develop nuclear weapons**. IN PAST DECADES, this process occurred in Israel, South Africa, India, Pakistan, IRAQ, and PRESUMABLY, IN North Korea. A world with 20 or 30 nuclear weapon states would not only make a more effective global security system impossible, it would lead the present nuclear weapon states to modernize and increase their weapons-and it would markedly increase the vulnerability of the United States to direct attack. Instead of SHRUGGING AT HUMAN FALLIBILITY, accepting war as inevitable, AND REACTING AFTER IT HAPPENS, U.S. policy should aim at establishing an international peacekeeping system that can head off an increasing number of conflicts. CONSEQUENCES IF THIS REASONING IS ACCEPTED, THE ADMINISTRATION SHOULD DECIDE ON AND PUBLICLY DECLARE AN EXPLICIT LONG-TERM POLICY OF JOINING WITH OTHER COUNTRIES IN SEEKING A GRADUAL LOWERING OF THE LEVEL OF ARMED CONFLICT IN THE WORLD THROUGH PREVENTING A GROWING PROPORTION OF POTENTIAL WARS AND CURTAILING WARS WHEN THEY DO OCCUR. This goal would be achieved by building an increasingly effective worldwide network of regional conflict-prevention and peacekeeping organizations headed by a more effective United Nations.

### 2ac death cult

#### Fear and discussion of death are different – contemplating finitude exposes the purpose of life

**Gunaratna** Buddhist **1982** (V.F. “Buddhist Reflections on Death” http://www.accesstoinsight.org/lib/authors/gunaratna/wheel102.html)

To the average man death is by no means a pleasant subject or talk for discussion. It is something dismal and oppressive — a veritable kill-joy, a fit topic for a funeral house only. The average man immersed as he is in the self, ever seeking after the pleasurable, ever pursuing that which excites and gratifies the senses, refuses to pause and ponder seriously that these very objects of pleasure and gratification will some day reach their end. If wise counsel does not prevail and urge the unthinking pleasure-seeking man to consider seriously that death can knock at his door also, it is only the shock of a bereavement under his own roof, the sudden and untimely death of a parent, wife or child that will rouse him up from his delirious round of sense-gratification and rudely awaken him to the hard facts of life. Then only will his eyes open, then only will he begin to ask himself why there is such a phenomenon as death. Why is it inevitable? Why are there these painful partings which rob life of its joys? To most of us, at some moment or another, the spectacle of death must have given rise to the deepest of thoughts and profoundest of questions. What is life worth, if able bodies that once performed great deeds now lie flat and cold, senseless and lifeless? What is life worth, if eyes that once sparkled with joy, eyes that once beamed with love are now closed forever, bereft of movement, bereft of life? Thoughts such as these are not to be repressed. It is just these inquiring thoughts, if wisely pursued, that will ultimately **unfold the potentialities inherent in the human mind to receive the highest truths.** According to the Buddhist way of thinking, death, far from being a subject to be shunned and avoided, is the key that **unlocks the seeming mystery of life**. It is by understanding death that we understand life; for death is part of the process of life in the larger sense. In another sense, life and death are two ends of the same process and if you understand one end of the process, you also understand the other end. Hence, by understanding the purpose of death we also understand the purpose of life. It is the contemplation of death, the intensive thought that it will some day come upon us, that softens the hardest of hearts, binds one to another with cords of love and compassion, and destroys the barriers of caste, creed and race among the peoples of this earth all of whom are subject to the common destiny of death. **Death is a great leveler**. Pride of birth, pride of position, pride of wealth, pride of power must give way to the all-consuming thought of inevitable death. It is this leveling aspect of death that made the poet say: "Scepter and crown Must tumble down And in the dust be equal made With the poor crooked scythe and spade." It is the contemplation of death that helps to destroy the infatuation of sense-pleasure. It is the contemplation of death that destroys vanity. It is the contemplation of death that gives balance and a healthy sense of proportion to our highly over-wrought minds with their misguided sense of values. It is the contemplation of death that gives strength and steadiness and direction to the erratic human mind, now wandering in one direction, now in another, without an aim, without a purpose. It is not for nothing that the Buddha has, in the very highest terms, commended to his disciples the practice of mindfulness regarding death. This is known as "marananussati bhavana." One who wants to practice it must at stated times, and also every now and then, revert to the thought maranam bhavissati — "death will take place." This contemplation of death is one of the classical meditation-subjects treated in the Visuddhi Magga which states that in order to obtain the fullest results, one should practice this meditation in the correct way, that is, with mindfulness (sati), with a sense of urgency (samvega) and with understanding (ñana). For example, suppose a young disciple fails to realize keenly that death can come upon him at any moment, and regards it as something that will occur in old age in the distant future; his contemplation of death will be lacking strength and clarity, so much so that it will run on lines which are not conducive to success. How great and useful is the contemplation of death can be seen from the following beneficial effects enumerated in the Visuddhi Magga: — "The disciple who devotes himself to this contemplation of death is always vigilant, takes no delight in any form of existence, gives up hankering after life, censures evil doing, is free from craving as regards the requisites of life, his perception of impermanence becomes established, he realizes the painful and soulless nature of existence and at the moment of death he is devoid of fear, and remains mindful and self-possessed. Finally, if in this present life he fails to attain to Nibbana, upon the dissolution of the body he is bound for a happy destiny." Thus it will be seen that mindfulness of death not only purifies and refines the mind but also **has the effect of robbing death of its fears and terrors,** and helps one at that solemn moment when he is gasping for his last breath, to face that situation with fortitude and calm. He is never unnerved at the thought of death but is always prepared for it. It is such a man that can truly exclaim, "O death, where is thy sting?" In the Anguttara Nikaya the Buddha has said, "Oh Monks, there are ten ideas, which if made to grow, made much of, are of great fruit, of great profit for plunging into Nibbana, for ending up in Nibbana." Of these ten, one is death. Contemplation on death and on other forms of sorrow such as old age, and disease, constitutes a convenient starting point for the long line of investigation and meditation that will ultimately lead to Reality. This is exactly what happened in the case of the Buddha. Was it not the sight of an old man followed by the sight of a sick man and thereafter the sight of a dead man that made Prince Siddhattha, living in the lap of luxury, to give up wife and child, home and the prospect of a kingdom, and to embark on a voyage of discovery of truth, a voyage that ended in the glory of Buddhahood and the bliss of Nibbana? The marked disinclination of the average man to advert to the problem of death, the distaste that arouses in him the desire to turn away from it whenever the subject is broached, are all due to the weakness of the human mind, sometimes occasioned by fear, sometimes by tanha or selfishness, but at all times supported by ignorance (avijja). The disinclination to understand death, is no different from the disinclination of a man to subject himself to a medical check-up although he feels that something is wrong with him. We must learn to value the necessity to face facts. Safety always lies in truth. The sooner we know our condition the safer are we, for we can then take the steps necessary for our betterment. The saying, "where ignorance is bliss it is folly to be wise" has no application here. **To live with no thought of death is to live in a fool's paradise**.

#### Confronting death exposes meaning in life

Manivaÿso 10**, Buddhist studies @ Mahachulalongkornrajavidyalaya University (yes, this is a real place) 2010** (Phramaha Pisit, “THE ANALYSTICAL STUDY OF MARA\_ASSATI IN THERAVADA BUDDHISM” <http://www.mcu.ac.th/userfiles/file/library1/Thesis/762.pdf>

According to the Buddhist way of thought, everyone has to confront death without any exemption, but if human beings know and understand the true meaning of death, death shall no more be threatening. “It is by understanding the death that we understand the life,” says V.F.Gunaratana. 3 He further points out that in another sense, life and death are two ends of the same process and if we understand one end of the process, we also understand the other. Therefore, in the Theravada Buddhist notion, death is just a natural phenomenon of life, which has the basic condition as a compounded thing that will be split off at the final stage. So, the meaning of death according to Theravada Buddhism is the state of not being able to be re-combined again of body and mind (Råpa and Nàma); indeed, the five aggregates (Pa¤cakhandha) 4 . In other words, it is the separation of the five aggregates or the cessation of life elements in this life span. However, the reason why death has become a problem or a cause of suffering is that the people do not understand the truth of life and its processes. Human beings fill up their lives with compounded things and cling tightly to the idea of the self (Attànudiññhi). However, the nature of compounded things does not give in to anybody’s desire; therefore whenever desire goes against the truth of nature, suffering occurs (Jàtipi dukkhà, maraõaÿpi dukkhaü).

### 2ac economic production k

#### Perm do the plan and reject the aff’s neoliberal ideology

#### Alt can’t solve – problematization isn’t enough for a transition and specific tech solves anyways

**Scheer 7 –** Member of the German Parliament, President of the European Association for Renewable Energy EUROSOLAR, Chairman of the World Council for Renewable Energy WCRE

(Hermann, *Energy Autonomy: The economic, social, and technological case for renewable energy* pg 270, dml)

Renewable energy’s champions should therefore get to work developing scenarios for concrete opportunities in the places where they live, in their regions and national governments, showing the public that (and how) it is possible to meet energy needs with technologies that have already been tested and are available for exploiting the potential of renewable energy in each specific context. The only thing that the protagonists of renewable energy might learn from the defenders of nuclear energy is how to present a large-scale, all-encompassing perspective, as the nuclear industry did from the 1950s through to the 1970s, when it was able to cast its spell over an entire generation. One need not go so far as to promise society that switching to renewable energy will bring us to a land overflowing with milk and honey. The disenchantment that followed waking up from the nuclear dream has helped exhaust society’s willingness to accept positive utopias, a disillusionment that has also been reflected in scepticism about the solar vision. In order to pick up steam socially, it should be enough to communicate the message that renewable energy is opening up a definitive opportunity for people to overcome existential energy crises.

#### Impacts are inevitable

**Aligica ’03** (Paul Aligica, Fellow at the Mercatus Center at George Mason University and Adjunct Fellow at the Hudson Institute, “The Great Transition and the Social Limits to Growth: Herman Kahn on Social Change and Global Economic Development”, April 21, http://www.hudson.org/index.cfm?fuseaction=publication\_details&id=2827)

Stopping things would mean if not to engage in an experiment to change the human nature, at least in an equally difficult experiment in altering powerful cultural forces: "We firmly believe that despite the arguments put forward by people who would like to 'stop the earth and get off,' it is simply impractical to do so. Propensity to change may not be inherent in human nature, but it is **firmly embedded** in most contemporary cultures. People have almost everywhere become curious, future oriented, and dissatisfied with their conditions. They want more material goods and covet higher status and greater control of nature. Despite much propaganda to the contrary, they believe in progress and future" (Kahn, 1976, 164). As regarding the critics of growth that stressed the issue of the gap between rich and poor countries and the issue of redistribution, Kahn noted that what most people everywhere want was visible, rapid improvement in their economic status and living standards, and not a closing of the gap (Kahn, 1976, 165). The people from poor countries have as a **basic goal** the transition from poor to middle class. The other implications of social change are secondary for them. Thus a crucial factor to be taken into account is that while the zero-growth advocates and their followers may be satisfied to stop at the present point, most others are not. Any serious attempt to frustrate these expectations or desires of that majority is likely to **fail and/or create disastrous counter reactions.** Kahn was convinced that "any concerted attempt to stop or even slow 'progress' appreciably (that is, to be satisfied with the moment) **is catastrophe-prone**". At the minimum, "it would probably require the creation of extraordinarily repressive governments or movements-and probably a repressive international system" (Kahn, 1976, 165; 1979, 140-153). The pressures of overpopulation, national security challenges and poverty as well as the revolution of rising expectations could be **solved only in a continuing growth environment**. Kahn rejected the idea that continuous growth would generate political repression and absolute poverty. On the contrary, it is the limits-to-growth position "which creates low morale, destroys assurance, undermines the legitimacy of governments everywhere, erodes personal and group commitment to constructive activities and encourages obstructiveness to reasonable policies and hopes". Hence this position "increases enormously the costs of creating the resources needed for expansion, makes more likely misleading debate and misformulation of the issues, and make less likely constructive and creative lives". Ultimately "it is precisely this position the one that increases the potential for the kinds of disasters which most at its advocates are trying to avoid" (Kahn, 1976, 210; 1984).

#### Violence declining now – heg is the reason

**Owen 11** [John M. Owen Professor of Politics at University of Virginia PhD from Harvard "DON’T DISCOUNT HEGEMONY" Feb 11 [www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/](http://www.cato-unbound.org/2011/02/11/john-owen/dont-discount-hegemony/)]

Andrew Mack and his colleagues at the Human Security Report Project are to be congratulated. Not only do they present a study with a striking conclusion, driven by data, free of theoretical or ideological bias, but they also do something quite unfashionable: they bear good news. Social scientists really are not supposed to do that. Our job is, if not to be Malthusians, then at least to point out disturbing trends, looming catastrophes, and the imbecility and mendacity of policy makers. And then it is to say why, if people listen to us, things will get better. We do this as if our careers depended upon it, and perhaps they do; for if all is going to be well, what need then for us?

Our colleagues at Simon Fraser University are brave indeed. That may sound like a setup, but it is not. I shall challenge neither the data nor the general conclusion that **violent conflict around the world has been decreasing** in fits and starts since the Second World War. When it comes to violent conflict among and within countries, things have been getting better. (The trends have not been linear—Figure 1.1 actually shows that the frequency of interstate wars peaked in the 1980s—but the 65-year movement is clear.) Instead I shall accept that Mack et al. are correct on the macro-trends, and focus on their explanations they advance for these remarkable trends. With apologies to any readers of this forum who recoil from academic debates, this might get mildly theoretical and even more mildly methodological.

Concerning international wars, one version of the “nuclear-peace” theory is not in fact laid to rest by the data. It is certainly true that nuclear-armed states have been involved in many wars. They have even been attacked (think of Israel), which falsifies the simple claim of “assured destruction”—that any nuclear country A will deter any kind of attack by any country B because B fears a retaliatory nuclear strike from A.

But the most important “nuclear-peace” claim has been about *mutually* assured destruction, which obtains between two robustly nuclear-armed states. The claim is that (1) rational states having second-strike capabilities—enough deliverable nuclear weaponry to survive a nuclear first strike by an enemy—will have an overwhelming incentive not to attack one another; and (2) we can safely assume that nuclear-armed states are rational. It follows that states with a second-strike capability will not fight one another.

Their colossal atomic arsenals neither kept the United States at peace with North Vietnam during the Cold War nor the Soviet Union at peace with Afghanistan. But the argument remains strong that those arsenals did help keep the United States and Soviet Union at peace with each other. Why non-nuclear states are not deterred from fighting nuclear states is an important and open question. But in a time when calls to ban the Bomb are being heard from more and more quarters, we must be clear about precisely what the broad trends toward peace can and cannot tell us. They may tell us nothing about why we have had no World War III, and little about the wisdom of banning the Bomb now.

Regarding the downward trend in *international* war, Professor Mack is friendlier to more palatable theories such as the “democratic peace” (democracies do not fight one another, and the proportion of democracies has increased, hence less war); the interdependence or “commercial peace” (states with extensive economic ties find it irrational to fight one another, and interdependence has increased, hence less war); and the notion that people around the world are more anti-war than their forebears were. Concerning the downward trend in *civil* wars, he favors theories of economic growth (where commerce is enriching enough people, violence is less appealing—a logic similar to that of the “commercial peace” thesis that applies among nations) and the end of the Cold War (which end reduced superpower support for rival rebel factions in so many Third-World countries).

These are all **plausible mechanisms** for peace. What is more, none of them excludes any other; all could be working toward the same end. That would be somewhat puzzling, however. Is the world just lucky these days? How is it that an array of peace-inducing factors happens to be working coincidentally in our time, when such a magical array was absent in the past? The answer may be that one or more of these mechanisms reinforces some of the others, or perhaps some of them are mutually reinforcing. Some scholars, for example, have been focusing on whether economic growth might support democracy and vice versa, and whether both might support international cooperation, including to end civil wars.

We would still need to explain how this charmed circle of causes got started, however. And here let me raise another factor, perhaps even less appealing than the “nuclear peace” thesis, at least outside of the United States. That factor is what international relations scholars call hegemony—specifically American hegemony.

A theory that many regard as discredited, but that refuses to go away, is called hegemonic stability theory. The theory emerged in the 1970s in the realm of international political economy. It asserts that for the global economy to remain open—for countries to keep barriers to trade and investment low—one powerful country must take the lead. Depending on the theorist we consult, “taking the lead” entails paying for global public goods (keeping the sea lanes open, providing liquidity to the international economy), coercion (threatening to raise trade barriers or withdraw military protection from countries that cheat on the rules), or both. The theory is skeptical that international cooperation in economic matters can emerge or endure absent a hegemon. The distastefulness of such claims is self-evident: they imply that it is good for everyone the world over if one country has more wealth and power than others. More precisely, they imply that it has been good for the world that the United States has been so predominant.

There is no obvious reason why hegemonic stability theory could not apply to other areas of international cooperation, including in security affairs, human rights, international law, peacekeeping (UN or otherwise), and so on. What I want to suggest here—suggest, not test—is that American hegemony might just be a deep cause of the steady decline of political deaths in the world.

How could that be? After all, the report states that United States is the third most war-prone country since 1945. Many of the deaths depicted in Figure 10.4 were in wars that involved the United States (the Vietnam War being the leading one). Notwithstanding politicians’ claims to the contrary, a candid look at U.S. foreign policy reveals that the country is as ruthlessly self-interested as any other great power in history.

The answer is that U.S. hegemony might just be a **deeper cause of the proximate causes outlined by** Professor Mack. Consider economic growth and openness to foreign trade and investment, which (so say some theories) **render violence irrational**. American power and policies may be responsible for these in two related ways. First, at least since the 1940s Washington has prodded other countries to embrace the market capitalism that entails economic openness and produces **sustainable** economic growth. The United States promotes capitalism for selfish reasons, of course: its own domestic system depends upon growth, which in turn depends upon the efficiency gains from economic interaction with foreign countries, and the more the better. During the Cold War most of its allies accepted some degree of market-driven growth.

Second, the U.S.-led western victory in the Cold War damaged the credibility of alternative paths to development—communism and import-substituting industrialization being the two leading ones—and left market capitalism the best model. The end of the Cold War also involved an end to the billions of rubles in Soviet material support for regimes that tried to make these alternative models work. (It also, as Professor Mack notes, eliminated the superpowers’ incentives to feed civil violence in the Third World.) What we call globalization is caused in part by the emergence of the United States as the global hegemon.

The same case can be made, with somewhat more difficulty, concerning the spread of democracy. Washington has supported democracy only under certain conditions—the chief one being the absence of a popular anti-American movement in the target state—but those conditions have become much more widespread following the collapse of communism. Thus in the 1980s the Reagan administration—the most anti-communist government America ever had—began to dump America’s old dictator friends, starting in the Philippines. Today Islamists tend to be anti-American, and so the Obama administration is skittish about democracy in Egypt and other authoritarian Muslim countries. But general U.S. material and moral support for liberal democracy remains strong.

The trouble with hegemonic stability theory is that it is difficult to test. The difficulty lies in the unobservable qualities of hegemony: it is about not simply material power—guns and money—but “soft power,” persuasion, ideas, things difficult to quantify and measure. Still, many scholars of international relations continue to think that there is much to the theory. The implications are large. If American hegemony does indeed underpin, at least indirectly, the virtuous macro-trends outlined in Professor Mack’s essay—the overall downward trend in wars and political deaths—then the decline in American hegemony many analysts are now seeing is about much more than the humbling of a superpower.

### 2ac smart grid

#### Development period can still be grid investment

**Tindale, 11** [Stephen Tindale is an associate fellow at the CER, June 2011, Center for European Reform, <http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/pb_thorium_june11-153.pdf>]

The money to support research and development of molten salt reactors need not be taken from renewables or other low-carbon energy supply options. There is more than enough money available in the existing subsidies for nuclear fusion. And the argument that governments which support any form of nuclear power overlook or downplay renewables is disproved by the example of France. France gets over three-quarters of its electricity from nuclear power stations. Yet the French government has supported onshore wind farms and is now giving subsides to offshore wind. It is also subsidising an expansion of the district heating system in Paris, to distribute heat from power stations burning energy crops and waste wood which would otherwise be wasted.

**Their impact is overstated—resilience and adaptation check**

**Farrell et al, 02 -** research engineer in the Department of Engineering and Public Policy at Carnegie Mellon University and the executive director of the Carnegie Mellon Electricity Industry Center (Alexander, “Bolstering the Security of the Electric Power System,” Issues in Science and Technology, Spring, http://www.issues.org/18.3/farrell.html)

Turning out the lights

Many terrorism scenarios involve disruption of electric service, or "turning out the lights." Whether this would allow terrorists to create widespread fear and panic is open to question. In the United States, households lose power for an average of 90 minutes per year. For the most part, individuals and society cope with these outages well, and power companies respond rapidly to restore service. Facilities that have special needs for reliability, such as hospitals and airports, typically have backup generators.

The local distribution system is the source of most outages; these affect relatively small numbers of people. The bulk power (generation and transmission) system causes only a few outages each year. In its most recent report on failures in this part of the electric power system, the North American Electricity Reliability Council (NERC) identified 58 "interruptions, unusual occurrences, demand and voltage reductions, and public appeals" in 2000. Of these events, almost half (26) were due to weather, mostly thunderstorms. Operator or maintenance errors accounted for 12 events, another 12 were due to faulty equipment, and 2 (including the largest single event) were due to forest fires. Six outages occurred simply due to failure to have sufficient power to meet demand. Not all of these 58 events caused the lights to go out, but when they did, many customers were affected. Even so, recovery was typically swift. The largest single outage in 2000 affected more than 660,000 customers in New Mexico but lasted for less than four hours.

Natural challenges of even larger scale have been met. For example, in January 1998 an ice storm struck Southern Canada and New York State, felling 1,000 transmission towers and 30,000 distribution poles while sending thousands of tree branches into power lines. This event left 1.6 million people without power, some for more than a month. Almost a quarter-million people were forced to leave their homes. Insurance claims reached about $1 billion (Canadian). This event was disruptive and costly, but it did not create terror or significant loss of life.

**Tons of alt causes**

Washington Post 4 [Jay Apt (former NASA astronaut, Carnegie Mellon Electricity Industry Center Executive Director) and Lester Lave (co-director). “Blackouts Are Inevitable: Coping, Not Prevention, Should Be the Primary Goal” http://www.washingtonpost.com/wp-dyn/articles/A52952-2004Aug9.html WWX]

As we approach the first anniversary of the Blackout of '03, we're reminded of the many times that officials, from New York Gov. Nelson Rockefeller in 1977 to Gov. George Pataki now -- along with a host of senators and representatives -- have assured us that they will take steps to prevent future blackouts. Yet roughly every four months, the United States experiences a blackout large enough to darken a half-million homes. Now the pressure is on Congress to enact an energy bill that will protect us from the lights going out. There's just one problem: It can't be done.

In a large, complicated arrangement such as our system for generating, transmitting and distributing electricity, blackouts simply cannot be prevented. Data for the past four decades show that blackouts occur more frequently than theory predicts, and they suggest that it will become increasingly expensive to prevent these low-probability, high-consequence events. The various proposed "fixes" are expensive and could even be counterproductive, causing future failures because of some unanticipated interaction. The state of current engineering is such that we cannot verify that any particular change won't impose problems larger than those it is designed to remedy. Nor can we eliminate all problems. Further, with a bit of "luck" and sufficient resources, an informed, intelligent terrorist organization could get around any protective structures and software to bring down the system.

Fortunately, we do have a model to follow. The problems uncovered by the blackout of August 2003 can be addressed by the kind of changes that transformed the air traffic control system from one that had occasional deadly crashes to one that has provided a relatively crash-free environment, despite enormous growth in daily flights and occasional errors by pilots and controllers.

While making obvious improvements in control and operation of the grid, we should focus the greater part of our effort on fulfilling the mission of the electricity system, not on trying to prevent blackouts. When hurricanes, tornadoes, ice storms or other problems black out the system, backup generators at hospitals, airports and other critical institutions prevent their missions from being interrupted.

The problem in New York, Toronto, Cleveland and Detroit last Aug. 14 was not that the hospitals or television stations were blacked out. The problem was that other critical missions could not be accomplished. Elevators were stuck between floors, trains stopped between stations, traffic lights went dark, cell phones quieted, and, in Cleveland, water ceased to flow and sewers overflowed. Water treatment and pumping the water to reservoirs requires electricity; without power, water would cease to be available to many people after just a few days. If the blackout had persisted for a week, public health and welfare would have suffered from the failure of a rapidly growing number of critical missions.

Since transmission was a prime contributor to the blackout, one proposal has been to invest $100 billion in upgrading the system. But while transmission investments are required to make deregulated electricity markets work, they will not prevent future blackouts.

Natural hazards produce many local and regional blackouts, and society has learned to cope with them. In fact, August 2003 revealed that many private institutions are far ahead of the public sector in defining their critical missions and taking steps to fulfill them when the lights go out. But it was even more obvious that other facilities, and especially such public functions as traffic lights, water and sewage, were not protected. In the public sector, we need to set priorities among the missions that depend on electricity.

#### Nuke expansion inevitable

**Amano, 12** [Yukiyo, Director General of the International Atomic Energy Agency, International Status and Prospects for Nuclear Power 2012, <http://www.iaea.org/About/Policy/GC/GC56/GC56InfDocuments/English/gc56inf-6_en.pdf>]

C.2. Prospects in Countries considering the Introduction of Nuclear Power 41. Since the mid-2000s, developing countries have expressed a new or renewed interest in nuclear power. While the Fukushima Daiichi accident caused some countries to change their positions and some to take a ‘wait and see’ approach, interest continued among countries considering or planning for nuclear power introduction. 42. Table C-2 shows the number of countries at different stages of nuclear power consideration or development. Sometimes referred to as ‘nuclear newcomers’, some countries, such as Bangladesh, Egypt and Vietnam, have in fact been planning for nuclear power for some time. Others, such as Poland, are reviving the nuclear power option after plans had been curtailed when governments and public opinion changed. Countries such as Jordan and Uruguay are considering or planning for nuclear power for the first time. What they have in common is that they are all considering, planning or starting nuclear power programmes, and have not connected a first nuclear power plant to the grid. TABLE C-1. Positions of countries with operating nuclear power plants plus Lithuania Category Number of countries New unit(s) under construction with more planned/proposed 11 New unit(s) under construction but the policy for more units is not established 2 No units under construction but with plans/proposals for building new unit(s) 10 No units under construction, and currently no plans/policy for building new units 4 Firm policy not to build new units and/or for closure of existing units 4 TABLE C-2. Positions of countries without operating nuclear power plants8 Description of group Number of Countries 2012 Number of Countries 2010 Number of Countries 2008 Considering a nuclear programme to meet identified energy needs with a strong indication of intention to proceed 14 14 14 Active preparation for a possible nuclear power programme with no final decision 6 7 7 Decided to introduce nuclear power and started preparing the appropriate infrastructure 6 10 5 New nuclear power plant ordered 3 2 0 New nuclear power plant under construction 0 1 1 43. Of the 29 countries considering or planning for nuclear power in 2012, 10 are from the Asia and the Pacific region, 10 are from the Africa region, 7 are in Europe (mostly Eastern Europe) and 2 are in Latin America8 Two additional groups were included in previous editions of this publication but not in this edition because they did not add substantially to an understanding of the rising expectations for nuclear power among developing countries. One group included countries that were not planning to introduce nuclear power but were interested in considering the associated issues, but it proved difficult to characterize trends and there were wide fluctuations in the numbers from year to year. A second group included countries where an invitation to bid to supply a nuclear power plant had been prepared, but this proved problematic because of countries that were choosing to order plants through direct bilateral agreements rather than through bids. GOV/INF/2012/12-GC(56)/INF/6 Page 10 44. Even after the Fukushima Daichii accident, some countries have taken concrete steps toward nuclear power introduction. In the United Arab Emirates (UAE), in 2011, the Emirates Nuclear Energy Corporation invited bids for uranium, conversion and enrichment for the fuel for the UAE’s first reactors. In Turkey, the project company Akkuyu Nukleer Santral Elektrik Uretim filed applications for construction permits and a power generation licence. Belarus signed a contract with the Russian Federation for the construction of two reactors, and Bangladesh signed an intergovernmental agreement with the Russian Federation, also for two reactors. Vietnam signed a loan agreement with the Russian Federation regarding financing of its first nuclear power plant and announced its intention to undertake a similar agreement with Japan. 45. The Islamic Republic of Iran began commissioning of its first nuclear power plant at Bushehr in September 2011, which marked the commissioning of the first nuclear power plant in a ‘newcomer’ country in 15 years. 46. The rate at which new countries joined the list of countries operating nuclear power plants was fairly steady through the early 1980s as shown in Fig. C-1. Until the addition of the Islamic Republic of Iran in 2011, only three countries had connected their first nuclear power plants to the grid in the post-Chernobyl era — China, Mexico and Romania. The countries now planning for their first nuclear power plants are doing so after an experience gap of 15 years. Of the countries considering or planning for their first nuclear plant, 9 have explicitly expressed target dates for the first operation before 2030. FIG. C-1. Number of countries operating, or having operated, nuclear power plants. Source IAEA (PRIS) 47. Overall, Tables C-1 and C-2 are consistent with trends reflected in the Agency’s low and high projections described below, i.e. there remains substantial uncertainty in projections about nuclear power, and the growth in the use of nuclear power is projected to be driven more by expansion in established nuclear power countries than by countries starting nuclear power programmes. The 9 countries that have explicitly expressed target dates for the first operation before 2030 lie between the 7 countries in the Agency’s low projection that would connect their first plant by 2030 and the 16 countries that would do so in the high projection. GOV/INF/2012/12-GC(56)/INF/6 Page 11 C.3. Potential Drivers for the Introduction of Nuclear Power 48. The key factors that have driven rising interest in nuclear power since about 2005, and the increase in construction starts shown in Fig. B-1, have not changed with the Fukushima Daiichi accident: growing energy demand, especially for electricity; volatile fossil fuel prices; environmental pressures and energy security concerns.

### 2ac politics

#### The plan reinvigorates growth

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

With some concept tests thorium used as a nuclear fuel could end energy as a problem issue and shift the economy into a new growth phase. All the conversation in the media, politics and the economy could be moved to building the next centuries energy production with thorium and the various ways to use the metal as a fission power source. Nobel laureate Carlo Rubbia at the European Organization for Nuclear Research points out the use of thorium as a cheap, clean and safe alternative to uranium in reactors may be the magic bullet we have all been hoping for. It’s an idea well worth much more attention. The math on thorium is impressive. Dr Rubbia says a metric ton of the silvery metal produces as much energy as 200 tons of uranium, or 3,500,000 ton of coal. A handful would power a major city for a week.

#### Obama won’t push the aff -- Reid & Hatch got it on lockdown.

Caruso, ‘10

[Doug, The Colombus Dispatch, 3-7, “The mighty thorium: The nearly perfect energy source nobody has heard of,” http://www.dispatch.com/content/stories/science/2010/03/07/thorium-art-gc67nvgb-1.html]

The Department of Energy approved $200,000 in funding at Oak Ridge for analytical studies this year of molten salt reactors using thorium and uranium, a department spokeswoman said. In 2008, Sen. Orrin Hatch, R-Utah, and Sen. Harry Reid, D-Nevada., introduced a bill that would direct thorium research begin at the Idaho National Laboratory. They introduced a new bill last week.

#### No Fiscal Cliff now

**Walsh 12** [“Durbin Says Spending Talks in Congress Under Way to Avoid Cliff”, Bloomberg, Steve Walsh - Sep 14, 2012]

U.S. Senator Dick Durbin of Illinois said bipartisan negotiations are under way in his chamber to avoid mandatory federal spending cuts by using recommendations of a presidential debt-reduction commission as a framework.¶ “The Group of Eight, four Democrat, four Republican senators that I’ve been part of for two years or more, still continues to meet and talk about what we can put on the table,” Durbin, the Senate’s second-ranking Democrat, said in an interview with Bloomberg Television’s Peter Cook on the new program Capitol Gains.¶ If Congress fails to act by the end of the year, tax rates for income, capital gains, dividends and estates would increase for all taxpayers. The top income tax rate would rise to 39.6 percent from 35 percent, and the top rate on capital gains would jump to 23.8 percent from 15 percent.¶ The tax increase is part of a so-called $607 billion fiscal cliff of automatic spending cuts and revenue changes in 2013 that the nonpartisan Congressional Budget Office says would probably cause a recession if left intact.¶ Durbin, co-chairman of President Barack Obama’s re-election campaign, said a starting point for an accord is the December 2010 plan proposed by a commission led by former Senator Alan Simpson, a Wyoming Republican, and Erskine Bowles, a Democrat who served as chief of staff to then-President Bill Clinton.

#### Labor unions support nuclear power -- that shields political backlash.

**Kosterlitz, 08** (Julie, National Journal, 5/3, “Yes to Nukes,” lexis) //DH

As it plots a comeback in the United States, the nuclear power industry is cultivating a critical ally: organized labor.The reasons are both practical and political. The industry's plan to build dozens of power plants requires thousands of workers, many of them with special skills that have become scarce during a more than 20-year hiatus in major construction. Good relations with unions could pave the way to steady labor supplies, smooth relations with workers, and more training programs to provide skilled labor. Perhaps more important, the industry could use labor's clout with Democrats to help ensure support in Congress--and in a White House that could soon be home to a Democrat--for the substantial federal backing needed to help get plant construction rolling again.

#### The plan has political legs – reserves, track record, and environmental benefits

Frye, 08 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

The bulk of thorium reserves are within countries friendly to the United States. [n347](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n347) This may be one reason why, within the U.S., thorium has "political legs." Senator Orrin Hatch (R-Utah) is seeking to require DOE to develop standards for the use of thorium rather than uranium as fuel for nuclear power plants. His legislation "would force... [the DOE]... and the [NRC]... to create new offices at [those two] agencies to study thorium-fuel options and promote their use abroad." [n348](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n348) In fact, Sen. Hatch has joined with Sen. Harry Reid (D-Nev.) to sponsor the Thorium Energy Independence and Security Act of 2008, providing $ 250 million to this end. [n349](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n349) This is particularly important because DOE is currently wedded to the controversial alternative concept of the closed uranium fuel cycle, which involves reprocessing spent fuel, using a uranium-plutonium fuel blend, and burning the fuel in breeder reactors.

Another likely reason for thorium's political legs is its existing track record within the United States: the first Indian Point reactor outside New York City  [\*330]  used a thorium-uranium blend of fuel in the 1960s and 1970s, as did the Oak Ridge Tennessee reactor mentioned above. A third reason for thorium's political legs is that at least some in the environmental community view it as preferable to any other nuclear energy option. For instance, the Natural Resources Defense Council, through its Nuclear Program Director Thomas B. Cochran, considers both Senator Hatch's bill and thorium power to "make[] a lot of sense." [n350](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n350)

#### Tons of political support for thorium.

Hamlin, ‘7 [Jason, GoldStockBull -- Investment Strategies, 11-30, “Thorium Power – Investing in the Future of Nuclear Energy,” http://www.goldstockbull.com/articles/thorium-power-investing-in-the-future-of-nuclear-energy/]

There is also significant political backing for thorium, with Senators representing several Western states, including Utah’s Orrin Hatch and Senate Majority leader Harry Reid, of Nevada, working on legislation to promote thorium. They say it’s a cleaner-burning fuel for nuclear-power plants, with the potential to cut high-level nuclear-waste volumes in half. Senator Hatch is currently proposing the “Thorium Energy Independence and Security Act of 2007,” which aims to ease concerns about nuclear waste by requiring DOE to develop standards for reactors to use thorium fuel rather than uranium.

#### PC not key

**Klein, 3/19/12** [The Unpersuaded Who listens to a President? by Ezra Klein March 19, 2012, Ezra Klein is the editor of Wonkblog and a columnist at the Washington Post, as well as a contributor to MSNBC and Bloomberghttp://www.newyorker.com/reporting/2012/03/19/120319fa\_fact\_klein#ixzz1p36PrMbH]

This, Edwards says, is the reality facing modern Presidents, and one they would do well to accommodate. “In a rational world, strategies for governing should match the opportunities to be exploited,” he writes. “Barack Obama is only **the latest** in a **long line** of presidents who have not been able to transform the political landscape **through** their efforts at **persuasion**. When he succeeded in achieving major change, it was by mobilizing those ***predisposed* to support** him and driving legislation through Congress on a party-line vote.”

That’s easier said than done. We don’t have a system of government set up for Presidents to drive legislation through Congress. Rather, we have a system that was designed to encourage division between the branches but to resist the formation of political parties. The parties formed anyway, and they now use the branches to compete with one another. Add in minority protections like the filibuster, and you have a system in which the job of the President is to persuade an opposition party that has both the incentive and the power to resist him.

Jim Cooper says, “We’ve effectively lost our Congress and gained a parliament.” He adds, “At least a Prime Minister is empowered to get things done,” but “we have the extreme polarization of a parliament, with party-line voting, without the empowered Prime Minister.” And you can’t solve that with a speech.

#### And, PC splits congress and backfires

**Klein, 3/19/12** [The Unpersuaded Who listens to a President? by [Ezra Klein](http://www.newyorker.com/magazine/bios/ezra_klein/search?contributorName=ezra%20klein) March 19, 2012, Ezra Klein is the editor of Wonkblog and a columnist at the Washington Post, as well as a contributor to MSNBC and Bloomberghttp://www.newyorker.com/reporting/2012/03/19/120319fa\_fact\_klein#ixzz1p36PrMbH]

The experience helped to crystallize something that Lee had been thinking about. “Most of the work on the relationship between the President and Congress was about the President as the agenda setter,” she says. “I was coming at it from the perspective of the increase in partisanship, and so I looked at Presidents not as legislative leaders but as party leaders.” That changes things dramatically. As Lee writes in her book “Beyond Ideology” (2009), there are “inherent **zero-sum conflicts** between the two parties’ political interests as **they seek to win elections.**” Put more simply, the President’s party can’t win unless the other party loses. And both parties know it. This, Lee decided, is the true nature of our political system.

To test her theory, she created a database of eighty-six hundred Senate votes between 1981 and 2004. She found that a President’s powers of persuasion were strong, but only within his own party. Nearly four thousand of the votes were of the mission-to-Mars variety—they should have found support among both Democrats and Republicans. Absent a President’s involvement, these votes fell along party lines just a third of the time, but when a President took a stand that number rose to more than half. The same thing happened with votes on more partisan issues, such as bills that raised taxes; they **typically** split along party lines, but **when a President intervened the divide was even sharper.**

One way of interpreting this is that party members let their opinion of the President influence their evaluation of the issues. That’s not entirely unreasonable. A Democrat might have supported an intervention in Iraq but questioned George W. Bush’s ability to manage it effectively. Another interpretation is that party members let their political incentives influence how they evaluate policy. “Whatever people think about raw policy issues, they’re aware that Presidential successes will help the President’s party and hurt the opposing party,” Lee says. “It’s not to say they’re entirely cynical, but the fact that success is useful to the President’s party is going to have an effect on how members respond.” Or, to paraphrase Upton Sinclair, it’s difficult to get a man to support something if **his reelection depends on his not supporting it.**

Both parties are guilty of this practice. Karl Rove, President Bush’s deputy chief of staff, recalls discussing the Social Security privatization plan with a sympathetic Democrat on the House Ways and Means Committee. He says that the representative told him, “You wouldn’t get everything you want and I wouldn’t get everything I want, but we could solve the problem. But I can’t do it because my leadership won’t let me.” Rove says, “It was less about Social Security than it was about George W. Bush.” At various times during the nineteen-nineties, Clinton and other Democrats had been open to adding some form of private accounts to Social Security, and in 1997 there were, reportedly, quiet discussions between Democrats and Republicans about doing exactly that. In theory, this background might have led to a compromise in 2005, but Bush’s aggressive sales pitch had polarized the issue.

The Obama Administration was taken by surprise when congressional Republicans turned against the individual mandate in health-care reform; it was the Republicans, after all, who had championed the idea, in 1993, as an alternative to the Clinton initiative. During the next decade, dozens of Senate Republicans co-sponsored health-care plans that included a mandate. Mitt Romney, of course, passed one when he was governor of Massachusetts. In 2007, when Senator Jim DeMint, of South Carolina—now a favorite of the Tea Party—endorsed Romney for President, he cited his health-care plan as a reason for doing so.

Senator Orrin Hatch, of Utah, who supported the mandate before he opposed it, shrugs off his party’s change of heart. “We were fighting Hillarycare,” he has said, of the Republicans’ original position. In other words, Clinton polarized Republicans against one health-care proposal, and then Obama turned them against another.

Representative Jim Cooper, a Democrat from Tennessee, takes Lee’s thesis even further. “The more high-profile the communication effort, the less likely it is to succeed,” he says. “In education reform, I think Obama has done brilliantly, largely because it’s out of the press. But on higher-profile things, like deficit reduction, he’s had a much tougher time.”

Edwards’s work suggests that Presidential persuasion isn’t effective with the public. Lee’s work suggests that Presidential persuasion might actually have an anti-persuasive effect on the opposing party in Congress. And, because our system of government usually requires at least some members of the opposition to work with the President if anything is to get done, that suggests that the President’s attempts at persuasion might have the perverse effect of making it harder for him to govern.

### 1ar

Lollis, 11 [October 10th, Ms. Tina, Funding for Liquid-Fluoride Thorium Reactor, Online Petition Request to the Obama Administration done via an independent third party, <http://www.thepetitionsite.com/2/Green-Energy/>]

We the undersigned petition you, the Obama Administration for a cleaner, more stable and sustainable energy source. During the years of the Johnson Administration they experimented with Molten-Salt Reactors using the natural element of Thorium, which we have have an abundance of buried in the Nevada desert. With use of the Liquid-Fluoride Thorium Reactors (LFTR), you will not only provide a cleaner, sustainable energy source to the United States, but to the world, as well. Using thorium has many advantages: -Research has already been conducted (reactor active from 1965-1969 Molten Salt Reactor Experiment). -One hundred grams of Thorium meets the current US citizen's lifetime energy needs. -LFTR 'burns' nearly all of its fuel. -Current Light Water Reactors burn only 3.4% of fuel, the rest is introduced into the waste stream. -LFTR generates much less waste. -LFTR burns existing nuclear waste as a fuel source. -The Thorium decay chain produces medical isotopes including Bi-213 (Distributed Cancers). -Thorium is abundant enough in the United States to achieve Energy Independence. -LFTR is passively safe, in a full power loss, LFTR cools naturally (No chance of meltdown via power-loss/natural disaster). -LFTR is perfect for Desalinization. -LFTR could completely replace fossil fuels as our grids energy source. -Thorium is 120x more abundant naturally than fissile uranium. -Known US Thorium reserves represent well over 500 years our current TOTAL power consumption. -Thorium fuel cycles does NOT produce weapons grade waste. -Kirk Sorenson has been invited to speak to Google about this tech multiple times. -Energy Independence has massive implications on our federal budget deficit. This, and many other benefits could be found by funding further research and development of a Thorium LFTR reactors. China, France, and other countries are currently working on this technology. It would be a great travesty to allow technology we developed 50 years ago, to be commercialized by the other great nations on this earth and fall behind with a 50 year head start. Thorium LFTR technology, is Green and Sustainable Technology. The resource is sufficiently large to be inexhaustible on a large scale time frame (500-5000 years in proven reserves per current energy usage). The resource is Green because of its lack of airborne greenhouse gasses, along with its ability to completely replace dirty fossil fuels. Kirk Sorenson projects 2-5 years for a prototype, 300-400million dollars, 5-10 years for commercial production.

#### The plan precipitates widespread investment – solves US leadership

Caruso, 10 [The Columbus Dispatch Sunday March 7, 2010 8:40 AM, “The Mighty Thorium”, http://www.dispatch.com/content/stories/science/2010/03/07/thorium-art-gc67nvgb-1.html]

So why aren't there thorium reactors all over the country? Several nuclear scientists said the nation was simply too wedded to uranium when the Department of Energy cut funding to the Oak Ridge reactor research. "It was demonstrated in a couple of test reactors here that it works and it works well," said Dan Ingersoll, senior program manager for nuclear technology programs at Oak Ridge National Laboratory. "It was abandoned not because it was a bad idea. It was a matter of having limited resources at the national level and choosing a single technology." In other words, given the investment the nation had already made in uranium enrichment and power plants, the government backed research into the next generation of more-efficient uranium reactors and took thorium off the menu. Weapons had nothing to do with the decision, Ingersoll said. But at the height of the Cold War, uranium had another advantage over thorium: Uranium reactors produce plutonium, which makes much better bomb fuel. India is pursuing thorium. Both uranium and thorium are mined as ore and then separated from the rock. But thorium is four times more prevalent in Earth's crust than uranium. "They have tons of thorium and almost no uranium resources," Ingersoll said. "To me, that's the compelling argument. We've already made the investment and we have no shortage of uranium." Richard Denning, a professor of mechanical engineering at Ohio State University who studies the safety of nuclear reactor designs, agreed that uranium is a proven technology that is here to stay. "Right now, we're so into the fuel cycle," he said. "There is enough uranium to fuel the next generation of plants, which will look much like the last generation." Sorensen and others warn that if we don't invest in thorium, others will beat us to it. In addition to India, which is pursuing less-efficient, water-cooled thorium reactors, he said, the Czech Republic is exploring liquid fluoride thorium reactors similar to reactors tested at Oak Ridge.

#### No debt downgrade

Politi, 9-11-12

[Danielle, Slate, “Moody’s Warns it Could Downgrade U.S. Credit Rating if Budget Talks Fail,” <http://www.slate.com/blogs/the_slatest/2012/09/11/moody_s_u_s_credit_rating_threatens_to_cut_from_aaa_to_aa1.html>]

If the budget talks in Congress fail to reach a deficit reduction deal, Moody’s could very well join rival Standard & Poor’s in taking away America’s prized triple A credit rating. Moody's said that if Congress gets rid of planned spending cuts and tax increases set to take effect next year and doesn’t institute deficit-reduction measures, the United States would lose the top-notch rating, reports the [Wall Street Journal](http://online.wsj.com/article/SB10000872396390444017504577645310593048338.html?mod=WSJ_hp_LEFTWhatsNewsCollection).¶ Moody’s currently gives the United States the top Aaa credit rating, but with a negative outlook. If negotiations in Congress fail to produce “a stabilization and then downward trend in the ratio of federal debt to GDP over the medium term” the agency would likely lower the rating to Aa1, reports [Reuters](http://www.reuters.com/article/2012/09/11/us-markets-rating-usa-idUSBRE88A0R420120911). The warning provides additional pressure to lawmakers because it seems to make clear that it won’t be enough to avert the infamous “fiscal cliff,” but rather lawmakers have to come up with a broad agreement to decrease debt, points out the [Financial Times](http://www.ft.com/intl/cms/s/0/17dcd728-fc18-11e1-af33-00144feabdc0.html#axzz26Bio7Bwo).

#### Seriously, no impact

Lawrence Korb (former assistant secretary of defense in the Reagan administration, is a senior fellow at the Center for American Progress) September 9, 2012 ‘Cuts Would Not Affect Security” http://www.nytimes.com/roomfordebate/2012/09/09/how-big-should-the-defense-budget-be/cuts-would-not-affect-security

But the United States can afford defense cuts, without undermining national security, for four reasons:¶ First, the United States has just gone through an enormous defense buildup. The budget increased, in real terms, for an unprecedented 13 straight years between 1998 and 2012. Even during the Reagan buildup, defense spending grew for only four years before dropping back to more sustainable levels.¶ Second, the cuts being discussed are smaller than they seem. The first $500 billion come from projected growth, so the budget will fall by just $6 billion next year and then grow at about the same pace as inflation. Even with sequestration, defense spending would be brought back only to its 2006 level in real terms -- more than we spent on average under Presidents Ronald Reagan and George H. W. Bush.¶ Third, ending this indiscriminate growth will force the Pentagon to manage its funds more carefully. Over the past decade, the Pentagon squandered $46 billion on weapons it later canceled, and let half its procurement programs balloon beyond their original budgets.¶ Finally, we face a world with relatively few major threats. And even with sequestration-size cuts, we would still account for more than 40 percent of the world’s defense spending, and our allies would account for about half of the rest.

#### Obama absent on the issue pc not key

Fox News, 9-12, 12, http://www.foxnews.com/on-air/on-the-record/2012/09/12/moodys-puts-pressure-congress-debt-deal-most-predictable-crisis-youll-ever-see#ixzz26GDjJCeB

\*\*\*THEIR EVIDENCE BEGINS\*\*\*THUNE: Well, look, I think that there's -- you know, this has to be addressed. And we've been saying for some time that we need a plan. Now, obviously, the Republicans in Congress, particularly the House of Representatives, have passed legislation that would avert the sequestration that would cut so dramatically our military spending. They've also -- and so has the Senate, Republicans, voted on legislation that would extend the tax rates, which is the other element in the fiscal cliff.¶ So there are steps that are being taken by those of us at least who see this as a very, very serious issue to try and avert what could be a bad crisis starting next year. But I think it's going to take presidential leadership. This is something where the president of the United States has got to step forward and put forward a plan. His budget last year was so disregarded by Congress that it got defeated 97 to 0 in the United States Senate. It wasn't a serious, meaningful attempt to get at this problem. And the problem worsens by the day. I mean, it...¶ VAN SUSTEREN: Well, but for the life of me, it's, like, where is he? I mean, if he's got to show leadership -- I mean, like, I realize there's a logjam on Capitol Hill. I realize the Senate's run by the Democrats and the House by the Republicans. But there is -- there is a logjam. It's costing all of us, you know, money every single day.\*\*\*THEIR EVIDENCE ENDS\*\*\*¶ You know, why -- why do you think -- he won't come here and talk to me, but why isn't he here in Washington, pounding the heads in the Senate and pounding the heads in the House?

#### Capital fails on Republicans—ideology outweighs

**Ornstein and Mann 2012** – \*PhD in political science from Michigan, resident scholar at AEI, \*\*senior fellow at the Brookings Institution (4/27, Norman and Thomas, Washington Post, “Let’s just say it: The Republicans are the problem.”, http://www.washingtonpost.com/opinions/lets-just-say-it-the-republicans-are-the-problem/2012/04/27/gIQAxCVUlT\_print.html, WEA)

We have been studying Washington politics and Congress for more than 40 years, and never have we seen them this dysfunctional. In our past writings, we have criticized both parties when we believed it was warranted. Today, however, we have no choice but to acknowledge that the core of the problem lies with the Republican Party.

The GOP has become an insurgent outlier in American politics. It is ideologically extreme; scornful of compromise; [unmoved by conventional understanding of facts, evidence and science](http://www.washingtonpost.com/opinions/liberals-and-conservatives-dont-just-vote-differently-they-think-differently/2012/04/12/gIQAzb1kDT_story.html); and dismissive of the legitimacy of its political opposition.

When one party moves this far from the mainstream, it makes it nearly impossible for the political system to deal constructively with the country’s challenges.

“Both sides do it” or “There is plenty of blame to go around” are the traditional refuges for an American news media intent on proving its lack of bias, while political scientists prefer generality and neutrality when discussing [partisan polarization](http://www.washingtonpost.com/opinions/turned-off-from-politics-thats-exactly-what-the-politicians-want/2012/04/20/gIQAffxKWT_story.html). Many self-styled bipartisan groups, in their search for common ground, propose solutions that move both sides to the center, a strategy that is simply untenable when one side is so far out of reach.

It is clear that the center of gravity in the Republican Party has shifted sharply to the right. Its once-legendary moderate and center-right legislators in the House and the Senate — think Bob Michel, Mickey Edwards, John Danforth, Chuck Hagel — are virtually extinct.

The post-McGovern Democratic Party, by contrast, while losing the bulk of its conservative Dixiecrat contingent in the decades after the civil rights revolution, has retained a more diverse base. Since the Clinton presidency, it has hewed to the center-left on issues from welfare reform to fiscal policy. While the Democrats may have moved from their 40-yard line to their 25, the Republicans have gone from their 40 to somewhere behind their goal post.

What happened? Of course, there were larger forces at work beyond the realignment of the South. They included the mobilization of social conservatives after the 1973 Roe v. Wade decision, the anti-tax movement launched in 1978 by California’s Proposition 13, the rise of conservative talk radio after a congressional pay raise in 1989, and the emergence of Fox News and right-wing blogs. But the real move to the bedrock right starts with two names: [Newt Gingrich](http://www.washingtonpost.com/newt-gingrich-2012-presidential-campaign/gIQAGLQzcO_topic.html) and [Grover Norquist](http://www.washingtonpost.com/lifestyle/style/grover-norquist-the-anti-tax-enforcer-behind-the-scenes-of-the-debt-debate/2011/07/12/gIQAPGNSBI_story.html).

From the day he entered Congress in 1979, Gingrich had a strategy to create a Republican majority in the House: convincing voters that the institution was so corrupt that anyone would be better than the incumbents, especially those in the Democratic majority. It took him 16 years, but by bringing ethics charges against Democratic leaders; provoking them into overreactions that enraged Republicans and united them to vote against Democratic initiatives; exploiting scandals to create even more public disgust with politicians; and then recruiting GOP candidates around the country to run against Washington, Democrats and Congress, Gingrich accomplished his goal.

Ironically, after becoming speaker, Gingrich wanted to enhance Congress’s reputation and was content to compromise with President Bill Clinton when it served his interests. But the forces Gingrich unleashed destroyed whatever comity existed across party lines, activated an extreme and virulently anti-Washington base — most recently represented by tea party activists — and helped drive moderate Republicans out of Congress. (Some of his progeny, elected in the early 1990s, moved to the Senate and polarized its culture in the same way.)

Norquist, meanwhile, founded Americans for Tax Reform in 1985 and rolled out his Taxpayer Protection Pledge the following year. The pledge, which [binds its signers to never support a tax increase](http://www.washingtonpost.com/blogs/ezra-klein/post/why-grover-norquists-anti-tax-pledge-works--even-among-voters-who-support-taxes/2012/04/17/gIQAo6IDOT_blog.html) (that includes closing tax loopholes), had been signed as of last year by 238 of the 242 House Republicans and 41 of the 47 GOP senators, according to ATR. The Norquist tax pledge has led to other pledges, on issues such as climate change, that create additional litmus tests that box in moderates and make cross-party coalitions nearly impossible. For Republicans concerned about a primary challenge from the right, the failure to sign such pledges is simply too risky.

Today, thanks to the GOP, compromise has gone out the window in Washington. In the first two years of the Obama administration, nearly every presidential initiative met with vehement, rancorous and unanimous Republican opposition in the House and the Senate, followed by efforts to delegitimize the results and repeal the policies. The filibuster, once relegated to a handful of major national issues in a given Congress, became a routine weapon of obstruction, applied even to widely supported bills or presidential nominations. And Republicans in the Senate have abused the confirmation process to block any and every nominee to posts such as the head of the Consumer Financial Protection Bureau, solely to keep laws that were legitimately enacted from being implemented.

In the third and now fourth years of the Obama presidency, divided government has produced something closer to complete gridlock than we have ever seen in our time in Washington, with partisan divides even leading last year to [America’s first credit downgrade](http://www.washingtonpost.com/business/economy/sandp-considering-first-downgrade-of-us-credit-rating/2011/08/05/gIQAqKeIxI_story.html).

On financial stabilization and economic recovery, on deficits and debt, on climate change and [health-care reform](http://www.washingtonpost.com/opinions/how-the-roberts-court-could-save-health-care/2012/03/07/gIQALljXGS_story.html), Republicans have been the force behind the widening ideological gaps and the strategic use of partisanship. In [the presidential campaign](http://www.washingtonpost.com/politics/campaigns) and in Congress, GOP leaders have embraced fanciful policies on taxes and spending, kowtowing to their party’s most strident voices.

Republicans often dismiss nonpartisan analyses of the nature of problems and the impact of policies when those assessments don’t fit their ideology. In the face of the deepest economic downturn since the Great Depression, the party’s leaders and their outside acolytes insisted on obeisance to a supply-side view of economic growth — thus fulfilling Norquist’s pledge — while ignoring contrary considerations.

The results can border on the absurd: In early 2009, several of the eight Republican co-sponsors of a bipartisan health-care reform plan dropped their support; by early 2010, the others had turned on their own proposal so that there would be zero GOP backing for any bill that came within a mile of Obama’s reform initiative. As one co-sponsor, Sen. Lamar Alexander (R-Tenn.), [told The Washington Post’s Ezra Klein](http://voices.washingtonpost.com/ezra-klein/2010/02/alexander_draft.html): “I liked it because it was bipartisan. I wouldn’t have voted for it.”

And seven Republican co-sponsors of a Senate resolution to create a debt-reduction panel voted in January 2010 against their own resolution, solely to keep it from getting to the 60-vote threshold Republicans demanded and thus denying the president a seeming victory.

This attitude filters down far deeper than the party leadership. Rank-and-file GOP voters endorse the strategy that the party’s elites have adopted, eschewing compromise to solve problems and insisting on principle, even if it leads to gridlock. Democratic voters, by contrast, along with self-identified independents, are more likely to favor deal-making over deadlock.

Democrats are hardly blameless, and they have their own extreme wing and their own predilection for hardball politics. But these tendencies do not routinely veer outside the normal bounds of robust politics. If anything, under the presidencies of Clinton and Obama, the Democrats have become more of a status-quo party. They are centrist protectors of government, reluctantly willing to revamp programs and trim retirement and health benefits to maintain its central commitments in the face of fiscal pressures.

No doubt, Democrats were not exactly warm and fuzzy toward George W. Bush during his presidency. But recall that they worked hand in glove with the Republican president on the No Child Left Behind Act, provided crucial votes in the Senate for his tax cuts, joined with Republicans for all the steps taken after the Sept. 11, 2001, attacks and supplied the key votes for the Bush administration’s financial bailout at the height of the economic crisis in 2008. The difference is striking.

The GOP’s evolution has become too much for some longtime Republicans. Former senator Chuck Hagel of Nebraska [called his party “irresponsible”](http://www.washingtonpost.com/blogs/the-fix/post/afternoon-fix-hagel-disgusted-by-republicans/2011/09/01/gIQAdiA3uJ_blog.html) in an interview with the Financial Times in August, at the height of the debt-ceiling battle. “I think the Republican Party is captive to political movements that are very ideological, that are very narrow,” he said. “I’ve never seen so much intolerance as I see today in American politics.”

And Mike Lofgren, a veteran Republican congressional staffer, wrote [an anguished diatribe](http://truth-out.org/index.php?option=com_k2&view=item&id=3079:goodbye-to-all-that-reflections-of-a-gop-operative-who-left-the-cult) last year about why he was ending his career on the Hill after nearly three decades. “The Republican Party is becoming less and less like a traditional political party in a representative democracy and becoming more like an apocalyptic cult, or one of the intensely ideological authoritarian parties of 20th century Europe,” he wrote on the Truthout Web site.

Shortly before Rep. West went off the rails with his accusations of communism in the Democratic Party, political scientists Keith Poole and Howard Rosenthal, who have long tracked historical trends in political polarization, said their studies of congressional votes found that Republicans are now more conservative than they have been in more than a century. The

ir data show [a dramatic uptick in polarization](http://voteview.com/political_polarization.asp), mostly caused by the sharp rightward move of the GOP.

If our democracy is to regain its health and vitality, the culture and ideological center of the Republican Party must change. In the short run, without a massive (and unlikely) across-the-board rejection of the GOP at the polls, that will not happen. If anything, Washington’s ideological divide will probably grow after the 2012 elections.

1. [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. [↑](#footnote-ref-6)
7. [↑](#footnote-ref-7)
8. [↑](#footnote-ref-8)
9. [↑](#footnote-ref-9)
10. [↑](#footnote-ref-10)
11. [↑](#footnote-ref-11)
12. [↑](#footnote-ref-12)
13. [↑](#footnote-ref-13)
14. [↑](#footnote-ref-14)
15. [↑](#footnote-ref-15)
16. [↑](#footnote-ref-16)
17. [↑](#footnote-ref-17)
18. [↑](#footnote-ref-18)
19. [↑](#footnote-ref-19)
20. [↑](#footnote-ref-20)
21. [↑](#footnote-ref-21)
22. [↑](#footnote-ref-22)
23. [↑](#footnote-ref-23)
24. [↑](#footnote-ref-24)
25. [↑](#footnote-ref-25)
26. [↑](#footnote-ref-26)
27. [↑](#footnote-ref-27)
28. [↑](#footnote-ref-28)
29. [↑](#footnote-ref-29)
30. [↑](#footnote-ref-30)
31. [↑](#footnote-ref-31)
32. [↑](#footnote-ref-32)
33. [↑](#footnote-ref-33)
34. [↑](#footnote-ref-34)
35. [↑](#footnote-ref-35)
36. [↑](#footnote-ref-36)
37. [↑](#footnote-ref-37)
38. [↑](#footnote-ref-38)
39. [↑](#footnote-ref-39)
40. [↑](#footnote-ref-40)
41. [↑](#footnote-ref-41)
42. [↑](#footnote-ref-42)
43. [↑](#footnote-ref-43)
44. [↑](#footnote-ref-44)
45. [↑](#footnote-ref-45)
46. [↑](#footnote-ref-46)
47. [↑](#footnote-ref-47)
48. [↑](#footnote-ref-48)
49. [↑](#footnote-ref-49)
50. [↑](#footnote-ref-50)
51. [↑](#footnote-ref-51)
52. [↑](#footnote-ref-52)
53. [↑](#footnote-ref-53)
54. [↑](#footnote-ref-54)
55. [↑](#footnote-ref-55)
56. [↑](#footnote-ref-56)
57. [↑](#footnote-ref-57)
58. [↑](#footnote-ref-58)