### 1AC Defense

#### Grid failure inevitable, 4 reasons: Overload, weather, cyber attacks, supply disruption

DSB Taskforce 2008 (Defense Science Board Task Force, Federal Advisory Committee established to provide independent advice to the Secretary of Defense, Tom Morehouse, editor, February 2008, Office of the Under Secretary of Defense For Acquisition, Technology, and Logistics, http://www.acq.osd.mil/dsb/reports/ADA477619.pdf)

The first risk is from overload. As wires become overloaded, they heat up and sag, making them vulnerable to entanglement with trees and other objects. This happened near Cleveland, Ohio on August 14, 2003. According to the U.S.-Canada Power System Outage Task Force, high demand caused a high-voltage line to come in contact with overgrown trees. The resulting cascade of failures plunged many of the 50 million people in the Northeast U.S. and Canada living in an area covering 9,300 square miles into darkness. It shut down more than 500 generating units at 265 power plants, including 22 nuclear plants.29¶ A second risk comes from natural disasters, such as hurricanes, tornadoes, electrical storms or other extreme weather events. The consequences could be very much as described above, but with the added risk of physical damage to the infrastructure. Favorable commentary about the performance of the grid following the August 2003 outage focused on the fact that restoration occurred fairly quickly. Within a few days power was restored virtually everywhere, with much of the area back up within a few hours. This was largely because safety features built into the grid successfully prevented damage to critical equipment such as generators, breakers and transformers. 30 However, the Task Force is concerned that such an extensive outage could be caused by such a commonplace event – a single line contacting a tree. This inevitably raises the next issue below: what the result might have been had there been physical damage to infrastructure, such as from a deliberate attack by knowledgeable adversaries?¶ A third risk comes from sabotage or terrorist activity, whether local, trans-national, or state-sponsored, and including both conventional and nuclear attack. Nuclear attack could take place either directly or through the generation of a high altitude electromagnetic pulse (EMP). The grid is a relatively easy target for a terrorist. It is brittle, increasingly centralized, capacity-strained, and largely unprotected from physical attack, with little stockpiling of critical hardware. Although the system is designed to survive single points of failure, increasing demand on the system and increasing network constraints make multiple points of failure more likely. These are difficult to anticipate and more likely to result in cascading outages and catastrophic outages that cover large areas for long periods of time. Network Single Points of Failure (NSPF) are abundant. High voltage transformers, breakers, and other long-lead time items are particularly critical system elements.31 They can be easily targeted and destroyed. Grid sections could be taken down for months even if replacement transformers and breakers could be found; or for years if certain components need to be newly manufactured and transported. There are only limited backups located around the country—generally co-located with operating equipment. For some of the largest equipment, there is no domestic supply and only limited overseas production capacity which is fully booked years ahead. 32 For example, 765 kV transformers are manufactured only by one company in Canada. Armed with the right knowledge, a small number of people could shut down electricity over significant areas for an extended period of time, including power to critical DoD missions. The grid is not designed to withstand a coordinated multi-pronged or wide-area attack.33 The Task Force noted that attacks on the grid are one of the most common and effective tactics of insurgents in Iraq, and are increasingly seen in Afghanistan.34¶ In addition to physical attacks on the grid, there is the potential for cyber attacks. U.S. grid control systems are continuously probed electronically, and there have been numerous attempted attacks on the Supervisory Control and Data Acquisition (SCADA) systems that operate the grid. None have yet resulted in major problems in the U.S., but the potential exists for major outages in the same way successful hackers can disrupt computer networks.35 Further details regarding the potential for deliberate attacks to the grid and their potential consequences are contained in a classified annex to this report.¶ A fourth risk comes from interruptions in supplies to generating plants, which can be caused by natural events, infrastructure failures, attack or even market forces. This occurred in California during 2000 and 2001 when supplies of natural gas were interrupted and forced a reduction in electricity generation.36 Approximately 20% of U.S. electricity is generated by natural gas and market prices have swung wildly over the past several years.37 Approximately 52% of U.S. electricity is generated by coal and transportation routes that move coal from mines to generating plants are sometimes remote and lacking in alternatives. Critical rail lines or bridges could be taken out by determined saboteurs. For example, in May 2005, 43 rail cars came off the tracks. The disruption to coal deliveries caused prices to spike, and raised electricity prices by 6% nationally, according to the Bureau of Labor Statistics. The 100 mile length of rail line through Wyoming that carries the output of the Western coal belt to power plants is the most heavily traveled in the nation.38 So in addition to risks from grid outage, there are risks to the supply chain that enables the grid to work—not least from electricity supply failures themselves, which could disable the pipelines and controls used by other forms of energy, notably oil and gas.

#### Takes out military installations and causes mission disruption- Confusion causes nuclear escalation- SMRs key

**Andres and Breetz 2011** (Richard B. Andres, Professor of National Security Strategy at the National War College and a Senior fellow in energy and environmental Security and Policy Chair in the Center for Strategic research, institute for national Strategic Studies, at the national Defense University, and Hanna L. Breetz, doctoral candidate in the Department of Political Science at the Massachusetts institute of technology, February 2011, “Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications,” National Defense University Strategic Forum, http://www.ndu.edu/press/lib/pdf/strforum/sf-262.pdf)

The DOD interest in small reactors derives largely from problems with base and logistics vulnerability. Over the last few years, the Services have begun to reexamine virtually every aspect of how they generate and use energy with an eye toward cutting costs, decreasing carbon emissions, and reducing energy-related vulnerabilities. These actions have resulted in programs that have signifcantly reduced DOD energy consumption and green-house gas emissions at domestic bases. Despite strong efforts, however, two critical security issues have thus far proven resistant to existing solutions: bases’ vulnerability to civilian power outages, and the need to transport large quantities of fuel via convoys through hostile territory to forward locations. Each of these is explored below.¶ Grid Vulnerability. DOD is unable to provide its bases with electricity when the civilian electrical grid is offline for an extended period of time. Currently, domestic military installations receive 99 percent of their electricity from the civilian power grid. As explained in a recent study from the Defense Science Board:¶ DOD’s key problem with electricity is that critical missions, such as national strategic awareness and national command authorities, are almost **entirely dependent** on the national transmission grid . . . [which] is fragile, vulnerable, near its capacity limit, and outside of DOD control. In most cases, neither the grid nor on-base backup power provides sufficient reliability to ensure continuity of critical national priority functions and oversight of strategic missions in the face of a long term (several months) outage.7¶ The grid’s fragility was demonstrated during the 2003 Northeast blackout in which 50 million people in the United States and Canada lost power, some for up to a week, when one Ohio utility failed to properly trim trees. The blackout created cascading disruptions in sewage systems, gas station pumping, cellular communications, border check systems, and so forth, and demonstrated the interdependence of modern infrastructural systems.8 More recently, awareness has been growing that the grid is also vulnerable to purposive attacks. A report sponsored by the **D**epartment of **H**omeland **S**ecurity suggests that a coordinated cyberattack on the grid could result in a third of the country losing power for a period of weeks or months.9 Cyberattacks on critical infrastructure are not well understood. It is not clear, for instance, whether existing terrorist groups might be able to develop the capability to conduct this type of attack. It is likely, however, that some nation-states either have or are working on developing the ability to take down the U.S. grid. In the event of a war with one of these states, it is possible, if not likely, that parts of the civilian grid would cease to function, taking with them military bases located in affected regions. Government and private organizations are currently working to secure the grid against attacks; however, it is not clear that they will be successful. Most military bases currently have backup power that allows them to func- tion for a period of hours or, at most, a few days on their own. If power were not restored after this amount of time, the results could be disastrous. First, military assets taken offline by the crisis would not be available to help with di- saster relief. Second, during an extended blackout, global military operations could be seriously compromised; this disruption would be particularly serious if the blackout was induced during major combat operations. During the Cold War, this type of event was far less likely because the¶ United States and Soviet Union shared the common un- derstanding that blinding an opponent with a grid black-out could escalate to **nuclear war**. America’s current opponents, however, may not share this fear or be deterred by this possibility. In 2008, the Defense Science Board stressed that DOD should mitigate the electrical grid’s vulnerabili- ties by turning military installations into “islands” of energy self-sufficiency.10 The department has made ef- forts to do so by promoting efficiency programs that lower power consumption on bases and by constructing renewable power generation facilities on selected bases. Unfortunately, these programs will not come close to reaching the goal of islanding the vast majority of bases. Even with massive investment in efficiency and renew- ables, most bases would not be able to function for more than a few days after the civilian grid went offline.¶ Unlike other alternative sources of energy, small reactors have the potential to solve DOD’s vulnerability to grid outages. Most bases have relatively light power demands when compared to civilian towns or cities. Small reactors could easily support bases’ power demands separate from the civilian grid during crises. In some cases, the reactors could be designed to produce enough power not only to supply the base, but also to provide critical services in surrounding towns during long-term outages.¶ Strategically, islanding bases with small reactors has another benefit. One of the main reasons an enemy might be willing to risk reprisals by taking down the U.S. grid during a period of military hostilities would be to affect ongoing military operations. Without the lifeline of intelligence, communication, and logistics provided by U.S. domestic bases, American military operations would be compromised in almost any con- ceivable contingency. Making bases more resilient to civilian power outages would reduce the incentive for an opponent to attack the grid. An opponent might still attempt to take down the grid for the sake of dis- rupting civilian systems, but the powerful incentive to do so in order to win an ongoing battle or war would be greatly reduced.

#### Mission disruptions cause every hotspot to escalate

Kagan and O’Hanlon 2007 (Frederick Kagan, resident scholar at AEI, and Michael O’Hanlon, senior fellow in foreign policy at Brookings, April 24, 2007, “The Case for Larger Ground Forces,” http://www.aei.org/files/2007/04/24/20070424\_Kagan20070424.pdf)

We live at a time when wars not only rage in nearly every region but threaten to erupt in many places where the current relative calm is tenuous. To view this as a strategic military challenge for the United States is not to espouse a specific theory of America’s role in the world or a certain political philosophy. Such an assessment flows directly from the basic biparti- san view of American foreign policy makers since World War II that overseas threats must be countered before they can directly threaten this country’s shores, that the basic stability of the international system is essential to American peace and prosperity, and that no country besides the United States is in a position to lead the way in countering major challenges to the global order.¶ Let us highlight the threats and their conse- quences with a few concrete examples, emphasiz- ing those that involve key strategic regions of the world such as the Persian Gulf and East Asia, or key potential threats to American security, such as the spread of nuclear weapons and the strengthening of the global Al Qaeda/jihadist movement. The Iranian government has rejected a series of international demands to halt its efforts at enriching uranium and submit to inter-¶ national inspections. What will happen if the US—or Israeli—government becomes convinced that Tehran is on the verge of fielding a nuclear weapon? North Korea, of course, has already done so, and the ripple effects are beginning to spread. Japan’s recent election to supreme power of a leader who has promised to rewrite that country’s constitution to support increased armed forces—and, possibly, even nuclear weapons— may well alter the delicate balance of fear in Northeast Asia fundamentally and rapidly. Also, in the background, at least for now, Sino- Taiwanese tensions continue to flare, as do tensions between India and Pakistan, Pakistan and Afghanistan, Venezuela and the United States, and so on. Meanwhile, the world’s noninterven- tion in Darfur troubles consciences from Europe to America’s Bible Belt to its bastions of liberal- ism, yet with no serious international forces on offer, the bloodletting will probably, tragically, continue unabated.¶ And as bad as things are in Iraq today, they could get worse. What would happen if the key Shiite figure, Ali al Sistani, were to die? If another major attack on the scale of the Golden Mosque bombing hit either side (or, perhaps, both sides at the same time)? Such deterioration might con- vince many Americans that the war there truly was lost—but the costs of reaching such a con- clusion would be enormous. Afghanistan is somewhat more stable for the moment, although a major Taliban offensive appears to be in the offing.¶ Sound US grand strategy must proceed from the recognition that, over the next few years and decades, the world is going to be a very unsettled and quite dangerous place, with Al Qaeda and its associated groups as a subset of a much larger set of worries. The only serious response to this international environment is to develop armed forces capable of protecting America’s vital interests throughout this dangerous time. Doing so requires a military capa- ble of a wide range of missions—including not only deterrence of great power conflict in deal- ing with potential hotspots in Korea, the Taiwan Strait, and the Persian Gulf but also associated with a variety of Special Forces activities and stabilization operations. For today’s US military, which already excels at high technology and is increasingly focused on re-learning the lost art of counterinsurgency, this is first and foremost a question of finding the resources to field a large-enough standing Army and Marine Corps to handle personnel- intensive missions such as the ones now under way in Iraq and Afghanistan.¶ Let us hope there will be no such large-scale missions for a while. But preparing for the possibility, while doing whatever we can at this late hour to relieve the pressure on our soldiers and Marines in ongoing operations, is¶ prudent. At worst, the only potential down- side to a major program to strengthen the mil- itary is the possibility of spending a bit too much money. Recent history shows no link between having a larger military and its overuse; indeed, Ronald Reagan’s time in office was characterized by higher defense budgets and yet much less use of the military, an outcome for which we can hope in the coming years, but hardly guarantee. While the authors disagree between ourselves about proper increases in the size and cost of the military (with O’Hanlon preferring to hold defense to roughly 4 percent of GDP and seeing ground forces increase by a total of perhaps 100,000, and Kagan willing to devote at least 5 percent of GDP to defense as in the Reagan years and increase the Army by at least 250,000), we agree on the need to start expanding ground force capabilities by at least 25,000 a year immediately. Such a measure is not only pru- dent, it is also badly overdue.

**Ambiguous relative capabilities spark great power conflict- Status competition drives decisionmaking**

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

Second, I question the dominant view that status quo evaluations are relatively independent of the distribution of capabilities. If the status of states depends in some measure on their relative capabilities, and if states derive utility from status, then different distributions of capabilities may affect levels of satisfaction, just as different income distributions may affect levels of status competition in domestic settings. 6 Building on research in psychology and sociology, I argue that even capabilities distributions among major powers foster ambiguous status hierarchies, which generate more dissatisfaction and clashes over the status quo. And the more stratified the distribution of capabilities, the less likely such status competition is. Unipolarity thus generates far fewer incentives than either bipolarity or multipolarity for direct great power positional competition over status. Elites in the other major powers continue to prefer higher status, but in a unipolar system they face comparatively weak incentives to translate that preference into costly action. And the absence of such incentives matters because social status is a positional good—something whose value depends on how much one has in relation to others.7 “If everyone has high status,” Randall Schweller notes, “no one does.”8 While one actor might increase its status, all cannot simultaneously do so. High status is thus inherently scarce, and competitions for status tend to be zero sum.9 I begin by describing the puzzles facing predominant theories that status competition might solve. Building on recent research on social identity and status seeking, I then show that under certain conditions the ways decision makers identify with the states they represent may prompt them to frame issues as positional disputes over status in a social hierarchy. I develop hypotheses that tailor this scholarship to the domain of great power politics, showing how the probability of status competition is likely to be linked to polarity. The rest of the article investigates whether there is sufficient evidence for these hypotheses to warrant further refinement and testing. I pursue this in three ways: by showing that the theory advanced here is consistent with what we know about large-scale patterns of great power conflict through history; by [End Page 30] demonstrating that the causal mechanisms it identifies did drive relatively secure major powers to military conflict in the past (and therefore that they might do so again if the world were bipolar or multipolar); and by showing that observable evidence concerning the major powers’ identity politics and grand strategies under unipolarity are consistent with the theory’s expectations. Puzzles of Power and War Recent research on the connection between the distribution of capabilities and war has concentrated on a hypothesis long central to systemic theories of power transition or hegemonic stability: that major war arises out of a power shift in favor of a rising state dissatisfied with a status quo defended by a declining satisfied state.10 Though they have garnered substantial empirical support, these theories have yet to solve two intertwined empirical and theoretical puzzles—each of which might be explained by positional concerns for status. First, if the material costs and benefits of a given status quo are what matters, why would a state be dissatisfied with the very status quo that had abetted its rise? The rise of China today naturally prompts this question, but it is hardly a novel situation. Most of the best known and most consequential power transitions in history featured rising challengers that were prospering mightily under the status quo. In case after case, historians argue that these revisionist powers sought recognition and standing rather than specific alterations to the existing rules and practices that constituted the order of the day. In each paradigmatic case of hegemonic war, the claims of the rising power are hard to reduce to instrumental adjustment of the status quo. In R. Ned Lebow’s reading, for example, Thucydides’ account tells us that the rise of Athens posed unacceptable threats not to the security or welfare of Sparta but rather to its identity as leader of the Greek world, which was an important cause of the Spartan assembly’s vote for war.11 The issues that inspired Louis XIV’s and Napoleon’s dissatisfaction with the status quo were many and varied, but most accounts accord [End Page 31] independent importance to the drive for a position of unparalleled primacy. In these and other hegemonic struggles among leading states in post-Westphalian Europe, the rising challenger’s dissatisfaction is often difficult to connect to the material costs and benefits of the status quo, and much contemporary evidence revolves around issues of recognition and status.12 Wilhemine Germany is a fateful case in point. As Paul Kennedy has argued, underlying material trends as of 1914 were set to propel Germany’s continued rise indefinitely, so long as Europe remained at peace.13 Yet Germany chafed under the very status quo that abetted this rise and its elite focused resentment on its chief trading partner—the great power that presented the least plausible threat to its security: Great Britain. At fantastic cost, it built a battleship fleet with no plausible strategic purpose other than to stake a claim on global power status.14 Recent historical studies present strong evidence that, far from fearing attacks from Russia and France, German leaders sought to provoke them, knowing that this would lead to a long, expensive, and sanguinary war that Britain was certain to join.15 And of all the motivations swirling round these momentous decisions, no serious historical account fails to register German leaders’ oft-expressed yearning for “a place in the sun.” The second puzzle is bargaining failure. Hegemonic theories tend to model war as a conflict over the status quo without specifying precisely what the status quo is and what flows of benefits it provides to states.16 Scholars generally follow Robert Gilpin in positing that the underlying issue concerns a “desire to redraft the rules by which relations among nations work,” “the nature and governance of the system,” and “the distribution of territory among the states in the system.”17 If these are the [End Page 32] issues at stake, then systemic theories of hegemonic war and power transition confront the puzzle brought to the fore in a seminal article by James Fearon: what prevents states from striking a bargain that avoids the costs of war? 18 Why can’t states renegotiate the international order as underlying capabilities distributions shift their relative bargaining power? Fearon proposed that one answer consistent with strict rational choice assumptions is that such bargains are infeasible when the issue at stake is indivisible and cannot readily be portioned out to each side. Most aspects of a given international order are readily divisible, however, and, as Fearon stressed, “both the intrinsic complexity and richness of most matters over which states negotiate and the availability of linkages and side-payments suggest that intermediate bargains typically will exist.”19 Thus, most scholars have assumed that the indivisibility problem is trivial, focusing on two other rational choice explanations for bargaining failure: uncertainty and the commitment problem.20 In the view of many scholars, it is these problems, rather than indivisibility, that likely explain leaders’ inability to avail themselves of such intermediate bargains. Yet recent research inspired by constructivism shows how issues that are physically divisible can become socially indivisible, depending on how they relate to the identities of decision makers.21 Once issues surrounding the status quo are framed in positional terms as bearing on the disputants’ relative standing, then, to the extent that they value their standing itself, they may be unwilling to pursue intermediate bargaining solutions. Once linked to status, easily divisible issues that theoretically provide opportunities for linkages and side payments of various sorts may themselves be seen as indivisible and thus unavailable as avenues for possible intermediate bargains. The historical record surrounding major wars is rich with evidence suggesting that positional concerns over status frustrate bargaining: expensive, protracted conflict over what appear to be minor issues; a propensity on the part of decision makers to frame issues in terms of relative rank even when doing so makes bargaining harder; decision-makers’ [End Page 33] inability to accept feasible divisions of the matter in dispute even when failing to do so imposes high costs; demands on the part of states for observable evidence to confirm their estimate of an improved position in the hierarchy; the inability of private bargains to resolve issues; a frequently observed compulsion for the public attainment of concessions from a higher ranked state; and stubborn resistance on the part of states to which such demands are addressed even when acquiescence entails limited material cost. The literature on bargaining failure in the context of power shifts remains inconclusive, and it is premature to take any empirical pattern as necessarily probative. Indeed, Robert Powell has recently proposed that indivisibility is not a rationalistic explanation for war after all: fully rational leaders with perfect information should prefer to settle a dispute over an indivisible issue by resorting to a lottery rather than a war certain to destroy some of the goods in dispute. What might prevent such bargaining solutions is not indivisibility itself, he argues, but rather the parties’ inability to commit to abide by any agreement in the future if they expect their relative capabilities to continue to shift.22 This is the credible commitment problem to which many theorists are now turning their attention. But how it relates to the information problem that until recently dominated the formal literature remains to be seen.23 The larger point is that positional concerns for status may help account for the puzzle of bargaining failure. In the rational choice bargaining literature, war is puzzling because it destroys some of the benefits or flows of benefits in dispute between the bargainers, who would be better off dividing the spoils without war. Yet what happens to these models if what matters for states is less the flows of material benefits themselves than their implications for relative status? The salience of this question depends on the relative importance of positional concern for status among states. Do Great Powers Care about Status? 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.

#### SMRs key to island bases- Other tech fails

Robitaille 2012 (George E. Robitaille, Department of Army Civilian, March 21, 2012, “Small Modular Reactors: The Army’s Secure Source of Energy?,” US Army War College Strategy Research Project, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA561802)

In recent years, the U.S Department of Defense (DoD) has identified a security issue at our installations related to the dependence on the civilian electrical grid.1 The DoD depends on a steady source of electricity at military facilities to perform the functions that secure our nation. The flow of electricity into military facilities is controlled by a public grid system that is susceptible to being compromised because of the age of the infrastructure, damage from natural disasters and the potential for cyber attacks. Although most major functions at military installations employ diesel powered generators as temporary backup, the public grid may not be available to provide electricity when it is needed the most. The United States electrical infrastructure system is prone to failures and susceptible to terrorist attacks.2 It is critical that the source of electricity for our installations is reliable and secure. In order to ensure that our military facilities possess a secure source of electricity, either the public system of electric generation and distribution is upgraded to increase its reliability as well as reducing its susceptibility to cyber attack or another source of electricity should be pursued. Although significant investments are being made to upgrade the electric grid, the current investment levels are not keeping up with the aging system. Small modular reactors (SMRs) are nuclear reactors that are about an order of magnitude smaller than traditional commercial reactor used in the United States. SMRs are capable of generating electricity and at the same time, they are not a significant contributor to global warming because of green house gas emissions. The DoD needs to look at small modular nuclear reactors (SMRs) to determine if they can provide a safe and secure source of electricity.

### 1AC SMR Markets

**DOD key first mover- Guarantees market leadership**

**Loudermilk 2011** (Micah J. Loudermilk is a Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, May 31, 2011, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs,” Journal of Energy Security, http://www.ensec.org/index.php?option=com\_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375)

Path forward: Department of Defense as first-mover¶ Problematically, despite the immense energy security benefits that would accompany the wide-scale adoption of small modular reactors in the US, with a difficult regulatory environment, anti-nuclear lobbying groups, skeptical public opinion, and of course the recent Fukushima accident, the nuclear industry faces a tough road in the battle for new reactors. While President Obama and Energy Secretary Chu have demonstrated support for nuclear advancement on the SMR front, progress will prove difficult. However, a potential route exists by which small reactors may more easily become a reality: the US military.¶ The US Navy has successfully managed, without accident, over 500 small reactors on-board its ships and submarines throughout 50 years of nuclear operations. At the same time, serious concern exists, highlighted by the Defense Science Board Task Force in 2008, that US military bases are tied to, and almost entirely dependent upon, the fragile civilian electrical grid for 99% of its electricity consumption. To protect military bases’ power supplies and the nation’s military assets housed on these domestic installations, the Board recommended a strategy of “islanding” the energy supplies for military installations, thus ensuring their security and availability in a crisis or conflict that disrupts the nation’s grid or energy supplies.¶ DOD has sought to achieve this through decreased energy consumption and renewable technologies placed on bases, but these endeavors will not go nearly far enough in achieving the department’s objectives. However, by placing small reactors on domestic US military bases, DOD could solve its own energy security quandary—providing assured supplies of secure and constant energy both to bases and possibly the surrounding civilian areas as well. Concerns over reactor safety and security are alleviated by the security already present on installations and the military’s long history of successfully operating nuclear reactors without incident.¶ Unlike reactors on-board ships, small reactors housed on domestic bases would undoubtedly be subject to Nuclear Regulatory Commission (NRC) regulation and certification, however, with strong military backing, adoption of the reactors may prove significantly easier than would otherwise be possible. Additionally, as the reactors become integrated on military facilities, general fears over the use and expansion of nuclear power will ease, creating inroads for widespread adoption of the technology at the private utility level. Finally, and perhaps most importantly, action by DOD as a “first mover” on small reactor technology will preserve America’s badly struggling and nearly extinct nuclear energy industry. The US possesses a wealth of knowledge and technological expertise on SMRs and has an opportunity to take a leading role in its adoption worldwide. With the domestic nuclear industry largely dormant for three decades, the US is at risk of losing its position as the global leader in the international nuclear energy market. If the current trend continues, the US will reach a point in the future where it is forced to import nuclear technologies from other countries—a point echoed by Secretary Chu in his push for nuclear power expansion. Action by the military to install reactors on domestic bases will guarantee the short-term survival of the US nuclear industry and will work to solidify long-term support for nuclear energy.¶ Conclusions¶ In the end, small modular reactors present a viable path forward for both the expansion of nuclear power in the US and also for enhanced US energy security. Offering highly safe, secure, and proliferation-resistant designs, SMRs have the potential to bring carbon-free baseload distributed power across the United States. Small reactors measure up with, and even exceed, large nuclear reactors on questions of safety and possibly on the financial (cost) front as well. SMRs carry many of the benefits of both large-scale nuclear energy generation and renewable energy technologies. At the same time, they can reduce US dependence on fossil fuels for electricity production—moving the US ahead on carbon dioxide and GHG reduction goals and setting a global example. While domestic hurdles within the nuclear regulatory environment domestically have proven nearly impossible to overcome since Three Mile Island, military adoption of small reactors on its bases would provide energy security for the nation’s military forces and may create the inroads necessary to advance the technology broadly and eventually lead to their wide-scale adoption.

#### China and Russia will spread dangerous SMRs globally- Causes prolif- US tech solves and is modeled

Ferguson 2010 (Dr. Charles D. Ferguson, President of the Federation of American Scientists, Adjunct Professor in the Security Studies Program at Georgetown University and Adjunct Lecturer in the National Security Studies Program at the Johns Hopkins University, May 19, 2010, Statement before the House Committee on Science and Technology for the hearing on Charting the Course for American Nuclear Technology: Evaluating the Department of Energy’s Nuclear Energy Research and Development Roadmap, http://www.fas.org/press/\_docs/05192010\_Testimony\_HouseScienceCommHearing%20.pdf)

The United States and several other countries have considerable experience in building and operating small and medium power reactors. The U.S. Navy, for example, has used small power reactors since the 1950s to provide propulsion and electrical power for submarines, aircraft carriers, and some other surface warships. China, France, Russia, and the United Kingdom have also developed nuclear powered naval vessels that use small reactors. Notably, Russia has deployed its KLT-40S and similarly designed small power reactors on icebreakers and has in recent years proposed building and selling barges that would carry these types of reactors for use in sea-side communities throughout the world. China has already exported small and medium power reactors. In 1991, China began building a reactor in Pakistan and started constructing a second reactor there in 2005. In the wake of the U.S.-India nuclear deal, Beijing has recently reached agreement with Islamabad to build two additional reactors rated at 650 MWe.2¶ One of the unintended consequences of more than 30 years of sanctions on India’s nuclear program is that India had concentrated its domestic nuclear industry on building small and medium power reactors based on Canadian pressurized heavy water technology, or Candu-type reactors. Pressurized heavy water reactors (PHWRs) pose proliferation concerns because they can be readily operated in a mode optimal for producing weapons-grade plutonium and can be refueled during power operations. Online refueling makes it exceedingly difficult to determine when refueling is occurring based solely on outside observations, for example, through satellite monitoring of the plant’s operations. Thus, the chances for potential diversion of fissile material increase. This scenario for misuse underscores the need for more frequent inspections of these facilities. But the limited resources of the International Atomic Energy Agency have resulted in a rate of inspections that are too infrequent to detect a diversion of a weapon’s worth of material.3 The opening of the international nuclear market to India may lead to further spread of PHWR technologies to more states. For example, last year, the Nuclear Power Corporation of India, Ltd. (NPCIL) expressed interest in selling PHWRs to Malaysia.4 NPCIL is the only global manufacturer of 220 MWe PHWRs. New Delhi favors South-to-South cooperation; consequently developing states in Southeast Asia, sub-Saharan Africa, and South America could become recipients of these technologies in the coming years to next few decades. Many of these countries would opt for small and medium power reactors because their electrical grids do not presently have the capacity to support large power reactors and they would likely not have the financial ability to purchase large reactors.¶ What are the implications for the United States of Chinese and Indian efforts to sell small and medium power reactors? Because China and India already have the manufacturing and marketing capability for these reactors, the United States faces an economically competitive disadvantage. Because the United States has yet to license such reactors for domestic use, it has placed itself at an additional market disadvantage. By the time the United States has licensed such reactors, China and India as well as other competitors may have established a strong hold on this emerging market.¶ The U.S. Nuclear Regulatory Commission cautioned on December 15, 2008 that the “licensing of new, small modular reactors is not just around the corner. The NRC’s attention and resources now are focused on the large-scale reactors being proposed to serve millions of Americans, rather than smaller devices with both limited power production and possible industrial process applications.” The NRC’s statement further underscored that “examining proposals for radically different technology will likely require an exhaustive review” ... before “such time as there is a formal proposal, the NRC will, as directed by Congress, continue to devote the majority of its resources to addressing the current technology base.”6 Earlier this year, the NRC devoted consideration to presentations on small modular reactors from the Nuclear Energy Institute, the Department of Energy, and the Rural Electric Cooperative Association among other stakeholders.7 At least seven vendors have proposed that their designs receive attention from the NRC.8¶ Given the differences in design philosophy among these vendors and the fact that none of these designs have penetrated the commercial market, it is too soon to tell which, if any, will emerge as market champions. Nonetheless, because of the early stage in development, the United States has an opportunity to state clearly the criteria for successful use of SMRs. But because of the head start of China and India, the United States should not procrastinate and should take a leadership role in setting the standards for safe, secure, and proliferation-resistant SMRs that can compete in the market. Several years ago, the United States sponsored assessments to determine these criteria.9 While the Platonic ideal for small modular reactors will likely not be realized, it is worth specifying what such an SMR would be. N. W. Brown and J. A. Hasberger of the Lawrence Livermore National Laboratory assessed that reactors in developing countries must:¶ • “achieve reliably safe operation with a minimum of maintenance and supporting infrastructure;¶ • offer economic competitiveness with alternative energy sources available to the candidate sites;¶ • demonstrate significant improvements in proliferation resistance relative to existing reactor systems.”10¶ Pointing to the available technologies at that time from Argentina, China, and Russia, they determined that “these countries tend to focus on the development of the reactor without integrated considerations of the overall fuel cycle, proliferation, or waste issues.” They emphasized that what is required for successful development of an SMR is “a comprehensive systems approach that considers all aspects of manufacturing, transportation, operation, and ultimate disposal.”¶

**Prevents fast prolif**

Cook 2011 (David Cook, Analyst at National Nuclear Security Administration, MPA from The Ohio State University at the John Glenn School of Public Affairs, “Slowing Atomic Arms Acquisition: More Small Modular Reactors Needed to Combat Nuclear Proliferation,” online)

Reports of Iran seeking to acquire a nuclear weapon are¶ becoming more and more prevalent. Numerous countries are seeking nuclear power and¶ it is vital that the world not export¶ nuclear power to countries that would use¶ that nuclear technology for nefarious ends. The production of nuclear energy, clearly presents inherent security challenges because nuclear material may be used to make nuclear weapons. Countries often defy international norms and pressures that attempt to stop their nuclear proliferation efforts. It is vitally important that these countries not nuclear proliferate. Legislators can take a realistic precaution to ensure that nuclear power used is used for safe purposes. Small modular reactors or SMRs can provide a level of security against nuclear proliferation. Small modular reactors are smaller versions of nuclear plants. These plants can be manufactured in a country that has been traditionally trusted with nuclear power like the United States and sent to other countries that are not traditionally trusted with nuclear power. Legislators need to ensure that more SMR are financed and that the United States takes the lead in the manufacturing process of SMRS to guarantee that the nuclear material needed to produce nuclear energy is safe and secure. Problem? More¶ Countries Are Seeking Nuclear Power¶ More than 80 countries receive technological assistance from the **I**nternational¶ **A**tomic **E**nergy **A**gency. 1 This number is likely to increase as the world turns to nuclear power to meet rising energy needs. While¶ the stalled in¶ America, other countries are turning to nuclear power. As of 2011, there are over 60 nuclear reactors under construction in 14 countries. 2¶ The problem with all of the sudden interest in nuclear power is that all nuclear technology and materials are in inherently “dual use.” Nuclear technology and materials¶ can be used to either to produce energy or enhance a country’s ability to produce nuclear weapons. 3Policy Alternatives¶ The current system that utilizes international inspectors and holding nations to a nuclear non-proliferation treaty is working for a majority of countries, however, this system does not guarantee that countries will not nuclear proliferate. The UN has brought sanctions against Iran for violating the NPT, but these sanctions are not as effective as international leaders hope. A variety of options are available to governments to ensure that countries do not nuclear proliferate.¶ One option is to build more Small Modular Reactors in countries that are newer to the production of nuclear energy. Small Modular Reactors are much smaller than traditional nuclear reactors. The nuclear material is secured safely within these plants and cannot be accessed by anyone once the plant has been manufactured. However, these units may not be made quickly enough and might not provide enough energy to meet the world energy needs.4 Another option is for the IAEA to provide more oversight and inspectors at the nuclear facilities in countries. On the other hand, the IAEA inspectors may not be welcomed in the offending countries and this policy option may not be feasible.¶ Recommendation Finance and Build Small¶ Modular Reactors¶ Legislators can help to ensure the safety of the United States by passing legislation that provides for the financing and building of small modular reactors. These units can be manufactured in countries that have been traditionally trusted with nuclear power and sent to other countries that are not traditionally trusted with nuclear power.¶ SMRs Contain Numerous Safety Features: The reactors contain less nuclear material than traditional power plants, inherently reducing the overall nuclear proliferation risk.¶ SMRS can be built at a factory and the construction of these plants can be overseen safely in a country with a trusted nuclear power background.¶ Light-water SMRs could cool the reactor core in the event of a meltdown even if the power goes out.¶ Nuclear proliferation continues to be a concern to the United States as more countries are acquiring nuclear energy technologies to meet rising energy demands. Numerous countries are seeking nuclear power and it is vital that world not export nuclear power to countries that would¶ use that nuclear technology for nefarious ends. Countries often defy international norms and pressures that attempt to stop their nuclear proliferation efforts.¶ The production and implementation of SMRs to the world nuclear security environment can help to ensure the safety of the United States and the world. Countries all over the globe are turning to nuclear power to meet energy needs in their respective countries and SMRs can help to ensure that nuclear energy is being used for the betterment of the world. It is imperative that the United States takes the lead in ensuring that more SMRs are built and built safely.

#### Proliferation makes nuclear war inevitable- 4 reasons it’s destabilizing

Heisbourg 2012 (François Heisbourg, Chairman of the International Institute for Strategic Studies and of the Geneva Centre for Security Policy, April 4, 2012, “How Bad Would the Further Spread of Nuclear Weapons Be?,” Nonproliferation Policy Education Center, http://www.npolicy.org/article.php?aid=1171&tid=4)

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 multi-polarity 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).

**Especially true in these regions**

**Elhefnawy 2008** (Nader Elhefnawy, PhD, Army War College, August 2008, “The Next Wave of Nuclear Proliferation,” Parameters, online)

It is inconceivable that anything like this distribution will continue in a world turning heavily to nuclear energy, a fact that has already laid the foun- dation for a broadening of production and use in East and South Asia.8 We should also expect a large-scale, rapid establishment of nuclear energy production in areas where it has been virtually absent, for example, the Middle East, sub-Saharan Africa, and Latin America. To approximate France’s current level of nuclear energy reliance, for instance, Iran alone would require roughly 18 operational reactors; Saudi Arabia, 20. More extensive substitution of nuclear energy for other sources of power, or future economic expansion (such as de- scribed above), will require a commensurate growth in the number of reactors.9¶ All of this may sound abstract, but moves in this direction are al- ready well under way. Some 40 developing nations have expressed interest in starting nuclear energy programs, and many have moved beyond vague state- ments of intentions.10 The United Arab Emirates, for instance, has already struck a deal for two reactors, the only one of 11 nations in this region (thus far) to have announced such plans.11¶ Assessing the Danger¶ As outlined above, a future in which the world as a whole turned to nuclear energy will mean not just an expansion of nuclear energy production, but substantial changes in production impacting mainland Asia, Africa, and Latin America. An assessment of the associated proliferation risk involved devolves basically into an examination of two dimensions, capabilities and intentions—what widened nuclear energy use will mean for the access of these states to nuclear weapons technology; and the impact that this new envi ronment will have on a government’s motivation to actually use that access to produce nuclear weaponry.¶ Technological Access¶ The increase in nuclear energy production described above will mean greater production, trading, and consumption of the fissile materials and other technologies that are part of the nuclear fuel cycle. The specifics differ according to reactor type, but every reactor uses uranium in the produc- tion of its fuel and produces plutonium in its waste, extractable in the fuel re- processing procedure, and in such a manner that every type of reactor poses a measure of proliferation risk.12 Gas-cooled and heavy-water reactors use natural uranium as fuel, but are ideal for producing weapons-grade plutonium. “Fast-neutron” reactors use fissile material (such as highly enriched uranium or plutonium) at the very start of their fuel cycle, and Fast Breeder Reactors in particular produce more fissile material than they consume.¶ Even Light Water Reactors (LWRs), which have been described as “proliferation-resistant” (two of which were provided to North Korea under the Agreed Framework), are no exception.13 They use low-enriched uranium, which is not useful for making weapons, but which is produced in the same en- richment process used to manufacture weapons. Additionally, low-enriched uranium can be seen as halfway to weapons grade, since it can be more rapidly enriched to the needed level than stock natural uranium. At the same time, while these reactors produce relatively smaller quantities of lower quality plu- tonium than other types, it has been estimated that a 1,000-megawatt LWR can still generate enough “weapons-usable” plutonium for up to 50 bombs a year.14¶ The response on the part of those seeking to limit proliferation has, accordingly, been to encourage as many nuclear energy users as possible not to develop the entire fuel cycle; that is, to forgo building up their own fuel en- richment and reprocessing capabilities. Instead, it is proposed that they buy fuel and reprocessing services on the world market, as proposed in the Global Nuclear Energy Partnership of February 2006. There are, however, widespread doubts about the initiative’s likely cost and effectiveness, concerns articulated in a letter signed by a number of control organizations, including the Federation of American Scientists, the Union of Concerned Scientists, and the Arms Control Association.15 Their objections, however, fail to include one important point—that states have been partly dissuaded from developing the full nuclear fuel cycle for eco- nomic reasons, a fact that may not remain operative in any massive expansion of nuclear energy use.¶ Simply put, it is cheaper for a small nuclear program to buy nuclear fuel on the world market than to build and operate the facilities required to en- rich uranium domestically. This has resulted in only eight of some 30 nuclear energy producers actually engaging in enrichment on an industrial scale.16 The same is true for fuel reprocessing facilities, especially given the relatively low cost of newly mined uranium. Accordingly, only a handful of states (Britain, France, Russia, Japan, and India) actually practice civil reprocessing.17¶ Any significant growth in nuclear energy production would change those economics. Many of today’s “small” programs would become equal in size to those now considered large-scale, and for that reason their investments in enrichment and reprocessing less impractical. Additionally, with more programs large and small operational, there would be a larger, more lucrative market for fuel production and fuel recycling services; the latter would in all likelihood grow more attractive as enlarged uranium consumption tightens supplies and drives up prices. (Indeed, as the situation currently stands, many uranium exporters not regarded as likely proliferators—including Australia and Canada—are interested in enrichment technology because enriching their uranium before export would increase profitability.)18 Certainly if ura- nium prices were to rise, there would be more interest in Fast Breeder Reac- tors, which one analyst suggests can extract more than 60 times as much energy per ton of mined ore as a “conventional” nuclear plant when operated in a closed circuit with thermal reactors and reprocessing facilities.19¶ In short, the economic incentives for states to refrain from developing the full nuclear fuel cycle will almost certainly weaken, while the particularly worrisome fast-neutron reactors will become more attractive. At the same time, the heightened dependence on nuclear energy, and the experience of en- ergy scarcity, will continue to reinforce the search for “energy independence” and “energy security,” contributing to the pressure that the nonproliferation re- gime is already experiencing, as the result of being a “ratifier” of unequal ac- cess to nuclear technology.20 In any event, such changes enormously increase the already substantial burden of monitoring and securing the storage and movement of the supplies associated with nuclear power generation, not to mention the political costs of maintaining the regime.21 Motivation¶ As outlined previously, any plausible combination of political ar- rangements and technological innovations is likely to have uneven results. Determined states are likely to find it easier to acquire the means for produc- ing fissile material, which raises the other key dimension of the issue—the motivation for acquiring these weapons in the first place.¶ Long-established research strongly indicates that the motivation to build nuclear weapons is more of a factor than simply achieving the technological capacity.22 Indeed, it is due to this excessive focus on capacity that ear- lier predictions about the speed and the extent of nuclear proliferation (which projected 25 to 50 nuclear-weapon states by the year 2000) proved wrong.23 The relative ease with which the weapons might be built is proof of this; a pro- gram to develop a minimal capability from scratch could cost as little as $500 million, less than the price of a modern warship.24¶ In short, were capacity the only issue, there would be far more nu- clear powers in the world, though of course access to the means cannot be ruled out as a factor in decisionmaking. When much of the infrastructure for developing a nuclear arsenal is already in place, as may be the case in several advanced countries, the decision to do so entails lower costs; and given the speed with which these programs can be initiated, the nations in question are also less susceptible to preventative action than countries starting from scratch.25 A particular danger is that having such facilities in place provides them with the option of diverting material from the fuel cycle for covert weapon programs.26¶ The rationale driving the shift to nuclear energy in the first place (en- ergy and climate stress) will increasingly translate into greater motivation on the part of some actors to pursue a nuclear capability. Broad economic disrup- tion is nearly certain as the result of the tightening of oil supplies and the cli- mate changes this scenario anticipates. Politically, this may translate into changes in the distribution of international power depending on individual states’ ability to cope (as with wealthier nations, or ones with energy-efficient economies), or even profit from these conditions (for instance, oil exporters); while the most vulnerable states may collapse, creating even greater problems for the international community (havens for crime, terrorism, or refugee flows).27 Intensified conflict over territory and waters rich in energy and other resources will become increasingly likely.¶ Alliances, trading relationships, and other arrangements will be in flux, and when combined with the associated anxiety and vulnerability may exacerbate a desire on the part of certain states to minimize their vulnerability. A goal which nuclear weapons have long been viewed as a cheap way of achieving. The “nuclearization” of a single state can induce a chain reaction across a region. The nuclearization of China spurred India and in turn Pakistan to follow suit, and the Argentinean and Brazilian nuclear programs fed off one another. Today the pos- sibility that a nuclear North Korea may lead South Korea or Japan to acquire nu- clear weapons is often discussed.28 In the Middle East there are signs that Saudi Arabia is reviewing its nuclear options, and a nuclear-armed Iran may encourage the Saudis and others in the region to continue down this path.29¶ With nuclear technology more widely available these actions can be taken much more rapidly and at less cost. Those pursuing this course of action will find it a simple matter to amass large stockpiles of nuclear weapons. It is also worth noting that even were the development of actual nuclear weapons to remain a rarity, “virtual arsenals” could be more common, leaving the nuclear weapons status of a longer list of countries uncertain, in many cases deliberately so, with a detrimental impact on the security environment.30

#### Extinction

Robock 2009 Professor of climatology @ Rutgers University [Alan Robock (Associate director of Rutger’s Center for Environmental Prediction. 30 year researcher in the area of climate change. Holds a doctorate in meteorology from MIT. Published over 150 peer-reviewed papers on climate change), “Nuclear winter” The Encyclopedia of Earth, January 6, 2009, Pg. http://www.eoearth.org/article/Nuclear\_winter]

Nuclear winter is a term that describes the climatic effects of nuclear war. In the 1980's, work conducted jointly by Western and Soviet scientists showed that for a full-scale nuclear war between the United States and the Soviet Union the climatic consequences, and indirect effects of the collapse of society, would be so severe that the ensuing nuclear winter would produce famine for billions of people far from the target zones. There are several wrong impressions that people have about nuclear winter. One is that there was a flaw in the theory and that the large climatic effects were disproven. Another is that the problem, even if it existed, has been solved by the end of the nuclear arms race. But these are both wrong. Furthermore, new nuclear states threaten global climate change even with arsenals that are much less than 1% of the current global arsenal. What's New Based on new work published in 2007 and 2008 by some of the pioneers of nuclear winter research who worked on the original studies, we now can say several things about this topic. New Science: A minor nuclear war (such as between India and Pakistan or in the Middle East), with each country using 50 Hiroshima-sized atom bombs as airbursts on urban areas, could produce climate change unprecedented in recorded human history. This is only 0.03% of the explosive power of the current global arsenal. This same scenario would produce global ozone depletion , because the heating of the stratosphere would enhance the chemical reactions that destroy ozone. A nuclear war between the United States and Russia today could produce nuclear winter, with temperatures plunging below freezing in the summer in major agricultural regions, threatening the food supply for most of the planet. The climatic effects of the smoke from burning cities and industrial areas would last for several years, much longer than we previously thought. New climate model simulations, that have the capability of including the entire atmosphere and oceans, show that the smoke would be lofted by solar heating to the upper stratosphere, where it would remain for years. New Policy Implications: The only way to eliminate the possibility of this climatic catastrophe is to eliminate the nuclear weapons. If they exist, they can be used. The spread of nuclear weapons to new emerging states threatens not only the people of those countries, but the entire planet. Rapid reduction of the American and Russian nuclear arsenals will set an example for the rest of the world that nuclear weapons cannot be used and are not needed. How Does Nuclear Winter Work? A nuclear explosion is like bringing a piece of the Sun to the Earth's surface for a fraction of a second. Like a giant match, it causes cities and industrial areas to burn. Megacities have developed in India and Pakistan and other developing countries, providing tremendous amounts of fuel for potential fires. The direct effects of the nuclear weapons, blast, radioactivity, fires, and extensive pollution, would kill millions of people, but only those near the targets. However, the fires would have another effect. The massive amounts of dark smoke from the fires would be lofted into the upper troposphere, 10-15 kilometers (6-9 miles) above the Earth's surface, and then absorption of sunlight would further heat the smoke, lifting it into the stratosphere, a layer where the smoke would persist for years, with no rain to wash it out. The climatic effects of smoke from fires started by nuclear war depend on the amount of smoke. Our new calculations show that for 50 nuclear weapons dropped on two countries, on the targets that would produce the maximum amount of smoke, about 5 megatons (Tg) of black smoke would be produced, accounting for the amount emitted from the fires and the amount immediately washed out in rain. As the smoke is lofted into the stratosphere, it would be transported around the world by the prevailing winds. We also did calculations for two scenarios of war between the two superpowers who still maintain large nuclear arsenals, the United States and Russia. In one scenario, 50 Tg of black smoke would be produced and in another, 150 Tg of black smoke would be produced. How many nuclear weapons would be required to produce this much smoke? It depends on the targets, but there are enough weapons in the current arsenals to produce either amount. In fact, there are only so many targets. Once they are all hit by weapons, additional weapons would not produce much more smoke at all. Even after the current nuclear weapons reduction treaty between these superpowers is played out in 2012, with each having about 2,000 weapons, 150 Tg of smoke could still be produced. Here are movies of the smoke transport from three different scenarios: These new results were made possible by the use of a state-of-the-art general circulation model of the climate. For the first time a complete calculation of not only atmospheric but also oceanic circulation was conducted, including the entire atmosphere from the surface up through the troposphere, stratosphere, and mesosphere, to an elevation of 80 kilometers (50 miles). Previous calculations had not been run for the 10 year simulations here, and had not allowed the smoke to be lofted into the upper stratosphere, where it would persist for many years. We calculated the climate response to the three scenarios illustrated above. Compared to the global warming observed for the past century, all three scenarios show massive cooling. Compared to the climate change for the Northern Hemisphere for the past 1,000 years, the famous hockey stick diagram, the climate change from any of these scenarios is unprecedented. Compared to climate change for the past millenium, even the 5 Tg case ( a war between India and Pakistan) would plunge the planet into temperatures colder than the Little Ice Age (approximately1600-1850 ). This would be essentially instantly , and agriculture would be severely threatened . Larger amounts of smoke would produce larger climate changes, and for the 150 Tg case produce a true nuclear winter, making agriculture impossible for years. In both cases, new climate model simulations show that the effects would last for more than a decade. Analogs Support the Theory Nuclear winter is a theory based on computer model calculations. Normally, scientists test theories by doing experiments, but we never want to do this experiment in the real world. Thus we look for analogs that can inform us of parts of the theory. And there are many such analogs that convince us that the theory is correct: Cities burning. Unfortunately, we have several examples of cities burning, firestorms created by the intense release of energy, and smoke being pumped into the upper atmosphere. These include San Francisco as a result of the earthquake in 1906, and cities bombed in World War II, including Tokyo, Dresden, Hamburg, Darmstadt, Hiroshima, and Nagasaki. The seasonal cycle. In the winter, the climate is cooler, because the days are shorter and sunlight is less intense. Again, this helps us quantify the effects of reduction of solar radiation. The diurnal cycle. At night the Sun sets and it gets cold at the surface. If the Sun did not rise tomorrow, we already have an intuitive feel for how much cooling would take place and how fast it would cool. Volcanic eruptions. Explosive volcanic eruptions, such as those of Tambora in 1815, Krakatau in 1883 and Pinatubo in 1991, provide several lessons. The resulting sulfate aerosol cloud in the stratosphere is transported around the world by winds, thus supporting the results from the animations above. The surface temperature plummets after each large eruption, in proportion to the thickness of the stratospheric cloud. In fact 1816, following Tambora, is known as the "Year Without a Summer," with global cooling and famine. Following the Pinatubo eruption, global precipitation, river flow, and soil moisture all reduced, since cooling the planet by blocking sunlight has a strong effect on reducing evaporation and weakening the hydrologic cycle. This is also what the nuclear winter simulations show. Forest fires. Smoke from large forest fires sometimes is injected into the lower stratosphere. And the smoke is transported around the world, also producing cooling under the smoke. Dust storms on Mars. Occasionally, dust storms start in one region of Mars, but the dust is heated by the Sun, lofted into the upper atmosphere, and transported around the planet to completely enshroud it in a dust blanket. This process takes a couple weeks, just like our computer simulations for the nuclear winter smoke. Extinction of the dinosaurs. 65,000,000 years ago an asteroid or comet smashed into the Earth in southern Mexico. The resulting dust cloud, mixed with smoke from fires, blocked out the Sun, killing the dinosaurs, and starting the age of mammals. This Cretaceous-Tertiary (K-T) extinction may have been exacerbated by massive volcanism in India at the same time. This teaches us that large amounts of aerosols in Earth's atmosphere have caused massive climate change and extinction of species . The difference with nuclear winter is that the K-T extinction could not have been prevented. Policy Implications The work on nuclear winter in the 1980's, and the realization that both direct and indirect effects of nuclear war would be a global catastrophe, led to the end of arms race and the end of the Cold War. In response to the comment "In the 1980s, you warned about the unprecedented dangers of nuclear weapons and took very daring steps to reverse the arms race," in an interview in 2000, Mikhail Gorbachev said "Models made by Russian and American scientists showed that a nuclear war would result in a nuclear winter that would be extremely destructive to all life on Earth; the knowledge of that was a great stimulus to us, to people of honor and morality, to act in that situation."[1] Since the 1980's, the number of nuclear weapons in the world has decreased to 1/3 of the peak number of more than 70,000. The consequences of regional-scale nuclear conflicts are unexpectedly large, with the potential to become global catastrophes. The combination of nuclear proliferation, political instability, and urban demographics may constitute one of the greatest dangers to the stability of society since the dawn of humans. The current and projected American and Russian nuclear arsenals can still produce nuclear winter. Only nuclear disarmament will prevent the possibility of a nuclear environmental catastrophe.

**Loose fissile material in SSA gets stolen**

**Belcher 2011** (Emma L. Belcher, former Stanton nuclear security fellow at the Council on Foreign Relations and MA/PhD from Tufts University, July 2011, “A Nuclear Security Fund,” Council on Foreign Relations, http://www.cfr.org/proliferation/nuclear-security-fund/p25388)

Al-Qaeda and other terrorist groups say they want nuclear weapons and will use them if they can. The most likely acquisition method is to buy or steal fissile material and fashion a crude Hiroshima-style device, provided they have some training in explosives and engineering. Alternatively, a group could use fissile material in a radiological dispersal device, or dirty bomb, which would cause panic, even if it did not cause significant destruction. This makes securing fissile material, and preventing its trafficking if it is stolen, vitally important. There are approximately 1,600 metric tons of highly enriched uranium (HEU) and 400 metric tons of plutonium in over 1,100 civilian and military locations worldwide—enough for many thousands of bombs. The security of these sources varies widely, as does the robustness of measures to prevent smuggling of stolen sources.¶ Though many nations are taking measures to prevent terrorists from acquiring fissile material, others lack the resources or prefer to fund other and—in their view—more pressing problems. This situation is most prevalent in eastern Europe and the Caucasus, where sources of fissile material are concentrated, and in sub-Saharan Africa, where public health and civil strife issues take priority over securing borders against smuggling. Terrorist groups could exploit these critical gaps, thus undermining global nuclear security efforts.

**Al Qaeda moving in now**

Dorell 2012 (Oren Dorell, April 19, 2012, “Al-Qaeda expands its reach to 'like-minded' groups in Africa,” USA Today, http://www.usatoday.com/news/world/story/2012-04-18/al-qaeda-helps-africa-radical-groups/54399376/1)

The Nigerian religious sect Boko Haram had been sporadically attacking police stations and people for years with machetes and sometimes guns to create an Islamic state in its corner of Africa's largest nation.

Then, in 2010, the group exploded into violence with suicide bombings, car bombs and coordinated assaults, months after an al-Qaeda leader in Algeria disclosed that the terror group had decided to help the Nigerian radicals.¶ Now Nigeria, whose government was trying to calm old conflicts between Muslims and Christians with negotiation, is headed for possible civil war in what experts say is an emerging strategy by al-Qaeda to convert local rebellions across sub-Saharan Africa into part of a global terror front against the West. "This new Jihadist nexus in Africa" is a rising danger that the West has yet to fully comprehend, said Max Boot, a senior fellow at the Council on Foreign Relations.¶ The pattern is seen not just in Nigeria, but also in Somalia and Mali, where al-Qaeda is prompting independence movements to broaden and heighten attacks, analysts said. Unilateral military operations, such as drone strikes, may have a role, but the focus should be on bolstering U.S. allies throughout North Africa and training their security forces to combat this growing extremism, Boot said.¶ In Somalia, al-Qaeda recently announced a merger with al-Shabaab, which had been at war for years against a coalition of U.S.-backed African countries.¶ Al-Qaeda's influence on al-Shabaab has been profound, said Katherine Zimmerman of the American Enterprise Institute's Critical Threats Project.

#### They’ll WMD attack the US in the next 2 years- Neg evidence underestimates their capability

Kanani 2011 (Rahim Kanani, founder and editor-in-chief of World Affairs Commentary, Citing Rolf Mowatt-Larssen, Senior Fellow, Belfer Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University, former Director of the Office of Intelligence and Counterintelligence, U.S. Department of Energy, former Chief of the Weapons of Mass Destruction Department, Counter-terrorist Center, Central Intelligence Agency, recipient of the CIA Director’s Award, graduate of the U.S. Military Academy, June 29th, “New al-Qaeda Chief Zawahiri Has Strong Nuclear Intent”, Forbes, http://blogs.forbes.com/rahimkanani/2011/06/29/new-al-qaeda-chief-zawahiri-has-strong-nuclear-intent/)

We should be especially worried about the threat of nuclear terrorism under Zawahiri’s leadership. In a recent report titled “Islam and the Bomb: Religious Justification For and Against Nuclear Weapons”, which I researched for and contributed to, lead author Rolf Mowatt-Larssen, former director of intelligence and counterintelligence at the U.S. Department of Energy, argues that al-Qaeda’s WMD ambitions are stronger than ever. And that “this intent no longer feels theoretical, but operational.” “I believe al-Qaeda is laying the groundwork for a large scale attack on the United States, possibly in the next year or two,” continues Mowatt-Larssen in the opening of the report issued earlier this year by the Belfer Center for Science and International Affairs at Harvard Kennedy School. “The attack may or may not involve the use of WMD, but there are signs that al-Qaeda is working on an event on a larger scale than the 9/11 attack.” Most will readily dismiss such claims as implausible and unlikely, and we hope they are right, but after spending months with Mowatt-Larssen, who also served as the former head of the Central Intelligence Agency’s WMD and terrorism efforts, scrutinizing and cross-referencing Zawahiri’s 268-page treatise published in 2008 titled “Exoneration”, the analytics steered us towards something far more remarkable than expected. “As I read the text closely, in the broader context of al-Qaeda’s past, my concerns grew that Zawahiri has written this treatise to play a part in the ritualistic process of preparing for an impending attack,” states Mowatt-Larssen. “As Osama bin Laden’s fatwa in 1998 foreshadowed the 9/11 attack, Ayman Zawahiri’s fatwa in 2008 may have started the clock ticking for al-Qaeda’s next large scale strike on America. If the pattern of al-Qaeda’s modus operandi holds true, we are in the middle of an attack cycle.” Among several important findings, Zawahiri sophisticatedly weaves identical passages, sources and religious justifications for a nuclear terrorist attack against the United States previously penned by radical Saudi cleric Nasir al Fahd. Indeed, the language used, research cited, and arguments put forth are nothing short of detailed and deliberate. Reading as both a religious duty to kill millions of Americans and a lengthy suicide note together, this piece of literature is something we must take seriously with Zawahiri now at the helm of al-Qaeda. The time may have come for al-Qaeda’s new CEO to leave a legacy of his own. Concluding the author’s note, Mowatt-Larssen states, “Even if this theory proves to be wrong, it is better to overestimate the enemy than to under­estimate him. Conventional wisdom holds that al-Qaeda is spent—that they are incapable of carrying out another 9/11. Leaving aside whether this view is correct, for which I harbor grave doubts, we will surely miss the signs of the next attack if we continue to overestimate our own successes, and dismiss what terrorists remain capable of accomplishing when they put their minds to it.”

**Terrorism causes miscalculation that draws in great powers and culminates in extinction- also causes rising alert levels**

Ayson 2010 (Robert Ayson, Professor of Strategic Studies and Director of the Centre for Strategic Studies: New Zealand at the Victoria University of Wellington, “After a Terrorist Nuclear Attack: Envisaging Catalytic Effects,” Studies in Conflict & Terrorism, Volume 33, Issue 7, July, Available Online to Subscribing Institutions via InformaWorld)

A terrorist nuclear attack, and even the use of nuclear weapons in response by the country attacked in the first place, would not necessarily represent the worst of the nuclear worlds imaginable. Indeed, there are reasons to wonder whether nuclear terrorism should ever be regarded as belonging in the category of truly existential threats. A contrast can be drawn here with the global catastrophe that would come from a massive nuclear exchange between two or more of the sovereign states that possess these weapons in significant numbers. Even the worst terrorism that the twenty-first century might bring would fade into insignificance alongside considerations of what a general nuclear war would have wrought in the Cold War period. And it must be admitted that as long as the major nuclear weapons states have hundreds and even thousands of nuclear weapons at their disposal, there is always the possibility of a truly awful nuclear exchange taking place precipitated entirely by state possessors themselves. But these two nuclear worlds—a non-state actor nuclear attack and a catastrophic interstate nuclear exchange—are not necessarily separable. It is just possible that some sort of terrorist attack, and especially an act of nuclear terrorism, could precipitate a chain of events leading to a massive exchange of nuclear weapons between two or more of the states that possess them. In this context, today’s and tomorrow’s terrorist groups might assume the place allotted during the early Cold War years to new state possessors of small nuclear arsenals who were seen as raising the risks of a catalytic nuclear war between the superpowers started by third parties. These risks were considered in the late 1950s and early 1960s as concerns grew about nuclear proliferation, the so-called n+1 problem. It may require a considerable amount of imagination to depict an especially plausible situation where an act of nuclear terrorism could lead to such a massive inter-state nuclear war. For example, in the event of a terrorist nuclear attack on the United States, it might well be wondered just how Russia and/or China could plausibly be brought into the picture, not least because they seem unlikely to be fingered as the most obvious state sponsors or encouragers of terrorist groups. They would seem far too responsible to be involved in supporting that sort of terrorist behavior that could just as easily threaten them as well. Some possibilities, however remote, do suggest themselves. For example, how might the United States react if it was thought or discovered that the fissile material used in the act of nuclear terrorism had come from Russian stocks,40 and if for some reason Moscow denied any responsibility for nuclear laxity? The correct attribution of that nuclear material to a particular country might not be a case of science fiction given the observation by Michael May et al. that while the debris resulting from a nuclear explosion would be “spread over a wide area in tiny fragments, its radioactivity makes it detectable, identifiable and collectable, and a wealth of information can be obtained from its analysis: the efficiency of the explosion, the materials used and, most important … some indication of where the nuclear material came from.”41 Alternatively, if the act of nuclear terrorism came as a complete surprise, and American officials refused to believe that a terrorist group was fully responsible (or responsible at all) suspicion would shift immediately to state possessors. Ruling out Western ally countries like the United Kingdom and France, and probably Israel and India as well, authorities in Washington would be left with a very short list consisting of North Korea, perhaps Iran if its program continues, and possibly Pakistan. But at what stage would Russia and China be definitely ruled out in this high stakes game of nuclear Cluedo? In particular, if the act of nuclear terrorism occurred against a backdrop of existing tension in Washington’s relations with Russia and/or China, and at a time when threats had already been traded between these major powers, would officials and political leaders not be tempted to assume the worst? Of course, the chances of this occurring would only seem to increase if the United States was already involved in some sort of limited armed conflict with Russia and/or China, or if they were confronting each other from a distance in a proxy war, as unlikely as these developments may seem at the present time. The reverse might well apply too: should a nuclear terrorist attack occur in Russia or China during a period of heightened tension or even limited conflict with the United States, could Moscow and Beijing resist the pressures that might rise domestically to consider the United States as a possible perpetrator or encourager of the attack? Washington’s early response to a terrorist nuclear attack on its own soil might also raise the possibility of an unwanted (and nuclear aided) confrontation with Russia and/or China. For example, in the noise and confusion during the immediate aftermath of the terrorist nuclear attack, the U.S. president might be expected to place the country’s armed forces, including its nuclear arsenal, on a higher stage of alert. In such a tense environment, when careful planning runs up against the friction of reality, it is just possible that Moscow and/or China might mistakenly read this as a sign of U.S. intentions to use force (and possibly nuclear force) against them. In that situation, the temptations to preempt such actions might grow, although it must be admitted that any preemption would probably still meet with a devastating response. As part of its initial response to the act of nuclear terrorism (as discussed earlier) Washington might decide to order a significant conventional (or nuclear) retaliatory or disarming attack against the leadership of the terrorist group and/or states seen to support that group. Depending on the identity and especially the location of these targets, Russia and/or China might interpret such action as being far too close for their comfort, and potentially as an infringement on their spheres of influence and even on their sovereignty. One far-fetched but perhaps not impossible scenario might stem from a judgment in Washington that some of the main aiders and abetters of the terrorist action resided somewhere such as Chechnya, perhaps in connection with what Allison claims is the “Chechen insurgents’ … long-standing interest in all things nuclear.”42 American pressure on that part of the world would almost certainly raise alarms in Moscow that might require a degree of advanced consultation from Washington that the latter found itself unable or unwilling to provide. There is also the question of how other nuclear-armed states respond to the act of nuclear terrorism on another member of that special club. It could reasonably be expected that following a nuclear terrorist attack on the United States, both Russia and China would extend immediate sympathy and support to Washington and would work alongside the United States in the Security Council. But there is just a chance, albeit a slim one, where the support of Russia and/or China is less automatic in some cases than in others. For example, what would happen if the United States wished to discuss its right to retaliate against groups based in their territory? If, for some reason, Washington found the responses of Russia and China deeply underwhelming, (neither “for us or against us”) might it also suspect that they secretly were in cahoots with the group, increasing (again perhaps ever so slightly) the chances of a major exchange. If the terrorist group had some connections to groups in Russia and China, or existed in areas of the world over which Russia and China held sway, and if Washington felt that Moscow or Beijing were placing a curiously modest level of pressure on them, what conclusions might it then draw about their culpability? If Washington decided to use, or decided to threaten the use of, nuclear weapons, the responses of Russia and China would be crucial to the chances of avoiding a more serious nuclear exchange. They might surmise, for example, that while the act of nuclear terrorism was especially heinous and demanded a strong response, the response simply had to remain below the nuclear threshold. It would be one thing for a non-state actor to have broken the nuclear use taboo, but an entirely different thing for a state actor, and indeed the leading state in the international system, to do so. If Russia and China felt sufficiently strongly about that prospect, there is then the question of what options would lie open to them to dissuade the United States from such action: and as has been seen over the last several decades, the central dissuader of the use of nuclear weapons by states has been the threat of nuclear retaliation. If some readers find this simply too fanciful, and perhaps even offensive to contemplate, it may be informative to reverse the tables. Russia, which possesses an arsenal of thousands of nuclear warheads and that has been one of the two most important trustees of the non-use taboo, is subjected to an attack of nuclear terrorism. In response, Moscow places its nuclear forces very visibly on a higher state of alert and declares that it is considering the use of nuclear retaliation against the group and any of its state supporters. How would Washington view such a possibility? Would it really be keen to support Russia’s use of nuclear weapons, including outside Russia’s traditional sphere of influence? And if not, which seems quite plausible, what options would Washington have to communicate that displeasure? If China had been the victim of the nuclear terrorism and seemed likely to retaliate in kind, would the United States and Russia be happy to sit back and let this occur? **In the charged** atmosphere immediately after a nuclear terrorist attack, how would the attacked country respond to pressure from other major nuclear powers not to respond in kind? The phrase “how dare they tell us what to do” immediately springs to mind. Some might even go so far as to interpret this concern as a tacit form of sympathy or support for the terrorists. This might not help the chances of nuclear restraint.

### 1AC Plan

#### Plan: The United States Federal Government should offer substantial power purchase agreements for electricity from small modular nuclear reactors on military bases in the United States.

### 1AC Solvency

**No disads- Lots of SMR funding now, Obama’s committed**

Biello 2012 (David Biello, journalist at Scientific American, April 19, 2012, Missourians for a Better Energy Future, http://www.moenergyfuture.org/news/small-reactors-make-a-bid-to-revive-nuclear-power/)

Small may be beautiful for the nuclear power industry So argue a host of would-be builders of novel nuclear reactors. While the U.S. government has not given up on investing in large units that boast conventional designs, the Department of Energy has also announced the availability of $450 million in funds to support engineering and licensing of so-called "small modular reactors."¶ "The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power," said Secretary of Energy Steven Chu in a statement announcing the funding, which aims to get such modular reactors hooked into the grid by 2022. "The Energy Department and private industry are working to position America as the leader in advanced nuclear

energy technology and manufacturing."

**SMRs are good to go- Plan quickly resolves any remaining issues**

Adams 2010 (Rod Adams, nuclear power expert with experience designing and operating small nuclear reactors and a former Submarine Engineer Officer, March 23, 2010, “Small Modular Reactors Could Be An American Export – But We Need to Move Faster,” Atomic Insights, http://atomicinsights.com/2010/03/small-modular-reactors-could-be-an-american-export-but-we-need-to-move-faster.html)

In the March 23, 2010 issue of the Wall Street Journal, Dr. Steven Chu published an op-ed piece titled America’sNew Nuclear Option that describes the Administration’s growing interest in smaller nuclear energy systems that can be produced in factories and delivered nearly complete to sites around the country and around the world. Here is a quote from that editorial:¶ As this paper recently reported, one of the most promising areas is small modular reactors (SMRs). If we can develop this technology in the U.S. and build these reactors with American workers, we will have a key competitive edge.¶ Small modular reactors would be less than one-third the size of current plants. They have compact designs and could be made in factories and transported to sites by truck or rail. SMRs would be ready to “plug and play” upon arrival.¶ If commercially successful, SMRs would significantly expand the options for nuclear power and its applications. Their small size makes them suitable to small electric grids so they are a good option for locations that cannot accommodate large-scale plants. The modular construction process would make them more affordable by reducing capital costs and construction times.¶ Their size would also increase flexibility for utilities since they could add units as demand changes, or use them for on-site replacement of aging fossil fuel plants.¶ Those are some terrific words, but the message loses some of its impact when the numbers are revealed later down the page. In the 2011 budget, the Administration requested just $39 million for a program aimed specifically at small reactors. That amount of money would not even pay for the Nuclear Regulatory Commission costs of reviewing the license for a single nuclear energy system design certification. In an agency whose total budget request is in excess of $28,000 million ($28 billion), a $39 million line item gets lost in the decimal dust.¶ There is an old saying that is appropriate here – “For where your treasure is, there your heart will be also”. The effort by Dr. Chu to publish a piece favorable to small nuclear energy systems in the Wall Street Journal is commendable, but the tiny slice of resource support indicates that there is still a lot of work to be done to enable the technology to reach the market, especially when compared to the massive number of dollars available for industrial wind deployment as a gift from taxpayers to companies like BP, Chevron, GE, FPL, and Siemens.¶ It is beyond comprehension to me that it will take us “about 10 years” (in Dr. Chu’s words) to license and deploy smaller, light water reactors that use essentially the same technology that we have been using successfully for nearly 60 years. We have the knowledge base and the manufacturing capability now; we should build several plants in controlled locations so we can show the regulators how their safety systems work to keep the public protected.¶ Dr. Chu’s op-ed piece concludes with some additional good words about the future potential of systems using high temperature gas – one of my favorites – and fast neutrons for better fuel economy plus the use of modern modeling and simulation techniquest. Dr. Chu’s head is in the right place, but he could use some encouragement to move more aggressively to take advantage of what is currently an American strong suit.¶ There are some Americans who know more than anyone else about what it takes to build durable, safe, secure, small reactors that use light water as a heat transfer and moderating fluid and steam as the power section working fluid. We can improve the economics through well understood principles of series production. The Department of Energy’s budget request for FY2011 currently includes more than $1,000 million for small, light water reactors whose allowed market is limited to military vessels. It would seem that technologies used in that program could be used as the basis for prototype licenses for systems like the mPowerTM and NuScale in a process that could take far less than 10 years.¶ There are several places in the US (Hawaii, Guam, Puerto Rico and Alaska) where early adoption of such systems could dramatically reduce the cost of electricity, reduce the dependence on a fragile fossil fuel tether, and improve its production cleanliness. Success in those locations could lead to successes in similar markets around the world and perhaps even in system refinements allow competitive costs in more traditional electrical power production markets. What are we waiting for?

**But the DOD’s key- Only way to barriers and achieve commercialization**

**Andres and Breetz 2011** (Richard B. Andres, Professor of national Security Strategy at the national War College and a Senior fellow and energy and environmental Security and Policy Chair in the Center for Strategic research, institute for national Strategic Studies, at the national Defense University, and Hanna L. Breetz, doctoral candidate in the Department of Political Science at the Massachusetts institute of technology, February 2011, “Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications,” National Defense University Strategic Forum, http://www.ndu.edu/press/lib/pdf/strforum/sf-262.pdf)

The preceding analysis suggests that DOD should seriously consider taking a leadership role on small reactors. This new technology has the potential to solve two of the most serious energy-related problems faced by the department today. Small reactors could island domestic military bases and nearby communities, thereby protect- ing them from grid outages. They could also drastically reduce the need for the highly vulnerable fuel convoys used to supply forward operating bases abroad.¶ The technology being proposed for small reactors (much of which was originally developed in U.S. Gov- ernment labs) is promising. A number of the planned designs are self-contained and highly mobile, and could meet the needs of either domestic or forward bases. Some promise to be virtually impervious to accidents, with design characteristics that might allow them to beused even in active operational environments. These re- actors are potentially safer than conventional light wa- ter reactors. The argument that this technology could be useful at domestic bases is virtually unassailable. The argument for using this technology in operational units abroad is less conclusive; however, because of its poten- tial to save lives, it warrants serious investigation.¶ Unfortunately, the technology for these reactors is, for the most part, caught between the drawing board and production. Claims regarding the field utility and safety of various reactors are plausible, but authoritative evalu- ation will require substantial investment and technology demonstration. In the U.S. market, DOD could play an important role in this area. In the event that the U.S. small reactor industry succeeds without DOD support, the types of designs that emerge might not be useful for the department since some of the larger, more efficient designs that have greater appeal to private industry would not fit the department’s needs. Thus, there is significant incentive for DOD to intervene to provide a market, both to help the industry survive and to shape its direction.¶ Since the 1970s, in the **U**nited **S**tates, **only the military** has overcome the considerable barriers to building nuclear reactors. This will probably be the case with small reactors as well. If DOD leads as a first mover in this market—initially by providing analysis of costs, staffing, reactor lines, and security, and, when possible, by moving forward with a pilot installation—the new technology will likely survive and be applicable to DOD needs. If DOD does not, it is possible the tech- nology will be unavailable in the future for either U.S. military or commercial use.

#### Power purchase agreements key- R&D projects fail to incentivize commercialization

Madia 2012 (William Madia, Chairman of the Board of Overseers and Vice President for the SLAC National Accelerator Laboratory at Stanford University, previously the Laboratory Director at the Oak Ridge National Laboratory, Spring 2012, “SMALL MODULAR REACTORS: A POTENTIAL GAME-CHANGING TECHNOLOGY,” Stanford Energy Club, http://energyclub.stanford.edu/index.php/Journal/Small\_Modular\_Reactors\_by\_William\_Madia)

Throughout the history of NPP development, plants grew in size based on classic “economies of scale” considerations. Bigger was cheaper when viewed on a cost per installed kilowatt basis. The drivers that caused the industry to build bigger and bigger NPPs are being offset today by various considerations that make this new breed of SMRs viable. ¶ ¶ Factory manufacturing is one of these considerations. Most SMRs are small enough to allow them to be factory built and shipped by rail or barge to the power plant sites. Numerous industry “rules of thumb” for factory manufacturing show dramatic savings as compared to “on-site” outdoor building methods. Significant schedule advantages are also available because weather delay considerations are reduced. Of course, from a total cost perspective, some of these savings will be offset by the capital costs associated with building multiple modules to get the same total power output. Based on analyses I have seen, overnight costs in the range of $5000 to $8000 per installed kilowatt are achievable. If these analyses are correct, it means that the economies of scale arguments that drove current designs to GW scales could be countered by the simplicity and factory-build possibilities of SMRs.¶ ¶ No one has yet obtained a design certification from the Nuclear Regulatory Commission (NRC) for an SMR, so we must consider licensing to be one of the largest unknowns facing these new designs. Nevertheless, since the most developed of the SMRs are mostly based on proven and licensed components and are configured at power levels that are passively safe, we should not expect many new significant licensing issues to be raised for this class of reactor. Still, the NRC will need to address issues uniquely associated with SMRs, such as the number of reactor modules any one reactor operator can safely operate and the size of the emergency planning zone for SMRs.¶ ¶ To determine if SMRs hold the potential for changing the game in carbon-free power generation, it is imperative that we test the design, engineering, licensing, and economic assumptions with some sort of public-private development and demonstration program. Instead of having government simply invest in research and development to “buy down” the risks associated with SMRs, I propose a more novel approach. Since the federal government is a major power consumer, it should commit to being the “first mover” of SMRs. This means purchasing the first few hundred MWs of SMR generation capacity and dedicating it to federal use. The advantages of this approach are straightforward. The government would both reduce licensing and economic risks to the point where utilities might invest in subsequent units, thus jumpstarting the SMR industry. It would then also be the recipient of additional carbon-free energy generation capacity. This seems like a very sensible role for government to play without getting into the heavy politics of nuclear waste, corporate welfare, or carbon taxes.

**SMRS are extremely safe**

**Kessides 2010** (Ioannis N. Kessides, Lead Economist in the World Bank's Development Research Group, June 2012, “The Future of the Nuclear Industry Reconsidered Risks, Uncertainties, and Continued Potential,” The World Bank Development Research Group Environment and Energy Team, http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2012/06/29/000158349\_20120629130837/Rendered/INDEX/WPS6112.txt)

Most SMR concepts envision widespread deployment of a large number of small nuclear plants sited in diverse environments and frequently in close proximity to users. These considerations place very stringent requirements on reliability and safety performance—arguably even more exacting relative to traditional large-scale nuclear plants. The need for enhanced levels of safety has led to design options that maximize the use of inherent and passive safety features and incorporate additional layers of defense in depth (IAEA, 2009).18 These safety features can be more easily and effectively implemented in SMRs because of their larger surface- to-volume ratio, reduced core power density, lower source term, and less frequent (multi-year) refueling. For example, large surface-to-volume ratios facilitate the passive (with no external source of electrical power or stored energy) removal of decay heat.¶ SMRs employ an enveloping design approach that seeks to eliminate or prevent as many accident initiators and accident consequences as possible. Any remaining plausible accident initiators and consequences are dealt with appropriate combinations of active and passive safety systems. In water-cooled SMRs, the integration of steam generators and pressurizers within the reactor vessel eliminates large-diameter pipes and penetrations in the reactor vessel, thereby reducing substantially the risk of LOCAs. Moreover, in some designs the application of in- vessel control rod drives eliminates the risk of inadvertent control rod ejections that lead to reactivity insertion accidents. Loss of coolant accidents may also be prevented with compact loop designs that employ short piping and fewer connections between components (Kuznetsov, 2009).¶ In HTGRs, the fuel particles consist of fissionable fuel kernels with tri-structural isotropic (TRISO) coating.19 The TRISO coating system constitutes a miniature pressure vessel that is capable of containing the readionuclides and gases generated by fission of the nuclear material in the kernel. One of the coating layers consists of silicon carbide (a strong refractory material) which can retain radionuclides at extremely high temperatures under all accident conditions—temperatures can remain at 1600°C for several hundred hours without loss of particle coating integrity. Furthermore, the graphite holding the TRISO-coated particles together can withstand even higher temperatures without structural damage.20 And the massive graphite structures in the core create an extremely large heat capacity. The combination of large thermal margins, low power density of the core, and relatively large length-to-diameter ratio of the core, allow for very slow and stable response to transients caused by initiating events and for passive heat removal (INL, 2011).¶ The effectiveness of passive safety features can be illustrated by comparing outcomes from probabilistic risk analysis (PRA). In 1991, a Level-2 PRA was developed for the EBR-II fast neutron spectrum experimental breeder reactor—a 21 MWe plant—to compare its operational risk to that of commercial LWR‘s for which PRA‘s were available. EBR-II employs an extensive array of passive and inherent safety measures to back up traditional active safety systems. This PRA exercise showed that for EBR-II the risk of simply violating a fuel pin technical specification (with no core damage) is less than the risk of significant core disruption for the LWRs of the time. The point of the PRA comparisons is that application of passive and inherent safety measures as incorporated in SMRs can help to overcome the increase in numbers of SMRs needed to deliver the same societal energy provided by a smaller number of large-sized LWRs. Similarly, preliminary Level-1 PRA results for the NuScale Power Reactor indicate a total single-module mean CDF of 2.8x10-8/reactor-year, well below that of existing nuclear plants. And for the VK-300, the probability of severe core damage has been estimated to be less than 2.0x10-8/reactor-year (Hill et al, 1998; Kuznetsov and Gabaraev, 2007; Modarres, 2010).¶ SMRs have a smaller fuel inventory and thus a reduced source term. So on top of reduced hazard of core damage, the hazard attendant to release of radioactivity is also reduced per deployed SMR. The combination of reduced probability of core damage failure, a reduced source term, and additional fission product release barriers, could offer major advantages for emergency planning and response.

#### No root cause of war – particularities are key

Gat 9 [Azar, Chair of the Department of Political Science at Tel Aviv University, So Why Do People Fight? Evolutionary Theory and the Causes of War, European Journal of International Relations, 2009, Vol. 15(4): 571–599, http://ejt.sagepub.com/cgi/content/abstract/15/4/571]

This article’s contribution is two-pronged: it argues that IR theory regarding the causes of conflict and war is deeply flawed, locked for decades in ultimately futile debates over narrow, misconstrued concepts; this conceptual confusion is untangled and the debate is transcended once a broader, comprehensive, and evolutionarily informed perspective is adopted. Thus attempts to find the root cause of war in the nature of either the individual, the state, or the international system are fundamentally misplaced. In all these ‘levels’ there are necessary but not sufficient causes for war, and the whole cannot be broken into pieces.13 People’s needs and desires — which may be pursued violently — as well as the resulting quest for power and the state of mutual apprehension which fuel the security dilemma are all molded in human nature (some of them existing only as options, potentials, and skills in a behavioral ‘tool kit’); they are so molded because of strong evolutionary pressures that have shaped humans in their struggle for survival over geological times, when all the above literally constituted matters of life and death. The violent option of human competition has been largely curbed within states, yet is occasionally taken up on a large scale between states because of the anarchic nature of the inter-state system. However, returning to step one, international anarchy in and of itself would not be an explanation for war were it not for the potential for violence in a fundamental state of competition over scarce resources that is imbedded in reality and, consequently, in human nature. The necessary and sufficient causes of war — that obviously have to be filled with the particulars of the case in any specific war — are thus as follows: politically organized actors that operate in an environment where no superior authority effectively monopolizes power resort to violence when they assess it to be their most cost-effective option for winning and/or defending evolution-shaped objects of desire, and/or their power in the system that can help them win and/or defend those desired goods. Wars have been fought for the attainment of the same objects of human desire that underlie the human motivational system in general — only by violent means, through the use of force. Politics — internal and external — of which war is, famously, a continuation, is the activity intended to achieve at the intra- and inter-state ‘levels’ the very same evolution-shaped human aims we have already seen. Some writers have felt that ‘politics’ does not fully encompass the causes of war. Even Thayer (2004: 178–9), who correctly argues that evolutionary theory explains ultimate human aims, nonetheless goes on to say, inconsistently, that Clausewitz needs extension because war is caused not only by political reasons but also by the evolutionarily rooted search for resources, as if the two were separate, with politics being somehow different and apart, falling outside of the evolutionary logic. What is defined as ‘politics’ is of course a matter of semantics, and like all definitions is largely arbitrary. Yet, as has been claimed here, if not attributed to divine design, organisms’ immensely complex mechanisms and the behavioral propensities that emanate from them — including those of human beings — ultimately could only have been ‘engineered’ through evolution. The challenge is to lay out how evolution-shaped human desires relate to one another in motivating war. The desire and struggle for scarce resources — wealth of all sorts — have always been regarded as a prime aim of ‘politics’ and an obvious motive for war. They seem to require little further elaboration. By contrast, reproduction does not appear to figure as a direct motive for war in large-scale societies. However, as we saw, appearance is often deceptive, for somatic and reproductive motives are the two inseparable sides of the same coin. In modern societies, too, sexual adventure remained central to individual motivation in going to war, even if it usually failed to be registered at the level of ‘state politics.’ This may be demonstrated by the effects of the sexual revolution since the 1960s, which, by lessening the attraction of foreign adventure for recruits and far increasing the attraction of staying at home, may have contributed to advanced societies’ growing aversion to war. Honor, status, glory, and dominance — both individual and collective — enhanced access to somatic and reproductive success and were thus hotly pursued and defended, even by force. The security dilemma sprang from this state of actual and potential competition, in turn pouring more oil onto its fire. Power has been the universal currency through which all of the above could be obtained and/or defended, and has been sought after as such, in an often escalating spiral. Kinship — expanding from family and tribe to peoples — has always exerted overwhelming influence in determining one’s loyalty and willingness to sacrifice in the defense and promotion of a common good. Shared culture is a major attribute of ethnic communities, in the defense of which people can be invested as heavily as in the community’s political independence and overall prosperity. Finally, religious and secular ideologies have been capable of stirring enormous zeal and violence; for grand questions of cosmic and socio-political order have been perceived as possessing paramount practical significance for securing and promoting life on earth and/or in the afterlife. In the human problem-solving menus, ideologies function as the most general blueprints. Rather than comprising a ‘laundry list’ of causes for war, all of the above partake in the interconnected human motivational system, originally shaped by the calculus of survival and reproduction.

#### Focus on the basis of knowledge devolves into inaction and extinction

Richard Allen Posner (born January 11, 1939) is an American jurist, legal theorist, and economist who is currently a judge on the United States Court of Appeals for the Seventh Circuit in Chicago and a Senior Lecturer at the University of Chicago Law School. He is an influential figure in the law and economics school of thought. 2004 CATASTROPHE RISK AND RESPONSE

And here is a paradox: despite their much more powerful apparatus of inquiry, scientists are more tentative than lawyers. Scientists talk more in terms of "theory" and "hypothesis" and "data" and "belief" than of "fact" and "truth," which are terms that pervade legal discourse. Obviously there are many scientific facts and scientific truths, but they are not the focus of interest. In Karl Popper's influential theory of scientific inquiry, the march of science is a process of error correction, and truth its ever-receding goal. That way of thinking is alien to the legal profession. A lawyer says, "My client is innocent, and that's the truth." More than a rhetoric of certitude is involved. Lawyers inhabit a plane of inquiry where facts are salient, such as the date of an automobile accident or the date the plaintiff filed his case. Even in this age of science, their concern is mainly with the visible everyday world, the world navigable by common sense. For present purposes, the deepest difference between law (and other social sciences) and the natural sciences may be that the orientation of the former is toward action and of the latter toward knowledge. That is one reason scientists cannot be entrusted with the defense of the nation and the human race, whether it is defense against the public enemy or (an overlapping category) against the catastrophic risks with which this book is concerned. This is not a criticism of science or scientists. To seekers after knowledge, measures of protection against dangerous knowledge, such as knowledge of how to use gene splicing to create a more lethal pathogen, are simply an impediment, and the value of astronomical skills in crafting a defense against asteroid collisions simply an irrelevance.

#### Psychoanalysis is a non-falsifiable joke – prefer predictions and explanations based on empiricism and evidence\*\*\*

Jerry A. **Coyne**, reviewing FOLLIES OF THE WISE by Frederick Crews, September 6, **2006**. http://tls.timesonline.co.uk/article/0,,25347-2345445,00.html

Laid out in the first four essays, Crews’s brief against Freud is hard to refute. Through Freud’s letters and documents, Crews reveals him to be not the compassionate healer of legend, but a cold and calculating megalomaniac, determined to go down in history as the Darwin of the psyche. Not only did he not care about patients (he sometimes napped or wrote letters while they were free-associating): there is no historical evidence that he effectively cured any of them. And the propositions of psychoanalysis have proven to be either untestable or falsified. How can we disprove the idea, for example, that we have a death drive? Or that dreams always represent wish fulfilments? When faced with counter-examples, Freudianism always proves malleable enough to incorporate them as evidence for the theory. Other key elements of Freudian theory have never been corroborated. There are no scientifically convincing experiments, for example, demonstrating the repression of traumatic memories. As Crews points out, work with survivors of the Holocaust and other traumatic episodes has shown not a single case in which such memories are quashed and then recovered. In four further essays, Crews documents the continuing pernicious influence of Freud in the “recovered memory” movement. The idea that childhood sexual abuse can be repressed and then recalled originated with Freud, and has been used by therapists to evoke false memories which have traumatized patients and shattered families. Realizing the scientific weaknesses of Freud, many diehards have taken the fall-back position that he was nevertheless a thinker of the first rank. Didn’t Freud give us the idea of the unconscious, they argue? Well, not really, for there was a whole history of pre-Freudian thought about people’s buried motives, including the writings of Shakespeare and Nietzsche. The “unconscious” was a commonplace of Romantic psychology and philosophy. And those who champion Freud as a philosopher must realize that his package also includes less savoury items like penis envy, the amorality of women, and our Lamarckian inheritance of “racial memory”. The quality of Crews’s prose is particularly evident in his two chapters on evolution versus creationism. In the first, he takes on creationists in their new guise as intelligent-design advocates, chastising them for pushing not only bad science, but contorted faith: “Intelligent design awkwardly embraces two clashing deities – one a glutton for praise and a dispenser of wrath, absolution, and grace, the other a curiously inept cobbler of species that need to be periodically revised and that keep getting snuffed out by the very conditions he provided for them. Why, we must wonder, would the shaper of the universe have frittered away some fourteen billion years, turning out quadrillions of useless stars, before getting around to the one thing he really cared about, seeing to it that a minuscule minority of earthling vertebrates are washed clean of sin and guaranteed an eternal place in his company?” But after demolishing creationists, Crews gives peacemaking scientists their own hiding, reproving them for trying to show that there is no contradiction between science and theology. Regardless of what they say to placate the faithful, most scientists probably know in their hearts that science and religion are incompatible ways of viewing the world. Supernatural forces and events, essential aspects of most religions, play no role in science, not because we exclude them deliberately, but because they have never been a useful way to understand nature. Scientific “truths” are empirically supported observations agreed on by different observers. Religious “truths,” on the other hand, are personal, unverifiable and contested by those of different faiths. Science is nonsectarian: those who disagree on scientific issues do not blow each other up. Science encourages doubt; most religions quash it. But religion is not completely separable from science. Virtually all religions make improbable claims that are in principle empirically testable, and thus within the domain of science: Mary, in Catholic teaching, was bodily taken to heaven, while Muhammad rode up on a white horse; and Jesus (born of a virgin) came back from the dead. None of these claims has been corroborated, and while science would never accept them as true without evidence, religion does. A mind that accepts both science and religion is thus a mind in conflict.Yet scientists, especially beleaguered American evolutionists, need the support of the many faithful who respect science. It is not politically or tactically useful to point out the fundamental and unbreachable gaps between science and theology. Indeed, scientists and philosophers have written many books (equivalents of Leibnizian theodicy) desperately trying to show how these areas can happily cohabit. In his essay, “Darwin goes to Sunday School”, Crews reviews several of these works, pointing out with brio the intellectual contortions and dishonesties involved in harmonizing religion and science. Assessing work by the evolutionist Stephen Jay Gould, the philosopher Michael Ruse, the theologian John Haught and others, Crews concludes, “When coldly examined . . . these productions invariably prove to have adulterated scientific doctrine or to have emptied religious dogma of its commonly accepted meaning”. Rather than suggesting any solution (indeed, there is none save adopting a form of “religion” that makes no untenable empirical claims), Crews points out the dangers to the survival of our planet arising from a rejection of Darwinism. Such rejection promotes apathy towards overpopulation, pollution, deforestation and other environmental crimes: “So long as we regard ourselves as creatures apart who need only repent of our personal sins to retain heaven’s blessing, we won’t take the full measure of our species-wise responsibility for these calamities”. Crews includes three final essays on deconstruction and other misguided movements in literary theory. These also show “follies of the wise” in that they involve interpretations of texts that are unanchored by evidence. Fortunately, the harm inflicted by Lacan and his epigones is limited to the good judgement of professors of literature. Follies of the Wise is one of the most refreshing and edifying collections of essays in recent years. Much like Christopher Hitchens in the UK, Crews serves a vital function as National Sceptic. He ends on a ringing note: “The human race has produced only one successfully validated epistemology, characterizing all scrupulous inquiry into the real world, from quarks to poems. It is, simply, empiricism, or the submitting of propositions to the arbitration of evidence that is acknowledged to be such by all of the contending parties. Ideas that claim immunity from such review, whether because of mystical faith or privileged “clinical insight” or the say-so of eminent authorities, are not to be countenanced until they can pass the same skeptical ordeal to which all other contenders are subjected.” As science in America becomes ever more harried and debased by politics and religion, we desperately need to heed Crews’s plea for empiricism.

# 2ac

### grid

#### NRC is prepared for SMR licensing

Solan 2010 (David Solan, Director, Energy Policy Institute, Associate Director, Center for Advanced Energy Studies, Assistant Professor of Public Policy and Administration at Boise State University, June 2010, “ECONOMIC AND EMPLOYMENT IMPACTS OF SMALL MODULAR NUCLEAR REACTORS,” Energy Policy Institute, http://www.nuclearcompetitiveness.org/images/EPI\_SMR\_ReportJune2010.pdf)

While the NRC is actively engaged in developing technology-neutral guidelines for new plant licensing, it has developed its current regulations based on 40 years of design and operation of LWR facilities (U.S. Nuclear Regulatory Commission, 2010). In addition, the NRC has been challenged to significantly upgrade its workforce and capacity to license LWR designs in the last five years (U.S. Government Accountability Office, 2007). Because of these factors, the SMRs which utilize light water designs should have a distinct advantage over non-LWR reactors in the NRC design and certification process, and the Department of Energy has publicly endorsed this view with the aim to financially assist SMR LWR designs through the licensing process (Chu, 2010). This should lead to faster certification and give LWR designs an early adoption advantage in the SMR market. An example of this LWR advantage is the backing of Babcock & Wilcox by three large utilities, Tennessee Valley Authority, First Energy Corp. and Oglethorpe Power Corp. These utilities recently signed a multi-firm agreement to solidify a mutual commitment to acquire necessary approval for the commercial use of B&W’s new reactor design within the U.S (Smith, 2010). Likewise, NuScale Power has met with Energy Northwest, a joint operating agency for public utilities, about interest in adopting its design, and Energy Northwest has initiated studying SMRs and held informational meetings with its local partners (Dininny, 2009; Haviland, 2009).

### mkt

#### Our evidence is not based on flawed studies – their indictment of our epistemology glosses over academic specificity.

Martin **Kramer**, fellow @ washington institute for near east policy. "Ivory towers on sand: the failure of middle eastern studies in american" **2001.** online

Said offered no evidence, no documents, no testimony, and no numbers to substantiate any of his claims about the existence of a "network" of government and academe. He never quantified the "numerical ratio" of "Orientals" to "non-Orientals" in positions of "power" within it. He never bothered to research the precise development of Middle Eastern studies in America. He was ignorant of the debates that had already taken place within the field. He did not even allude to the recent erosion (and near collapse) of external support for these studies. Above all, he failed to make even the most rudimentary distinctions between the center and periphery of the field. Said invested a great deal of energy in other chapters of Orientalism. But his treatment of Middle Eastern studies in America was superficial, unsubstantiated, even lazy. Many failings could be laid at the door of the founders of Middle Eastern studies, but the most damning was their failure to expose the weaknesses of Orientalism. A lone (and now-forgotten) rebuttal came from Malcolm Kerr, a political scientist born to two American educators in the hospital of the American University of Beirut, trained at Princeton, and tenured at UCLA. Kerr represented the best in a school that had always seen itself as devoted not only to the pursuit of knowledge, but to the service of the Arab world and its relations with America. Kerr, in his review of Orientalism in MESA's journal, expressed a profound disappointment. The book had been spoiled by overzealous prosecutorial argument in which Pro fessor Said, in his eagerness to spin too large a web, leaps at conclusions and tries to throw everything but the kitchen sink into a preconceived frame of analysis. In charging the entire tradition of European and American Oriental studies with the sins of reductionism and caricature, he commits precisely the same error. Kerr (who was not mentioned one way or another in Orientalism) determined that the Americans quoted by Said were "not a particularly representative sample of Near Eastern studies in the United States today; and if Said had looked further afield he would have got quite different results." For example, Said omitted any discussion of the many scholars of Arab and Muslim origin who founded and fertilized the field of Middle Eastern studies in America. "Surely as a group," Kerr opined, "they have exerted as much intellectual influence as Said's select roster of ogres, and surely they have not been altogether brainwashed by the tradition." Then there were the numerous American-born scholars, named by Kerr and omitted by Said, whom it would be hard to claim were "bamboozled by the establishment troika of the Zionist lobby, the State Department, and the Ford Foundation." As for scholars who had worked for the government or the foundations, "a careful study of their work would indicate consistent resistance to the themes of denigration and caricaturization of Eastern peoples of which Said complains."38

### 2AC Desalination Add-On

#### SMRs key to desalination

Solan 2010 (David Solan, Director, Energy Policy Institute, Associate Director, Center for Advanced Energy Studies, Assistant Professor of Public Policy and Administration at Boise State University, June 2010, “ECONOMIC AND EMPLOYMENT IMPACTS OF SMALL MODULAR NUCLEAR REACTORS,” Energy Policy Institute, http://www.nuclearcompetitiveness.org/images/EPI\_SMR\_ReportJune2010.pdf)

Besides electricity generation, additional applications may be well-suited for SMR systems in the future. While the applicability of nuclear energy to additional applications is not dependent on facility size, the actual use of large nuclear facilities does not occur due to economic considerations. Currently, only a few countries utilize nuclear energy for non-generation purposes, primarily desalination and district heating (IAEA, 2008). A brief overview of the application possibilities for SMRs is provided below.¶ Desalination. The IAEA has identified desalination as possibly the leading non-electric civilian use for nuclear energy. Water scarcity is becoming an increasingly problematic global issue in both developed and developing countries. As noted in an IAEA (2007) report,¶ Because of population growth, surface water resources are increasingly stressed in many parts of the world, developed and developing regions alike. Water stress is counter to sustainable development; it engenders disease; diverts natural flows, endangering flora and fauna of rivers, lakes wetlands, deltas and oceans; and it incites regional conflicts over water rights. In the developing world, more than one billion people currently lack access to safe drinking water; nearly two and a half billion lack access to adequate sanitation services. This would only get worse as populations grow. Water stress is severe in the developed world as well....In light of these trends, many opportunities in both developed and developing countries are foreseen for supply of potable water generated using nuclear process heat or off-peak electricity (p. 23).¶ The desalination of sea water requires large amounts of energy and is not dependent on a particular fuel for heat or electricity. The IAEA (2000) defines nuclear desalination as “the production of potable water from sea water in a facility in which a nuclear reactor is used as the source of energy for the desalination process” (p. 3). The three technologies that comprise nuclear desalination are nuclear, the desalination method, and the system that couples them together (IAEA, 2000). The feasibility of integrated nuclear desalination plants has been proven with over 175 reactor-years of experience worldwide (IAEA, 2007a). ¶ Large-scale, proven commercial technologies for desalination can be grouped into distillation processes and the reverse osmosis process. Distillation technologies require heat to create steam which condenses and separates fresh water from brine. Reverse osmosis requires only electricity to push fresh water from the higher pressure saltwater side of a semi-permeable membrane to the lower pressure freshwater side. An IAEA study (2007a) on the economics of nuclear desalination reported that “SMRs offer the largest potential as coupling options to nuclear desalination systems in developing countries” (p. 4). Furthermore, the study found that the costs for nuclear desalination are roughly similar to that of natural gas desalination, and could be substantially lower depending on fuel costs (IAEA, 2007a). Based on a preliminary assessment of the global desalination market through 2030, particularly in developing countries, desalination has the potential to provide a strong market for SMRs if they can successfully compete with conventional nuclear plants and other sources of generation (Arthur, 2010).

#### Extinction

NASCA 2004 (National Association for Scientific and Cultural Appreciation, 2004, “Water shortages - Only a matter of time,” http://www.nasca.org.uk/Strange\_relics\_/water/water.html)

Water Shortage According to the latest estimates nearly 70% of the Earth’s population will struggle to find an adequate water supply by the year 2025. Many authorities now believe that tension over water consumption will be the major catalyst for the wars of the future. Water shortage. It’s just around the corner. Water is one of the prime essentials for life as we know it. The plain fact is - no water, no life! This becomes all the more worrying when we realise that the worlds supply of drinkable water will soon diminish quite rapidly. In fact a recent report commissioned by the United Nations has emphasised that by the year 2025 at least 66% of the worlds population will be without an adequate water supply. Incalculable damage. As a disaster in the making water shortage ranks in the top category. Without water we are finished, and it is thus imperative that we protect the mechanism through which we derive our supply of this life giving fluid. Unfortunately the exact opposite is the case. We are doing incalculable damage to the planets capacity to generate water and this will have far ranging consequences for the not too distant future. Bleak future The United Nations has warned that burning of fossil fuels is the prime cause of water shortage. While there may be other reasons such as increased solar activity it is clear that this is a situation over which we can exert a great deal of control. If not then the future will be very bleak indeed! Already the warning signs are there. Drought conditions. The last year has seen devastating heatwaves in many parts of the world including the USA where the state of Texas experienced its worst drought on record. Elsewhere in the United States forest fires raged out of control, while other regions of the globe experienced drought conditions that were even more severe. Parts of Iran, Afgahnistan, China and other neighbouring countries experienced their worst droughts on record. These conditions also extended throughout many parts of Africa and it is clear that if circumstances remain unchanged we are facing a disaster of epic proportions. Moreover it will be one for which there is no easy answer. Dangers. The spectre of a world water shortage evokes a truly frightening scenario. In fact the United Nations warns that disputes over water will become the prime source of conflict in the not too distant future. Where these shortages become ever more acute it could forseeably lead to the brink of nuclear conflict. On a lesser scale water, and the price of it, will acquire an importance somewhat like the current value placed on oil. The difference of course is that while oil is not vital for life, water most certainly is! Power shift. It seems clear then that in future years countries rich in water will enjoy an importance that perhaps they do not have today. In these circumstances power shifts are inevitable, and this will undoubtedly create its own strife and tension. Nightmare situation. In the long term the implications do not look encouraging. It is a two edged sword. First the shortage of water, and then the increased stresses this will impose upon an already stressed world of politics. It means that answers need to be found immediately. Answers that will both ameliorate the damage to the environment, and also find new sources of water for future consumption. If not, and the problem is left unresolved there will eventually come the day when we shall find ourselves with a nightmare situation for which there will be no obvious answer.

### Bunkers

Interpretation: The aff gets to weigh the impacts of a policy implemented by the USFG. The neg must prove the plan is worse than the status quo or offer a competitive counter advocacy.

This interpretation is best:

Most predictable—grounded in the resolution

Alternative frameworks are infinite and unpredictable makes aff win impossible.

Focused education

Perm both

Perm do the aff and the alt in every other instance.

Perm do the aff and non-compet parts

Either the alt solves all the residual links to the aff or it doesn’t solve at all.

Alt doesn’t solve the aff—we outweigh—floating PIKs bad—moving target, jacks ground, bad education, voter fairness

Extinction precludes value to life and discussion

#### Human life is inherently valuable

Melinda Penner (Director of Operations – STR, Stand To Reason) 2005 “End of Life Ethics: A Primer”, Stand to Reason, http://www.str.org/site/News2?page=NewsArticle&id=5223

Intrinsic value is very different. Things with intrinsic value are valued for their own sake. They don’t have to achieve any other goal to be valuable. They are goods in themselves. Beauty, pleasure, and virtue are likely examples. Family and friendship are examples. Something that’s intrinsically valuable might also be instrumentally valuable, but even if it loses its instrumental value, its intrinsic value remains. Intrinsic value is what people mean when they use the phrase "the sanctity of life." Now when someone argues that someone doesn’t have "quality of life" they are arguing that life is only valuable as long as it obtains something else with quality, and when it can’t accomplish this, it’s not worth anything anymore. It's only instrumentally valuable. The problem with this view is that it is entirely subjective and changeable with regards to what might give value to life. Value becomes a completely personal matter, and, as we all know, our personal interests change over time. There is no grounding for objective human value and human rights if it’s not intrinsic value. Our legal system is built on the notion that humans have intrinsic value. The Declaration of Independence: "We hold these truths to be self-evident, that all men are created equal, that each person is endowed by his Creator with certain unalienable rights...." If human beings only have instrumental value, then slavery can be justified because there is nothing objectively valuable that requires our respect. There is nothing other than intrinsic value that can ground the unalienable equal rights we recognize because there is nothing about all human beings that is universal and equal. Intrinsic human value is what binds our social contract of rights. So if human life is intrinsically valuable, then it remains valuable even when our capacities are limited. Human life is valuable even with tremendous limitations. Human life remains valuable because its value is not derived from being able to talk, or walk, or feed yourself, or even reason at a certain level. Human beings don’t have value only in virtue of states of being (e.g., happiness) they can experience. The "quality of life" view is a poison pill because once we swallow it, we’re led down a logical slippery slope. The exact same principle can be used to take the life of human beings in all kinds of limited conditions because I wouldn't want to live that way. Would you want to live the life of a baby with Down’s Syndrome? No? Then kill her. Would you want to live the life of an infant with cerebral palsy? No? Then kill him. Would you want to live the life of a baby born with a cleft lip? No? Then kill her. (In fact, they did.) Once we accept this principle, it justifies killing every infant born with a condition that we deem a life we don’t want to live. There’s no reason not to kill every handicapped person who can’t speak for himself — because I wouldn’t want to live that way. This, in fact, is what has happened in Holland with the Groningen Protocol. Dutch doctors euthanize severely ill newborns and their society has accepted it.

#### Posn 1ac—knowledge seekers do not have crisis solving capabilities, the application of knowledge to solve problems only solves

#### Even if things are uncertain- we must act to deal with existential threats

Richard Allen Posner (born January 11, 1939) is an American jurist, legal theorist, and economist who is currently a judge on the United States Court of Appeals for the Seventh Circuit in Chicago and a Senior Lecturer at the University of Chicago Law School. He is an influential figure in the law and economics school of thought. 2004 CATASTROPHE RISK AND RESPONSE

The point about catastrophic risk as political litmus paper is not limited to global warming. It is general, reflecting the scientific illiteracy of most nonscientists. The nonscientist, not being in a position to evaluate the significance of scientific disagreement, will unless there is unanimity of scientific opinion be sorely tempted to adopt the scientific position that fits his own political outlook. So liberals oppose the ABM defense and controls on biotechnology, and conservatives oppose taxes on carbon dioxide emissions and measures to preserve genetic diversity. The scientific ignorance not of the public at large, but of the people who count in making and implementing policy, is perhaps remediable. More stubborn are the obstacles that interest-group politics, as illuminated by the theory of public choice, and politics more broadly, strew in the path of responding to the catastrophic risks. Perhaps the greatest of these obstacles is that politicians are unlikely to earn any gratitude from the electorate for minimizing risks that are unlikely in any event to occur, no matter how great the consequences if they do occur, when to deal with such risks a politician might have to forgo responding to risks of losses that, though much smaller, are also much more likely to occur before the politician leaves office. The person who wants his health insurance restored is unlikely to be impressed by being told that the government has decided that an asteroid defense is a more urgent priority than universal health insurance. The critical analytical technique for evaluating and ameliorating the catastrophic risks is cost-benefit analysis. It remains a usable tool despite the pervasive uncertainties, ethical and conceptual as well as factual, concerning those risks—that is one of the most important points that I have tried to make in this book. But cost-benefit analysis of catastrophic risks must be enriched with recognition of the cognitive difficulty that people encounter in dealing with very small probabilities and very large magnitudes. And the uncertainties arising from the peculiar character of the catastrophic risks create an inescapable need for value judgments concerning such matters as the proper weight to be given the interests of remote future generations, the nonmonetizable social benefits to be ascribed to basic scientific research, and the degree of risk aversion appropriate in responding to the catastrophic risks. Bridging the gap between a purely economic analysis of these responses and the ultimate decision that answers the question "what is to be done?" is another project in which properly informed lawyers can play a critical role. But emphasis must fall on "properly informed," as yet merely an aspiration. A final point is that cost-benefit analysis should not be thought of as purely normative or public-choice theory as purely positive. The political process may not be dominated by costs and benefits, but it is influenced by them. Inverse cost-benefit analysis, in which the expected costs of a disaster are divided by the current government expenditures on preventing the disaster from occurring to yield the probability of disaster implied by the expenditures, can be a wake-up call for politicians and the public. We have seen that the levels of current expenditure to combat the major catastrophic risks, even bioterrorism, the one that has managed to thrust itself into the public consciousness, assume that the risks are much smaller than they probably are. We have also seen that there are many possibilities, ranging from detection and interception systems for averting asteroid collisions to additional police measures for averting bioterror attacks, for responding to the catastrophic risks without breaking the bank. Were the dangers posed by the catastrophic risks and the opportunities for minimizing those dangers at reasonable cost more generally recognized, the United States and the world would rouse themselves to effective action, and the world would be a safer place.

#### The alternative fails and causes a spiral of insecurity that causes the most violent aspects of your impact claims – only taking strategic political action like the plan solves

P. H. Liotta (Professor of Humanities at Salve Regina University, Newport, RI, andExecutive Director of the Pell Center for International Relations and Public Policy) 2005 “Through the Looking Glass” Sage Publications

Although it seems attractive to focus on exclusionary concepts that insist on desecuritization, privileged referent objects, and the ‘belief’ that threats and vulnerabilities are little more than social constructions (Grayson, 2003), all these concepts work in theory but fail in practice. While it may be true that national security paradigms can, and likely will, continue to dominate issues that involve human security vulnerabilities – and even in some instances mistakenly confuse ‘vulnerabilities’ as ‘threats’ – there are distinct linkages between these security concepts and applications. With regard to environmental security, for example, Myers (1986: 251) recognized these linkages nearly two decades ago: National security is not just about fighting forces and weaponry. It relates to watersheds, croplands, forests, genetic resources, climate and other factors that rarely figure in the minds of military experts and political leaders, but increasingly deserve, in their collectivity, to rank alongside military approaches as crucial in a nation’s security. Ultimately, we are far from what O’Hanlon & Singer (2004) term a global intervention capability on behalf of ‘humanitarian transformation’. Granted, we now have the threat of mass casualty terrorism anytime, anywhere – and states and regions are responding differently to this challenge. Yet, the global community today also faces many of the same problems of the 1990s: civil wars, faltering states, humanitarian crises. We are nowhere closer toaddressing how best to solve these challenges, even as they affect issues of environmental, human, national (and even ‘embedded’) security. Recently, there have been a number of voices that have spoken out on what the International Commission on Intervention and State Sovereignty has termed the ‘responsibility to protect’:10 the responsibility of some agency or state (whether it be a superpower such as the United States or an institution such as the United Nations) to enforce the principle of security that sovereign states owe to their citizens. Yet, the creation of a sense of urgency to act – even on some issues that may not have some impact for years or even decades to come – is perhaps the only appropriate first response. The real cost of not investing in the right way and early enough in the places where trends and effects are accelerating in the wrong direction is likely to be decades and decades of economic and political frustration – and, potentially, military engagement. Rather than justifying intervention (especially military), we ought to be justifying investment. Simply addressing the immensities of these challenges is not enough. Radical improvements in public infrastructure and support for better governance, particularly in states and municipalities (especially along the Lagos–Cairo–Karachi–Jakarta arc), will both improve security and create the conditions for shrinking the gap between expectations and opportunity. A real debate ought to be taking place today. Rather than dismissing ‘alternative’ security foci outright, a larger examination of what forms of security are relevant and right among communities, states, and regions, and which even might apply to a global rule-set – as well as what types of security are not relevant – seems appropriate and necessary. If this occurs, a truly remarkable tectonic shift might take place in the conduct of international relations and human affairs. Perhaps, in the failure of states and the international community to respond to such approaches, what is needed is the equivalent of the 1972 Stockholm conference that launched the global environmental movement and established the United Nations Environmental Programme (UNEP), designed to be the environmental conscience of the United Nations. Similarly, the UN Habitat II Conference in Istanbul in 1996 focused on the themes of finding adequate shelter for all and sustaining human development in an increasingly urbanized world. Whether or not these programs have the ability to influence the future’s direction (or receive wide international support) is a matter of some debate. Yet, given that the most powerful states in the world are not currently focusing on these issues to a degree sufficient to produce viable implementation plans or development strategies, there may well need to be a ‘groundswell’ of bottom-up pressure, perhaps in the form of a global citizenry petition to push the elusive world community toward collective action.Recent history suggests that military intervention as the first line of response to human security conditions underscores a seriously flawed approach. Moreover, those who advocate that a state’s disconnectedness from globalization is inversely proportional to the likelihood of military (read: US) intervention fail to recognize unfolding realities (Barnett, 2003, 2004). Both middle-power and major-power states, as well as the international community, must increasingly focus on long-term creeping vulnerabilities in order to avoid crisis responses to conditions of extreme vulnerability. Admittedly, some human security proponents have recently soured on the viability of the concept in the face of recent ‘either with us or against us’ power politics (Suhrke, 2004). At the same time, and in a bit more positive light, some have clearly recognized the sheer impossibility of international power politics continuing to feign indifference in the face of moral categories. As Burgess (2004: 278) notes, ‘for all its evils, one of the promises of globalization is the unmasking of the intertwined nature of ethics and politics in the complex landscape of social, economic, political and environmental security’. While it is still not feasible to establish a threshold definition for human security that neatly fits all concerns and arguments (as suggested by Owen, 2004: 383), it would be a tragic mistake to assume that national, human, and environmental security are mutually harmonious constructs rather than more often locked in conflictual and contested opposition with each other. Moreover, aspects of security resident in each concept are indeed themselves embedded with extraordinary contradictions. Human security, in particular, is not now, nor should likely ever be, the mirror image of national security. Yet, these contradictions are not the crucial recognition here. On the contrary, rather than focusing on the security issues themselves, we should be focusing on the best multi-dimensional approaches to confronting and solving them. One approach, which might avoid the massive tidal impact of creeping vulnerabilities, is to sharply make a rudder shift from constant crisis intervention toward strategic planning, strategic investment, and strategic attention. Clearly, the time is now to reorder our entire approach to how we address – or fail to address – security.

#### Violence is objectively decreasing due to modern liberalism-best method to solve conflict

Pinker 11 Steven Pinker is Professor of psychology at Harvard University "Violence Vanquished" Sept 24 online.wsj.com/article/SB10001424053111904106704576583203589408180.html

With all its wars, murder and genocide, history might suggest that the taste for blood is human nature. Not so, argues Harvard Prof. Steven Pinker. He talks to WSJ's Gary Rosen about the decline in violence in recent decades and his new book, "The Better Angels of Our Nature." But a better question may be, "How bad was the world in the past?" Believe it or not, the world of the past was much worse. Violence has been in decline for thousands of years, and today we may be living in the most peaceable era in the existence of our species. The decline, to be sure, has not been smooth. It has not brought violence down to zero, and it is not guaranteed to continue. But it is a persistent historical development, visible on scales from millennia to years, from the waging of wars to the spanking of children. This claim, I know, invites skepticism, incredulity, and sometimes anger. We tend to estimate the probability of an event from the ease with which we can recall examples, and scenes of carnage are more likely to be beamed into our homes and burned into our memories than footage of people dying of old age. There will always be enough violent deaths to fill the evening news, so people's impressions of violence will be disconnected from its actual likelihood. Evidence of our bloody history is not hard to find. Consider the genocides in the Old Testament and the crucifixions in the New, the gory mutilations in Shakespeare's tragedies and Grimm's fairy tales, the British monarchs who beheaded their relatives and the American founders who dueled with their rivals. Today the decline in these brutal practices can be quantified. A look at the numbers shows that over the course of our history, humankind has been blessed with six major declines of violence. The first was a process of pacification: the transition from the anarchy of the hunting, gathering and horticultural societies in which our species spent most of its evolutionary history to the first agricultural civilizations, with cities and governments, starting about 5,000 years ago. For centuries, social theorists like Hobbes and Rousseau speculated from their armchairs about what life was like in a "state of nature." Nowadays we can do better. Forensic archeology—a kind of "CSI: Paleolithic"—can estimate rates of violence from the proportion of skeletons in ancient sites with bashed-in skulls, decapitations or arrowheads embedded in bones. And ethnographers can tally the causes of death in tribal peoples that have recently lived outside of state control. These investigations show that, on average, about 15% of people in prestate eras died violently, compared to about 3% of the citizens of the earliest states. Tribal violence commonly subsides when a state or empire imposes control over a territory, leading to the various "paxes" (Romana, Islamica, Brittanica and so on) that are familiar to readers of history. It's not that the first kings had a benevolent interest in the welfare of their citizens. Just as a farmer tries to prevent his livestock from killing one another, so a ruler will try to keep his subjects from cycles of raiding and feuding. From his point of view, such squabbling is a dead loss—forgone opportunities to extract taxes, tributes, soldiers and slaves. The second decline of violence was a civilizing process that is best documented in Europe. Historical records show that between the late Middle Ages and the 20th century, European countries saw a 10- to 50-fold decline in their rates of homicide. The numbers are consistent with narrative histories of the brutality of life in the Middle Ages, when highwaymen made travel a risk to life and limb and dinners were commonly enlivened by dagger attacks. So many people had their noses cut off that medieval medical textbooks speculated about techniques for growing them back. Historians attribute this decline to the consolidation of a patchwork of feudal territories into large kingdoms with centralized authority and an infrastructure of commerce. Criminal justice was nationalized, and zero-sum plunder gave way to positive-sum trade. People increasingly controlled their impulses and sought to cooperate with their neighbors. The third transition, sometimes called the Humanitarian Revolution, took off with the Enlightenment. Governments and churches had long maintained order by punishing nonconformists with mutilation, torture and gruesome forms of execution, such as burning, breaking, disembowelment, impalement and sawing in half. The 18th century saw the widespread abolition of judicial torture, including the famous prohibition of "cruel and unusual punishment" in the eighth amendment of the U.S. Constitution. At the same time, many nations began to whittle down their list of capital crimes from the hundreds (including poaching, sodomy, witchcraft and counterfeiting) to just murder and treason. And a growing wave of countries abolished blood sports, dueling, witchhunts, religious persecution, absolute despotism and slavery. The fourth major transition is the respite from major interstate war that we have seen since the end of World War II. Historians sometimes refer to it as the Long Peace. Today we take it for granted that Italy and Austria will not come to blows, nor will Britain and Russia. But centuries ago, the great powers were almost always at war, and until quite recently, Western European countries tended to initiate two or three new wars every year. The cliché that the 20th century was "the most violent in history" ignores the second half of the century (and may not even be true of the first half, if one calculates violent deaths as a proportion of the world's population). Though it's tempting to attribute the Long Peace to nuclear deterrence, non-nuclear developed states have stopped fighting each other as well. Political scientists point instead to the growth of democracy, trade and international organizations—all of which, the statistical evidence shows, reduce the likelihood of conflict. They also credit the rising valuation of human life over national grandeur—a hard-won lesson of two world wars. The fifth trend, which I call the New Peace, involves war in the world as a whole, including developing nations. Since 1946, several organizations have tracked the number of armed conflicts and their human toll world-wide. The bad news is that for several decades, the decline of interstate wars was accompanied by a bulge of civil wars, as newly independent countries were led by inept governments, challenged by insurgencies and armed by the cold war superpowers. The less bad news is that civil wars tend to kill far fewer people than wars between states. And the best news is that, since the peak of the cold war in the 1970s and '80s, organized conflicts of all kinds—civil wars, genocides, repression by autocratic governments, terrorist attacks—have declined throughout the world, and their death tolls have declined even more precipitously. The rate of documented direct deaths from political violence (war, terrorism, genocide and warlord militias) in the past decade is an unprecedented few hundredths of a percentage point. Even if we multiplied that rate to account for unrecorded deaths and the victims of war-caused disease and famine, it would not exceed 1%. The most immediate cause of this New Peace was the demise of communism, which ended the proxy wars in the developing world stoked by the superpowers and also discredited genocidal ideologies that had justified the sacrifice of vast numbers of eggs to make a utopian omelet. Another contributor was the expansion of international peacekeeping forces, which really do keep the peace—not always, but far more often than when adversaries are left to fight to the bitter end. Finally, the postwar era has seen a cascade of "rights revolutions"—a growing revulsion against aggression on smaller scales. In the developed world, the civil rights movement obliterated lynchings and lethal pogroms, and the women's-rights movement has helped to shrink the incidence of rape and the beating and killing of wives and girlfriends. In recent decades, the movement for children's rights has significantly reduced rates of spanking, bullying, paddling in schools, and physical and sexual abuse. And the campaign for gay rights has forced governments in the developed world to repeal laws criminalizing homosexuality and has had some success in reducing hate crimes against gay people. \* \* \* \* Why has violence declined so dramatically for so long? Is it because violence has literally been bred out of us, leaving us more peaceful by nature? This seems unlikely. Evolution has a speed limit measured in generations, and many of these declines have unfolded over decades or even years. Toddlers continue to kick, bite and hit; little boys continue to play-fight; people of all ages continue to snipe and bicker, and most of them continue to harbor violent fantasies and to enjoy violent entertainment. It's more likely that human nature has always comprised inclinations toward violence and inclinations that counteract them—such as self-control, empathy, fairness and reason—what Abraham Lincoln called "the better angels of our nature." Violence has declined because historical circumstances have increasingly favored our better angels. The most obvious of these pacifying forces has been the state, with its monopoly on the legitimate use of force. A disinterested judiciary and police can defuse the temptation of exploitative attack, inhibit the impulse for revenge and circumvent the self-serving biases that make all parties to a dispute believe that they are on the side of the angels. We see evidence of the pacifying effects of government in the way that rates of killing declined following the expansion and consolidation of states in tribal societies and in medieval Europe. And we can watch the movie in reverse when violence erupts in zones of anarchy, such as the Wild West, failed states and neighborhoods controlled by mafias and street gangs, who can't call 911 or file a lawsuit to resolve their disputes but have to administer their own rough justice. Another pacifying force has been commerce, a game in which everybody can win. As technological progress allows the exchange of goods and ideas over longer distances and among larger groups of trading partners, other people become more valuable alive than dead. They switch from being targets of demonization and dehumanization to potential partners in reciprocal altruism. For example, though the relationship today between America and China is far from warm, we are unlikely to declare war on them or vice versa. Morality aside, they make too much of our stuff, and we owe them too much money. A third peacemaker has been cosmopolitanism—the expansion of people's parochial little worlds through literacy, mobility, education, science, history, journalism and mass media. These forms of virtual reality can prompt people to take the perspective of people unlike themselves and to expand their circle of sympathy to embrace them. These technologies have also powered an expansion of rationality and objectivity in human affairs. People are now less likely to privilege their own interests over those of others. They reflect more on the way they live and consider how they could be better off. Violence is often reframed as a problem to be solved rather than as a contest to be won. We devote ever more of our brainpower to guiding our better angels. It is probably no coincidence that the Humanitarian Revolution came on the heels of the Age of Reason and the Enlightenment, that the Long Peace and rights revolutions coincided with the electronic global village.

#### Steady transition to world peace now—nuclear conflict cuts it short, avoiding rollback should be prioritized

http://www.commondreams.org/views04/1230-05.htm Gwynne **Dyer** December 30, 200**4** is a Canadian journalist based in London whose articles are published in 45 papers worldwide. This is an abridged version of the last chapter in his updated book, War, first published in 1985. His latest book is Future: Tense. The Coming Global Order, published by McClelland and Stewart. by the Toronto Star The End of War Our Task Over the Next Few Years is to Transform the World of Independent States into a Genuine Global Village by Gwynne Dyer

War is deeply embedded in our history and our culture, probably since before we were even fully human, but weaning ourselves away from it should not be a bigger mountain to climb than some of the other changes we have already made in the way we live, given the right incentives. And we have certainly been given the right incentives: The holiday from history that we have enjoyed since the early '90s may be drawing to an end, and another great-power war, fought next time with nuclear weapons, may be lurking in our future. The "firebreak" against nuclear weapons use that we began building after Hiroshima and Nagasaki has held for well over half a century now. But the proliferation of nuclear weapons to new powers is a major challenge to the stability of the system. So are the coming crises, mostly environmental in origin, which will hit some countries much harder than others, and may drive some to desperation. Add in the huge impending shifts in the great-power system as China and India grow to rival the United States in GDP over the next 30 or 40 years and it will be hard to keep things from spinning out of control. With good luck and good management, we may be able to ride out the next half-century without the first-magnitude catastrophe of a global nuclear war, but the potential certainly exists for a major die-back of human population. We cannot command the good luck, but good management is something we can choose to provide. It depends, above all, on preserving and extending the multilateral system that we have been building since the end of World War II. The rising powers must be absorbed into a system that emphasizes co-operation and makes room for them, rather than one that deals in confrontation and raw military power. If they are obliged to play the traditional great-power game of winners and losers, then history will repeat itself and everybody loses. Our hopes for mitigating the severity of the coming environmental crises also depend on early and concerted global action of a sort that can only happen in a basically co-operative international system. When the great powers are locked into a military confrontation, there is simply not enough spare attention, let alone enough trust, to make deals on those issues, so the highest priority at the moment is to keep the multilateral approach alive and avoid a drift back into alliance systems and arms races. And there is no point in dreaming that we can leap straight into some never-land of universal brotherhood; we will have to confront these challenges and solve the problem of war within the context of the existing state system. The solution to the state of international anarchy that compels every state to arm itself for war was so obvious that it arose almost spontaneously in 1918. The wars by which independent states had always settled their quarrels in the past had grown so monstrously destructive that some alternative system had to be devised, and that could only be a pooling of sovereignty, at least in matters concerning war and peace, by all the states of the world. So the victors of World War I promptly created the League of Nations. But the solution was as difficult in practice as it was simple in concept. Every member of the League of Nations understood that if the organization somehow acquired the ability to act in a concerted and effective fashion, it could end up being used against them, so no major government was willing to give the League of Nations any real power. Instead, they got World War II, and that war was so bad — by the end the first nuclear weapons had been used on cities — that the victors made a second attempt in 1945 to create an international organization that really could prevent war. They literally changed international law and made war illegal, but they were well aware that all of that history and all those reflexes were not going to vanish overnight. It would be depressing to catalogue the many failures of the United Nations, but it would also be misleading. The implication would be that this was an enterprise that should have succeeded from the start, and has failed irrevocably. On the contrary; it was bound to be a relative failure at the outset. It was always going to be very hard to persuade sovereign governments to surrender power to an untried world authority which might then make decisions that went against their particular interests. In the words of the traditional Irish directions to a lost traveler: "If that's where you want to get to, sir, I wouldn't start from here." But here is where we must start from, for it is states that run the world. The present international system, based on heavily armed and jealously independent states, often exaggerates the conflicts between the multitude of human communities in the world, but it does reflect an underlying reality: We cannot all get all we want, and some method must exist to decide who gets what. That is why neighboring states have lived in a perpetual state of potential war, just as neighboring hunter-gatherer bands did 20,000 years ago. If we now must abandon war as a method of settling our disputes and devise an alternative, it only can be done with the full co-operation of the world's governments. That means it certainly will be a monumentally difficult and lengthy task: Mistrust reigns everywhere and no nation will allow even the least of its interests to be decided upon by a collection of foreigners. Even the majority of states that are more or less satisfied with their borders and their status in the world would face huge internal opposition from nationalist elements to any transfer of sovereignty to the United Nations. The good news for humans is that it looks like peaceful conditions, once established, can be maintained. And if baboons can do it, why not us? The U.N. as presently constituted is certainly no place for idealists, but they would feel even more uncomfortable in a United Nations that actually worked as was originally intended. It is an association of poachers turned game-keepers, not an assembly of saints, and it would not make its decisions according to some impartial standard of justice. There is no impartial concept of justice to which all of mankind would subscribe and, in any case, it is not "mankind" that makes decisions at the United Nations, but governments with their own national interests to protect. To envision how a functioning world authority might reach its decisions, at least in its first century or so, begin with the arrogant promotion of self-interest by the great powers that would continue to dominate U.N. decision-making and add in the crass expediency masquerading as principle that characterizes the shifting coalitions among the lesser powers in the present General Assembly: It would be an intensely political process. The decisions it produced would be kept within reasonable bounds only by the need never to act in a way so damaging to the interest of any major member or group of members that it forced them into total defiance, and so destroyed the fundamental consensus that keeps war at bay. There is nothing shocking about this. National politics in every country operates with the same combination: a little bit of principle, a lot of power, and a final constraint on the ruthless exercise of that power based mainly on the need to preserve the essential consensus on which the nation is founded and to avoid civil war. In an international organization whose members represent such radically different traditions, interests, and levels of development, the proportion of principle to power is bound to be even lower. It's a pity that there is no practical alternative to the United Nations, but there isn't. If the abolition of great-power war and the establishment of international law is truly a hundred-year project, then we are running a bit behind schedule but we have made substantial progress. We have not had World War III, and that is thanks at least in part to the United Nations, which gave the great powers an excuse to back off from several of their most dangerous confrontations without losing face. No great power has fought another since 1945, and the wars that have broken out between middle-sized powers from time to time — Arab-Israeli wars and Indo-Pakistani wars, mostly — seldom lasted more than a month, because the U.N.'s offers of ceasefires and peacekeeping troops offered a quick way out for the losing side. If you assessed the progress that has been made since 1945 from the perspective of that terrifying time, the glass would look at least half-full. The enormous growth of international organizations since 1945, and especially the survival of the United Nations as a permanent forum where the states of the world are committed to avoiding war (and often succeed), has already created a context new to history. The present political fragmentation of the world into more than 150 stubbornly independent territorial units will doubtless persist for a good while to come. But it is already becoming an anachronism, for, in every other context, from commerce, technology, and the mass media to fashions in ideology, music, and marriage, the outlines of a single global culture (with wide local variations) are visibly taking shape. It is very likely that we began our career as a rising young species by exterminating our nearest relatives, the Neanderthals, and it is entirely possible we will end it by exterminating ourselves, but the fact that we have always had war as part of our culture does not mean that we are doomed always to fight wars. Other aspects of our behavioral repertoire are a good deal more encouraging. There is, for example, a slow but quite perceptible revolution in human consciousness taking place: the last of the great redefinitions of humanity. At all times in our history, we have run our affairs on the assumption that there is a special category of people (our lot) whom we regard as full human beings, having rights and duties approximately equal to our own, and whom we ought not to kill even when we quarrel. Over the past 15,000 or 20,000 years we have successively widened this category from the original hunting-and-gathering band to encompass larger and larger groups. First it was the tribe of some thousands of people bound together by kinship and ritual ties; then the state, where we recognize our shared interests with millions of people whom we don't know and will never meet; and now, finally, the entire human race. There was nothing in the least idealistic or sentimental in any of the previous redefinitions. They occurred because they were useful in advancing people's material interests and ensuring their survival. The same is true for this final act of redefinition: We have reached a point where our moral imagination must expand again to embrace the whole of mankind. It's no coincidence that the period in which the concept of the national state is finally coming under challenge by a wider definition of humanity is also the period that has seen history's most catastrophic wars, for they provide the practical incentive for change. But the transition to a different system is a risky business: The danger of another world war which would cut the whole process short is tiny in any given year, but cumulatively, given how long the process of change will take, it is extreme. That is no reason not to keep trying. Our task over the next few generations is to transform the world of independent states in which we live into some sort of genuine international community. If we succeed in creating that community, however quarrelsome, discontented, and full of injustice it will probably be, then we shall effectively have abolished the ancient institution of warfare. Good riddance.

#### No mindless intervention

Mandelbaum 2011 (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)

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.

#### Psychoanalysis is a non-falsifiable joke – prefer predictions and explanations based on empiricism and evidence\*\*\*

Jerry A. **Coyne**, reviewing FOLLIES OF THE WISE by Frederick Crews, September 6, **2006**. http://tls.timesonline.co.uk/article/0,,25347-2345445,00.html

Laid out in the first four essays, Crews’s brief against Freud is hard to refute. Through Freud’s letters and documents, Crews reveals him to be not the compassionate healer of legend, but a cold and calculating megalomaniac, determined to go down in history as the Darwin of the psyche. Not only did he not care about patients (he sometimes napped or wrote letters while they were free-associating): there is no historical evidence that he effectively cured any of them. And the propositions of psychoanalysis have proven to be either untestable or falsified. How can we disprove the idea, for example, that we have a death drive? Or that dreams always represent wish fulfilments? When faced with counter-examples, Freudianism always proves malleable enough to incorporate them as evidence for the theory. Other key elements of Freudian theory have never been corroborated. There are no scientifically convincing experiments, for example, demonstrating the repression of traumatic memories. As Crews points out, work with survivors of the Holocaust and other traumatic episodes has shown not a single case in which such memories are quashed and then recovered. In four further essays, Crews documents the continuing pernicious influence of Freud in the “recovered memory” movement. The idea that childhood sexual abuse can be repressed and then recalled originated with Freud, and has been used by therapists to evoke false memories which have traumatized patients and shattered families. Realizing the scientific weaknesses of Freud, many diehards have taken the fall-back position that he was nevertheless a thinker of the first rank. Didn’t Freud give us the idea of the unconscious, they argue? Well, not really, for there was a whole history of pre-Freudian thought about people’s buried motives, including the writings of Shakespeare and Nietzsche. The “unconscious” was a commonplace of Romantic psychology and philosophy. And those who champion Freud as a philosopher must realize that his package also includes less savoury items like penis envy, the amorality of women, and our Lamarckian inheritance of “racial memory”. The quality of Crews’s prose is particularly evident in his two chapters on evolution versus creationism. In the first, he takes on creationists in their new guise as intelligent-design advocates, chastising them for pushing not only bad science, but contorted faith: “Intelligent design awkwardly embraces two clashing deities – one a glutton for praise and a dispenser of wrath, absolution, and grace, the other a curiously inept cobbler of species that need to be periodically revised and that keep getting snuffed out by the very conditions he provided for them. Why, we must wonder, would the shaper of the universe have frittered away some fourteen billion years, turning out quadrillions of useless stars, before getting around to the one thing he really cared about, seeing to it that a minuscule minority of earthling vertebrates are washed clean of sin and guaranteed an eternal place in his company?” But after demolishing creationists, Crews gives peacemaking scientists their own hiding, reproving them for trying to show that there is no contradiction between science and theology. Regardless of what they say to placate the faithful, most scientists probably know in their hearts that science and religion are incompatible ways of viewing the world. Supernatural forces and events, essential aspects of most religions, play no role in science, not because we exclude them deliberately, but because they have never been a useful way to understand nature. Scientific “truths” are empirically supported observations agreed on by different observers. Religious “truths,” on the other hand, are personal, unverifiable and contested by those of different faiths. Science is nonsectarian: those who disagree on scientific issues do not blow each other up. Science encourages doubt; most religions quash it. But religion is not completely separable from science. Virtually all religions make improbable claims that are in principle empirically testable, and thus within the domain of science: Mary, in Catholic teaching, was bodily taken to heaven, while Muhammad rode up on a white horse; and Jesus (born of a virgin) came back from the dead. None of these claims has been corroborated, and while science would never accept them as true without evidence, religion does. A mind that accepts both science and religion is thus a mind in conflict.Yet scientists, especially beleaguered American evolutionists, need the support of the many faithful who respect science. It is not politically or tactically useful to point out the fundamental and unbreachable gaps between science and theology. Indeed, scientists and philosophers have written many books (equivalents of Leibnizian theodicy) desperately trying to show how these areas can happily cohabit. In his essay, “Darwin goes to Sunday School”, Crews reviews several of these works, pointing out with brio the intellectual contortions and dishonesties involved in harmonizing religion and science. Assessing work by the evolutionist Stephen Jay Gould, the philosopher Michael Ruse, the theologian John Haught and others, Crews concludes, “When coldly examined . . . these productions invariably prove to have adulterated scientific doctrine or to have emptied religious dogma of its commonly accepted meaning”. Rather than suggesting any solution (indeed, there is none save adopting a form of “religion” that makes no untenable empirical claims), Crews points out the dangers to the survival of our planet arising from a rejection of Darwinism. Such rejection promotes apathy towards overpopulation, pollution, deforestation and other environmental crimes: “So long as we regard ourselves as creatures apart who need only repent of our personal sins to retain heaven’s blessing, we won’t take the full measure of our species-wise responsibility for these calamities”. Crews includes three final essays on deconstruction and other misguided movements in literary theory. These also show “follies of the wise” in that they involve interpretations of texts that are unanchored by evidence. Fortunately, the harm inflicted by Lacan and his epigones is limited to the good judgement of professors of literature. Follies of the Wise is one of the most refreshing and edifying collections of essays in recent years. Much like Christopher Hitchens in the UK, Crews serves a vital function as National Sceptic. He ends on a ringing note: “The human race has produced only one successfully validated epistemology, characterizing all scrupulous inquiry into the real world, from quarks to poems. It is, simply, empiricism, or the submitting of propositions to the arbitration of evidence that is acknowledged to be such by all of the contending parties. Ideas that claim immunity from such review, whether because of mystical faith or privileged “clinical insight” or the say-so of eminent authorities, are not to be countenanced until they can pass the same skeptical ordeal to which all other contenders are subjected.” As science in America becomes ever more harried and debased by politics and religion, we desperately need to heed Crews’s plea for empiricism.

#### Calls to address specific security threats are key to solve those problems without succumbing to the pratfalls of the Bush Doctrine

Kailyn Nicholson and Anna Schaffer - Henry M. Jackson School of International Studies - 3/10/2011, The Future of U.S. Democracy Promotion: Strategies for a Sustainable Fourth Wave of Democratization, https://digital.lib.washington.edu/dspace/bitstream/handle/1773/16487/Task%20Force%20C%202011%20Web.pdf?sequence=1

Democracy Promotion in Rhetoric The current administration has attempted to steer clear of unrealistic rhetoric in favor of a more pragmatic doctrine. This resolution appears to reflect the Obama administration‘s efforts to disassociate from the Bush-era rhetoric that provoked such global criticism. Post 9/11, the Bush administration was seen to sway between a preemptive realism that sought to unilaterally maintain America‘s position of power in the world and a lofty Wilsonian rhetoric that espoused spreading democratic ideals to all corners of the globe. Especially under Bush‘s Freedom Agenda, supporting democracy and the promotion of freedom was embraced as a foreign policy goal. The Freedom Agenda incorporated or helped to justify the global war on terror and Iraqi invasion. Increasingly weak evidence to support initial justifications for intervention eventually gave way to the language of democracy promotion as a more appealing rhetoric. And, Iraq became the centerpiece of this agenda executed in the name of promoting democratic values and supporting human rights. In his second inaugural address in 2005, former President Bush stated, So it is the policy of the U.S. to seek and support the growth of democratic movements and institutions in every nation and culture, with the ultimate goal of ending tyranny in our world…We will encourage reform in other governments by making clear that success in our relations will require decent treatment of their own people. America‘s belief in human dignity will guide our principles (Bush 2005) In claiming that the long-term goal of the U.S. was to end ‗tyranny in our world,‘ Bush set unrealistic and idealized expectations for the results of democracy promotion. Much of the justifications by the Bush administration for democracy promotion asserted the moral grounds for democracy. In a speech at the 2008 World Economic Forum in Sharm el-Sheikh Egypt, former President Bush pronounced: Some say any state that holds an election is a democracy. But true democracy requires vigorous political parties allowed to engage in free and lively debate. True democracy requires the establishment of civic institutions that ensure an election‘s legitimacy and hold leaders accountable. And true democracy requires competitive elections in which opposition candidates are allowed to campaign without fear or intimidation. Too often in the Middle East, politics has consisted of one leader and the opposition in jail. America is deeply concerned about the plight of political prisoners in this region, as well as democratic activists who are intimidated or repressed, newspapers and civil society organizations that are shut down, and dissidents whose voices are stifled. The time has come for nations across the Middle East to abandon these practices, and treat their people with dignity and the respect they deserve (Bush 2008) Here, former President Bush professed to stand behind democratic forces in all states. The fact that this speech took place three years after the 2005 Egyptian presidential election, where one candidate, Ayman Nour, was imprisoned, highlights a thread of hypocrisy in Bush‘s lofty rhetoric. Alternatively, the Obama administration adopted a more realistic rhetoric that gave recognition to other national interests, including security interests and threats to U.S. security. In response to the discourse and policies of the previous administration President Obama stated: Indeed, one of the lessons of our effort in Iraq is that American influence around the world is not a function of military force alone. We must use all elements of our power -- including our diplomacy, our economic strength, and the power of America's example -- to secure our interests and stand by our allies. And we must project a vision of the future that's based not just on our fears, but also on our hopes -- a vision that recognizes the real dangers that exist around the world (Obama 2010) Indeed, Obama‘s rhetoric implies a much more pragmatic approach than that of the previous administration. Here, Obama stated the need for balancing various U.S. interests and real-world threats, while also acknowledging tensions. One critique of Obama states, ―If there is an Obama doctrine emerging, it is one much more realpolitik than his predecessor‘s, focused on relations with traditional great powers and relegating issues like human rights and democracy to second-tier concerns‖ (Baker 2010). However, it should be noted and taken into consideration that pragmatic responses advocated by the Obama administration may have been influenced by the legacy issues left from the previous administration. It is possible the Obama administration has taken a realistic and pragmatic approach because it is an alternative to the last administration. Therefore, it is important to consider how foreign policy is influenced by legacy and also how it may be constrained by reality. In any case, within any administration, Wilsonian ideals and moral values are never to be ignored. In his most recent State of the Union address Obama gave support to human rights and noted: Recent events have shown us that what sets us apart must not just be our power – it must also be the purpose behind it. In south Sudan – with our assistance – the people were finally able to vote for independence after years of war….And we saw that same desire to be free in Tunisia, where the will of the people proved more powerful than the writ of a dictator. And tonight, let us be clear: The U.S. of America stands with the people of Tunisia, and supports the democratic aspirations of all people (Obama 2011) While Obama does still express support for human rights and democratic values he does so with an air of caution. Unlike the previous administration, this administration refrains from soaring unrealistic rhetoric in favor of a more pragmatic and realistic rhetoric regarding foreign policy and democracy promotion. In doing so, this current administration is seen to be noticeably less hypocritical and inconsistent than the previous. C. Implementation: Rhetoric in Action? In reality U.S. democracy promotion efforts have not reflected the rhetoric surrounding it. Democracy promotion is inconsistent country to country and policy to policy. Actions do not reflect the language expressed by policy makers to support democracy. After the Bush administration it has become increasingly entangled with military interests resulting in the association of democracy promotion with regime change and forceful coercion. Under the façade of democracy promotion, policies may implement a top-down effort supporting supposed democratic leaders rather than fostering democratic values from the bottom-up through civil society. Its exclusiveness and selectiveness is seen when we support democracy in one state and ignore human rights in another. Within the Bush administration a large gap existed between talk and action whether it was the continued cozy relations with the Saudi government, the U.S. embrace of Pakistan‘s former military dictator Pervez Musharraf, or the largely uncritical line toward China‘s continued authoritarianism (Carothers 2007). In the Middle East, the Bush administration later came to characterize its interventionin Iraq as a democratizing mission, when clearly other interests, particularly security interests were involved from the start. Other U.S. autocratic allies in the region felt almost no pressure at all, despite the Bush team‘s grand pronouncements about its commitment to a politically transformed region (Carothers 2007). Instead, the Bush administration worked to tighten relations with allies in the region in an effort to create a friendly coalition of states that would serve as useful partners in the War on Terror and would help to maintain the balance of power as it was in the Middle East. Thus, the statement of principles made by President Bush at the World Economic Forum in Egypt in 2008 rarely applies to Egypt or other U.S. allies in the Middle East. Yemen, Saudi Arabia, Jordan, Egypt, Pakistan, Ethiopia have all escaped the rhetoric of supporting human rights and democratic values by the Bush administration(Carothers 2007). Indeed, inconsistency between rhetoric and action is widespread; however, inconsistency in rhetoric between private and public audiences also exists. This is a different situation where the U.S. presents public rhetoric of support, for example, in the case of Egypt -prior to the year 2011- but expresses disapproval and criticisms in private. The recent release of WikiLeaks documents has revealed how American diplomats have repeatedly raised concerns with Egyptian officials about jailed dissidents and bloggers. A 2009 cable from U.S. ambassador to Egypt, Margaret Scobey, highlighted the difficulty of promoting democracy in a state that is both a strategic ally, but also a partial democracy ruled by an oppressive president: We continue to promote democratic reform in Egypt, including the expansion of political freedom and pluralism, and respect for human rights. Egyptian democracy and human rights efforts, however, are being stymied, and the GoE [Government of Egypt] remains skeptical of our role in democracy promotion, complaining that any efforts to open up will result in empowering the Muslim Brotherhood, which currently holds 86 seats in Egypt's 454-seat parliament (Embassy Cairo. 2009) However, the documents also show that relations between Mubarak and Obama warmed up as a result of Obama playing down what was the so-called ‗name and shame‘ approach of the Bush Administration (Landler and Lehren 2011). The nature of the WikiLeaks documents concerning Egypt draw attention to a balancing of private pressure with strong public support for Mubarak under the current administration-underscoring yet another sign of inconsistency. II. How False U.S. Rhetoric Has Hurt U.S. Reputation and Image While the U.S. has unparalleled economic and military assets, American influence and standing in the world are significantly low. Frequent gaps between rhetoric and behavior, policy changes or even reversals have harmed the U.S. image as an international power and moral figure. This negative image is partially a consequence of false rhetoric. A recent committee on human rights in Washington acknowledged, ―The world is not blind to this double standard. When they see the U.S. promoting human rights, not as a matter of principle but as a matter of convenience, it saps these principles of much of their force, and it makes the U.S. a much less powerful moral force on behalf of the values that this Nation stands for‖ (U.S. 2008). Even among other Western nations, the U.S. is seen to have a weak stance concerning human rights. In 1998, The United States Information Agency (USIA) found that 59 percent of the British and 61 percent of Germans said the U.S. was doing a good job promoting human rights. Today, 56 percent of the British and 78 percent of Germans say the US is doing a bad job (Kull 2007). Clearly, opinions of the U.S. on human rights issues have degraded significantly. An American rhetoric supporting human rights and democratic ideals worldwide while, simultaneously, failing to be consistent in implementing this rhetoric evidently will influence this degradation. The U.S. is viewed as hypocritical in its rhetoric about human rights and democracy because it is seen to be selective in its actual application. American leaders pursue more confrontational strategies for supporting democratic change against those countries with strained relations with the U.S. and adopt policies of engagement to induce or, at times, overlook democratic change with allies and friends. ―Close American relationships with authoritarian regimes in Saudi Arabia, Egypt, Jordan, and cordial relationships with autocratic rulers in Kazakhstan, Azerbaijan, and Equatorial Guinea, undermine U.S. credibility when criticizing similar types of autocratic regimes with less friendly ties to Washington‖ (McFaul 2010,163). Rhetoric about liberty has been juxtaposed with the instability in Iraq and democracy promotion has become associated with regime change. In the past decade, ―the rhetorical conflation by the Bush Administration and its allies of the war in Iraq and democracy promotion has muddied the meaning of the democracy project, diminishing support for it at home and abroad‖ (Melia 2007, 12). Public opinion polls from a 2005 survey by the Pew Research Center found the U.S. to be broadly disliked in most countries surveyed. Furthermore, a degrading trend in U.S. image can be seen as a repercussion of the inconsistency in rhetoric and policy of the past. A poll, conducted for BBC World Service in 18 countries, tracked this issue from 2005-2007. ―On average, positive views of the U.S. have slipped from 40 percent in 2005 to 36 percent in 2006 to 29 percent in 2007. Negative views have risen from 46 percent in 2005 to 52 percent in 2007‖ (Kull 2007). What‘s more, Gallup Polls in 143 countries reveal the image of the leadership of the U.S. is generally poor worldwide, but that the Obama administration will have the most repair work to do on its image in the predominantly Muslim Middle East and North Africa, where regional median approval is just 15 percent (Ray 2009). One year into his term, global opinion polls taken by Gallup reflect a positive view of Obama‘s leadership and foreign policy, yet, still present mixed reviews towards his handlings of trouble spots in the Middle East (English 2010). Such negative views of the U.S. erode U.S. power and undermine U.S. influence abroad. III. Democracy Promotion as a Façade for Promoting Other U.S. Interests The point where democracy promotion rhetoric does not properly align with implementation of supporting democracy, in any given state, is a sign of inconsistency and the use of democracy promotion as a façade for promoting other U.S. interests. Inconsistency between rhetoric and action in democracy promotion highlights the varying and diverse interests of the U.S. where democracy promotion, at times, wrongly serves the purpose of justifying other non-related and sometimes contrary U.S. interests. While the U.S. does wish to support and uphold human rights and the universal concept of economic, social and political freedoms, these interests somehow fall behind other US interests. This raises the questions of: whether U.S. interests are presented as prioritized? And how does one account for the supremacy of security interests over values of supporting human rights and democracy in general? This section will first examine U.S. interests from a Wilsonian, idealist view and next, from a realist view. These two schools of thought concerning foreign policy and inevitably, democracy promotion are today seen to be in opposition with each other. This can be accounted for by the short-term mindset of foreign policy in any given administration. Foreign policy is bound to vary with each new administration, within the same administration or due to a change in the global landscape. A forward-looking foreign policy strategy encourages a balance between interests of supporting human rights and moral values (so called idealist interests), and realist tendencies to focus solely on security and strategic interests. The current strategy, however, juxtaposes these two interest views and prompts a choice between the two. Thus, while it is in U.S. interests in the long-term to promote democracy as an end in itself, U.S. actions concerning democracy promotion currently seem to be motivated and driven by short-term interests. This section will analyze where focus on short-term realist interests has prompted a lack of clarity and consistency in policies. In this manner, democracy promotion is used as a tool, rather than an end, to maintain or secure other strategic interests. What‘s more, efforts to advance democracy and human rights only occur when they are in agreement with other interests. Shortterm realist interests also reveal, in certain cases, that democracy promotion does not even exist at all; the U.S. does not intervene or interfere in certain states where other U.S. interests have a higher priority than supporting democracy. China, Ethiopia, Kazakhstan, Nigeria, Pakistan, and Russia, are sites where security and economic interests override the interest of supporting a democracy (Carothers 2007). Furthermore, lack of clarity and consistency in policies has wrongly entangled democracy promotion with military and security interests. Security, for any state, including the U.S. is critical to a state‘s survival. Indeed, first and foremost, security is America‘s primary interest. Michael McFaul notes that the ―central purpose of American power is not to make the world a better place, but first to ensure security, prosperity of American people‖ and the ―paramount objective of American foreign policy must always be to defend the security of the American people‖ (McFaul 2010, 10, 68). Deterring military foes, forging alliances, creating alliances, ensuring stable access to natural resources, creating and maintaining U.S. military bases, expanding trade and investment opportunities abroad all represent strategies to ensure American security and, therefore, generally precede other policies (United States 2010). However, security is not, nor should not, be the sole interest of U.S foreign policy. Foreign policy, must take other interests into account; clearly, ―Not all interests need to be vital to be worthy of American protection‖ (Haass 1995, 48). A. The Case for Wilsonianism A Wilsonian view of foreign policy and also democracy promotion states a U.S. interest in upholding moral values. The U.S. has a moral obligation to human rights, and here democracy promotion is not simply a tool for national interest. Democracy promotion is seen as an end in itself that promotes human rights values, quality of life, economic, political and social liberties. In rhetoric, America‘s stated interests for promoting democracy are normally Wilsonian ideals associated with supporting human empowerment and self-determination and the wish that democratic values are shared globally. Critics have deemed this view to be limited in the scope with which it can substantiate a policy action to promote democracy. Richard Haassargues, ―The principal problem with this thinking is that the active promotion of democracy is a luxury policymakers cannot always afford‖ (Haass 1995, 46). Further critiques note that there may still be instances where national security or economic interests override supporting democratic values. When it comes to human rights, nowhere have the conflicts and contradictions been greater than in Washington‘s dealings with superpowers. Haass continues, ―When it comes to relations with Russia or China, Saudi Arabia or Egypt, other national security interests must normally take precedence over (or at least coexist with) concerns about how they choose to govern themselves. During the early Bush administration certain neo-conservatives appropriated ―the fact that promoting democracy can be difficult and expensive also reduces its attraction as a foreign policy compass‖ as another means to highlight the apparent conflicting interests associated with democracy promotion (Haass 2005). B. The Case for Realism Realists emphasize the balance of U.S. power amongst other global actors through the maintenance of security. ―This theory prescribes that the U.S. has a security interest in increasing its military and economic power and fostering and maintaining alliances with powerful states to check the influence of other great or rising powers‖(McFaul 2010, 76). Above all else, maintaining a balance of power is ideal. U.S. needs access to oil, minerals, basing rights and trade from all countries willing to cooperate, irrespective of whether they are autocratic or democratic. Realists argue that democracy promotion can undermine allies, empower anti-American forces and generate both domestic and international instability. In the case of Egypt, for instance, supporters of Mubarak and Mubarak himself, argued that democratization could give way to the empowerment of non-western friendly actors, such as the Muslim Brotherhood and ultimately destabilize the Middle East region (Embassy Cairo 2010).Haass acknowledges ―The strength of the realist approach is that it does not overlook existing and potential threats to U.S. interests, threats that if they were to materialize could overwhelm policy concerns‖ (Haass 1995, 48). C. Democracy Promotion as a Tool, Rather Than an End Here is where focus on short-term realist interests prompts a lack of clarity and consistency in policies. Under a realist school of thought, democracy promotion is seen as a tool rather than an end. It can be emphasized as a strategy to ideally secure other interests. Consequently, democracy promotion, when it exists, can become entangled with military and security interests; or, democracy promotion may not exist at all where other strategic interests are already present. Still, there are cases where democracy promotion doesn‘t even exist at all; the U.S. does not intervene or interfere in certain states where other U.S. interests have a higher priority than supporting a democracy. U.S. military presence in the Middle East prompts the need for allies in the region. Pakistan represents one instance; Pervez Musharraf maintained control of Pakistan with his power as a military dictator up until the 2008 elections. Security interests as well as economic interests play a significant role in undermining democracy promotion in the Middle East. U.S. oil interests invoke a more hardheaded foreign policy that disregards human rights and quality of life standards in states such as Algeria and Saudi Arabia. Accordingly, Michael McFaul notes, ―Without the illiberal kingdom of Saudi Arabia as a trade partner today, the U.S. would not have enough affordable energy to support our current way of life‖ (McFaul 2010, 79). On the same note, other countries with limited trade and aid relations to the U.S., such as Syria, will not experience the same policy with the U.S. as does Saudi Arabia, for instance. Economic and strategic interests have, in the past, prevented the U.S. from taking a firm stance against China‘s human rights violations. China, on the contrary, maintains a favored nation status. For the U.S., ―promoting human rights was jettisoned in May 1994 when the need to export to China and engage in a host of strategic efforts proved too significant to set aside‖ (Haass 1995, 53). Indeed U.S. leverage against China‘s human rights violations is supposedly limited due to economic interests that are present. Furthermore, when powers face a challenger to their hegemony, they are more likely to tolerate autocracies that can present themselves as buffer against their rivals (Levitsky and Steven and Way, 2002). The U.S. has been cited for supporting the ‗democrat‘ rather than the democracy where support for autocratic allies is emphasized over support for actual democratic institutions. This policy was seen in Egypt, prior to January 25, 2011, where the U.S. has provided billions of dollars in aid over the past several decades to prop up the Egyptian dictatorship. Supporters of this policy acknowledge the false assumption that elected parties will be in agreement with the U.S. and its foreign policy. They acknowledge that democratic elections could promote the rise of a fascist leader (Kopstein 2006, 89). Mubarak, has been cited frequently for human rights violations; detention, torture, refusal to register opposition political parties were all used by Mubarak as a means to constrain the scope of democracy and prevent a threat to his persistent rule (Untied States 2008). In Egypt, Mubarak profited from this Western concern that Islamists will win a fair election in the country. ―As evidence Mubarak can point to the parliamentary elections of 2005, when candidates backed by the Muslim Brotherhood captured a majority of the seats they contested‖ (United States 2008). Although the U.S. rarely placed pressure on Mubarak publicly, documents from WikiLeaks reveal U.S. pressure on Mubarak to democratize and to improve human rights. Nevertheless, ―U.S. pressure for democratization largely ended with the strong Muslim Brotherhood showing of 2005‖(United States 2008). Instances of supporting autocratic allies have happened frequently in U.S. foreign policy, and present a challenge to the consistency in rhetoric of foreign policy and democracy promotion in the future. D. Entanglement of Democracy Promotion with Military or Security Interests Inconsistency between rhetoric and action can also manifest itself when other U.S. interests, specifically military and security interests, become entangled with the act of promoting democracy. In the past decade, entanglement represents one of the greatest faults to American foreign policy and its association with democracy promotion consequently. Entanglement presented itself most distinctly within Bush‘s Freedom Agenda where military force became an instrument for democracy promotion and democracy promotion became associated with regime change. Here, McFaul comments that “During the Bush administration, the American armed forces assumed a leading role in fostering democratic change (McFaul 2010, 155). At times, the purpose for a military intervention can be disguised under the veil of democracy promotion. Or, similarly, democracy promotion becomes a façade to fulfill other interests, as was seen in Iraq. “The increasingly threadbare nature of initial US justifications for the invasion, (weapons of mass destruction, the Iraq-Al-Qaeda ‘link‘), rendered the language of democracy promotion an attractive fall-back for the administration" (Durac and Cavatorta 2009, 9). A close association between military intervention and democracy promotion overshadows the more traditional and legitimate means for supporting democratic development in other countries. In Iraq, policy makers fell back on democracy when all other legitimate reasons to invade couldn‘t be summoned. In cases like this, the act of using democracy promotion as a façade renders U.S. democracy promotion misleading and unfounded. IV. Undermining U.S. Credibility and Image A. Accusations of Hypocrisy The determinedness with which the Bush administration tied democracy promotion rhetoric to aggressive War on Terror military actions had the opposite of its desired effect. The U.S. had hoped that its preemption policy might be more palatable if couched in values that are almost universally agreed upon, like freedom and democracy. President Bush‘s statement ―For the sake of our long-term security, all free nations must stand with the forces of democracy and justice that have begun to transform the Middle East‖ implies that the U.S.‘s involvement in the Middle East is consistently aimed at supporting democratic movements. However, the fact that security is a much more immediate concern in military conflicts meant that, in practice, democracy was not the primary consideration when it came to which governments to support and which to challenge. Egypt, for example, is a close U.S. ally and enjoyed generous military support throughout the freedom agenda years despite being decisively authoritarian. On the other hand, the U.S. refused to support Hamas although it was democratically elected by the Palestinian people. While both of these decisions make sense from a geopolitical/security perspective, they do not fit the democracy promotion agenda. When President Bush made universal statements about democracy promotion while at the same time supporting non-democracies and failing to support all functioning democracies for security reasons, the international community recognized the hypocrisy. B. Accusations of Hubris Another way in which U.S. democracy promotion rhetoric helped undermine our credibility and image abroad has been by declaring success, or at least marked progress, in places where democracy, if it exists at all, is not functioning enough to improve the quality of life of citizens. By calling these examples successful, the U.S. either looks disturbingly out of touch or too haughty to admit the shortcomings of its democracy promotion efforts. Iraq is an excellent example of this, as Frank Rich of the New York Times points out: ―Iraq‘s ‗example of freedom,‘‖ as President Bush referred to his project in nation building and democracy promotion, did not inspire other states in the Middle East to emulate it. If Iraq is an example of success, who indeed would volunteer to be the next patient of U.S. democracy promotion? There are many other examples stretching back before the Bush era of similarly willfully inaccurate statements. Thomas Carothers points to the Congo, Cambodia, and Soviet-free Afghanistan as cases where the U.S. stubbornly congratulated themselves on progress that, to the rest of the world, looked like tragedy. Setting unrealistic expectations for the results of democracy promotion, such as President Bush‘s ―long-term goal of ending tyranny in our world, ―are another form of this hubris (Bush 2005). These two types of misleading rhetoric create a very stark image of U.S. democracy promotion in the eyes of the rest of the world. The U.S. claims to stand behind democratic forces in all states, but does not follow through when more immediate strategic concerns are present. Actions claimed to be democracy promotion are implemented with military coercion and claimed as successes even if they fail to provide security or stability for the country‘s citizens, and, in the case of Iraq, actively destabilize a region. As a result, ―the credibility of the US as an agent of democracy promotion in the Middle East is called into question, both within the region and without‖ (Bali and Rana, 2010). V. Implications for Diplomatic Effectiveness: Realism The preceding mistakes have resulted in ―Obama and his foreign-policy team edge[ing] away from the language of democracy promotion, which they fear that the Freedom Agenda has rendered toxic. (Taub 2009)‖ The new administration may feel the need to avoid Bush-era rhetoric that engendered so much criticism, but the associations of U.S. democracy promotion with aggressive militarism, hypocrisy, and arrogance will not disappear overnight. They must be replaced by a strong, realistic redefinition of what democracy promotion means to the U.S., when and how it will be practiced, and when it must take a backseat to other more immediate concerns. Once the U.S. rhetorically embraces realistic standards, it will be possible for policy and rhetoric to be consistent. This will present a reasonable face for U.S. democracy promotion, encouraging cooperation and discussion rather than avoidance or presumptive opposition. This is something U.S. policymakers should be concerned with for more substantive reasons than international popularity. Being seen as hypocritical and arrogant strengthens the case of foreign leaders seeking to oppose U.S. policy, both in international forums and bilateral relations. The U.S.‘s ability to achieve foreign policy objectives- be they economic, military, or geopolitical- is materially harmed by the perception that we have qualities undesirable in a working relationship. Unrealistic assessment of outcomes, inconsistency, unwillingness to recognize areas of weakness, and arrogance are all characteristics that do not invite support and cooperation. Indeed, McFaul asserts the Bush administration‘s rhetoric and policy in the Middle East were damaging to the U.S.‘s ability to realize foreign policy goals to the extent that they formed ―a serious impasse between the White House and all other international organizations, which subsequently tried to steer clear of associating with Bush policies, including his freedom agenda‖ (McFaul 2010, 218). It clearly follows that all U.S foreign policy goals are served by a positive and respected image abroad, because other states and international organizations are more willing to cooperate with policies when they have a positive image of U.S. goals and methods for achieving them. Certain aspects of democracy promotion have been identified as contributing to a negative image abroad:  Aggression/militarism  Unwarranted declarations of success/denial of mistakes  Inconsistency o Between rhetoric and action Between standards for various states Accordingly, attempts to foster a more positive, cooperative image should involve amending democracy promotion policy to be more:  Peaceful and non-coercive  Realistic o In assessments of progress and willingness to discuss/learn from mistakes o Rhetoric able to be achieved with action o Policies capable of being applied consistently across cases (flexible, humble) Incorporating these guidelines into a new coherent democracy promotion strategy will help the Obama administration avoid the backlash against Bush era mistakes. As previously mentioned Obama is already bringing his democracy promotion rhetoric down to a more realistic level, but he has not fully embraced all the changes necessary for a new effective era of democracy promotion. His administration‘s handling of the recent Egyptian protests is an indication of the need for clear, consistent rhetoric that can be employed in situations where democracy promotion and other interests conflict. This is already acknowledged in private. A cable sent from the U.S. Embassy in Egypt in 2008 admits that ―An ongoing challenge remains balancing our security interests with our democracy promotion efforts.‖ Yet instead of openly addressing this conflict in statements on Egypt‘s unfolding revolution, President Obama delivered ―ambiguous messages about an orderly transition‖ (Embassy Cairo 2008). More than two weeks into the protests, he issued a statement saying ―the future of Egypt will be determined by the Egyptian people‖ (Obama 2011). While this is certainly an improvement on former president Bush‘s coercive and idealistic rhetoric, it does not provide a clear policy on democracy promotion and its limitations. Inherent in the statement is a message of non-coercion, acknowledgement of the unpredictability of democratization efforts, and an unwillingness to burn bridges with current government authorities. All of these considerations should be stated publicly and result from a clearly defined U.S. policy on democracy promotion that commits to realistic goals and recognizes that other interests like regional security must play a role in immediate decisions without endangering the long-term process of democratization. A. Non-coercion: Separating Immediate Security Concerns from Democracy Promotion Efforts As later sections of this paper will discuss, successful democratization is a long-term process requiring diverse economic and civil society development. While it is possible to destabilize a dictatorial regime through military or economic coercion, removing one undemocratic government does not automatically- or even usually- usher a functioning democracy into power. Therefore coercion is rarely a useful tool in democracy promotion efforts. More frequently, as described earlier in the chapter, democracy promotion ends up being used as a justification for otherwise unpopular coercive actions. Iraq is the most recent and most blatant example of military coercion justified by democracy promotion rhetoric, but understood by most politicians to be a strategic attempt to gain influence in the oil-rich Middle East. Cuba provides an excellent example of economic coercion in the name of democracy. If the sanctions imposed by the U.S. really were an attempt to force a democratic transition, the decades of unperturbed socialism since their implementation would have proven this method a failure. The fact that the embargo remains intact proves other strategic interests are at stake. If the U.S. can refrain from using democracy promotion rhetoric to justify coercive policies, foreign governments and citizens will be less likely to balk at the idea of allowing the U.S. influence in their country. Later sections of this paper will elaborate on strategies for peaceful and non-coercive democracy promotion. This should be a policy that the U.S. is firmly committed to. Not only does it adhere to a basic moral commitment to human rights, peace, and stability, as outlined previously, by showing respect for state sovereignty and international cooperation it will also increase the ability of the U.S. to achieve foreign policy goals through diplomatic channels. Matthew Longo agrees that ―Without question, military power is important, but it is not the only road forward. Nor is it always the best agent for change. The message of democracy-promotion abroad is not well-delivered from the opposite end of a gun‖ (Longo 2010). This is not a call for the U.S. to withdraw its foreign military presence or adopt a pacifist attitude; far from it. It simply urges that democracy promotion rhetoric not be used as a decoration to make military action more palatable. Security rhetoric can be militant, but for the sake of effectiveness in the international arena, democracy promotion rhetoric should be non-coercive. B. Achievable Rhetoric The second point, realistic assessment of progress in democracy promotion efforts, is crucial in order to achieve consistency between rhetoric and action. If the government makes grandiose statements about democracy promotion, as were common under Bush‘s Freedom Agenda, it will be hard pressed to live up to them. Eliminating tyranny entirely is a noble goal, as is supporting all democratic movements worldwide, but the truth is that the U.S. government is in no position to actually do either of those things. It cannot achieve consistency between rhetoric and action if rhetoric is unrealistic. This is not to say that there is no place for lofty or inspiring language. On the contrary, it often plays an important role in motivating populations to organize for democratic change. What is essential is that lofty rhetoric not be confused with actual commitments to act or expected outcomes of an action. For example, instead of claiming a completely free and democratic Middle East to be the goal of a policy like the Freedom Agenda, U.S. politicians could state that all citizens of Middle Eastern states deserve to have their basic rights and freedoms protected by accountable, responsive governments. It is entirely possible to reinforce a commitment to human rights and quality of life for all people without making specific claims about the U.S.‘s own power to reshape the world as it sees fit. C. Realism Allows for Consistency In addition to rhetoric about goals and actions being realistic in scope, it must also be as consistent as possible with actual U.S. interests, policies, and actions. Clearly this is not possible in all areas of foreign policy, particularly security and intelligence, but for democracy promotion it is largely possible and in fact helpful in many ways. Cavatorta and Durac point out that often, ―rather than being interested in democratic reform for its own sake, the US propounds democracy in the hope and expectation that it will deliver outcomes which the US desires.‖ It is important not to confuse democracy promotion for its own sake with democracy promotion used as part of a strategy to make a state less hostile to U.S. interests, be they economic, military, or political. This distinction is important because, as previously stated, democracy promotion is a long-term and contextually sensitive project and is unlikely to succeed as part of a short-term effort to affect specific strategic variables. Thus, if democracy promotion is tied to such projects rhetorically, it will seem to have a low success rate and diminish our credibility. If, however, it is made clear that the U.S. is seeking a strategic outcome, for instance permission to build a military base in a foreign state, and democracy promotion is one of many tools being employed to towards this end, no unrealistic expectations are raised. In this case, the U.S. appears pragmatic rather than blindly optimistic. Being clear and realistic rhetorically about the desired short-term and long-term outcomes of policies will improve the image of the U.S. as an international actor and restore credibility to its democracy promotion efforts. When democracy promotion is indeed the priority of a given project, it will be more successful and contribute to a more admirable and diplomatically effective U.S. when mistakes are recognized, discussed in a cooperative forum, and amended for future projects. Democracy promotion, like any process, will stagnate if unsuccessful models are ignored and allowed to proliferate because of a desire to save face. It is time to stop ―using transitional language to characterize countries that in no way conform to any democratization paradigm‖ and earn back the respect of the democracy promotion community (Carothers 2007, 4). D. Realism Encourages Multilateral Cooperation A further benefit to realistic assessments of progress beyond image repair is the possibility for greater international cooperation on democracy promotion projects. Discussions among democracy promoters about the successes and challenges of particular cases will not only foster a sense of shared goals, but also allow for faster and more effective revisions of unsuccessful tactics. Multilateralism has many benefits that will be more thoroughly discussed later in the paper, but most simply it will make us less vulnerable to accusations of arrogance. Exemplifying the willingness to cooperate and take criticism that we would like to see in other states will only bolster our credibility and effectiveness in the diplomatic arena. VI. Conclusion Improving the image of the U.S. abroad will increase its effectiveness in all aspects of foreign policy. Creating a clear, consistent democracy promotion policy that recognizes the need to compromise between immediate strategic interests and long-term democratization efforts is necessary to eliminate accusations of hubris and hypocrisy so common since the Bush Administration‘s Freedom Agenda. President Obama has made steps in the right direction, but has yet to present a cohesive, transparent democracy promotion policy to the public.

Their use of a far less than sufficient link card proves they create their own object petit a—hopelessly attempting to utilize abstract evidence to answer the aff, proving they never have a true relationship to their author and his arguments, DA to the alt.

#### ( ) Specificity first– empirical work and descriptive analysis solve best

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I interpret Payne’s argument to mean that a combination of American cultural arrogance and laziness has encouraged the view that one size and style of supposedly realist analysis must fit all. Payne’s logic does not differ notably from the ideas on ethnocentrism developed more than twenty years ago by Ken Booth in this country.15 Although I am in complete sympathy with Poore’s commentary, I cannot help but notice that even he sails perilously close to the wind of inadvertent selfcontradiction when he writes, for example: ‘For ambitious strategic culture protagonists strategic culture provides a direct challenge to the hegemony of realist theorising’. It is unsound to suggest, as does Poore here, that realist theorising can be innocent of culturalist input. He commits the same systemic error as does Desch, with his head-to-head assessment of cultural versus realist explanations of behaviour. The general Western, certainly the general American, strategic wisdom of today is powerfully anti-nuclear. This stance has everything to do with the US strategic context at present. It should be needless to add that that US context is not widely shared beyond the circle of polities who are directly the beneficiaries of the international order that the United States guards. It follows that US-authored general theory on the evils of nuclear armament is likely to be irrelevant or even misleading for actors beyond the pale of the American order. Most of the objects of concern will be polities or groups with strategic cultures not shaped by contemporary high confidence in their conventional, or unconventional asymmetrical, but non-nuclear, prowess. Stuart Poore is exactly right when he concludes that ‘[s]trategic culturalists should **now be urged to** generate more empirical research **into particular strategic cultural cases** through **the use of** thick description**. In doing so, many** new insights can be gained into cases where previous**ly rationalist materialist** explanations have exerted **an over-bearing** dominance’**. That sounds remarkably** like Ken Booth arguing a generation ago for better regional studies. Booth was correct then, as is Poore today. Those scholars may, or may not, be happy to know that the Pentagon now agrees with them, hence the creation of the new Deterrence Analysis Center to which I have referred. Strategic cultural analysis is vital because it alone – save only for old-fashioned espionage, of course – can make sense of those material factors which realist beliefs are utterly unable to decode. To illustrate, what would a general, acultural, theory of strategy have told us about German rearmament in the 1930s? Did that military recovery have some immanent meaning, totally unambiguous to the well-schooled realist? Of course it did not. If the first question to pose was ‘what is Germany acquiring?’, the second was ‘what does Germany intend to do with it?’ That all important second question could not be answered according to some presumed-tobe general truth about military balance and imbalance. The behaviour of statesmen is influenced, or more, by their beliefs. Cultural analysis is methodologically near impossible if, following Johnston’s mighty efforts, one seeks falsifiable theory. The reason is because culture is literally everywhere: it is too pervasive, yet elusive, for its influence to be isolated for rigorous assessment. Although I distinguish culture as an identifiable dimension of strategy, also I claim that ‘all dimensions of strategy are cultural’.16 That is why I welcome Poore’s advice to treat with authority ‘context all the way down’. I do not think that I was confused as between what was cultural and what was not, because it has long been clear to me that everything with strategic significance is chosen, employed, or interpreted, according to some particular ideational set that we can call cultural. Somewhat belatedly, faint but pursuing, I have come to appreciate that cultural analysis of strategic matters is as valid and essential as it is likely to thwart the scholarly architect of general theory. Poore is right. We need empirically thick studies of societies of interest, always remembering that we must filter what we learn through the distorting lens of our own culture. The way forward is well signposted: more empirical investigation of actual beliefs and attitudes (as contrasted with merely presumed beliefs and attitudes); no more drawing of false distinctions between realist and culturalist explanations; and a moratorium on noble endeavours to build falsifiable general theory. Some political leaders, with the more or less enthusiastic support of their societies, will deploy their army for defence, some for offence, and others will try to employ it to slaughter their neighbours, foreign and even domestic. Thus do the two commentaries that I have addressed coalesce. There is no abstract, rational, realist strategic logic which determines completely what an army should be about. Whether or not an army is unleashed to commit mass murder, depends very largely upon the beliefs of its chieftains. To that extent at least, Martin Shaw and I are in total accord. Whereas Poore’s essay usefully and justly urges me to be more consistent in my treatment of culture in context, my differences with Shaw extend to the very identity of the contexts that shape and give meaning to behaviour. In my world view, we face strategic problems that require strategic, certainly grand strategic rather than narrowly military strategic, answers. In other words, I believe that strategy is hero, not villain. When I said, perhaps unkindly, that I find Shaw empirically challenged, what I had in mind was that every one of the atrocity events of recent history that he and I both deplore, either was, or could have been, prevented or halted only by strategic behaviour. Whether warfare remains, as at present, mainly an intra- and trans- state event, or whether it migrates back to the stratospheric unpleasantness of great-power struggle, it must occur in a context wherein the logic of strategy rules. The sadly imperfect answer to our troubles of insecurity lies in the practice of effective strategy by a guardian power, with some assistance from others. Whether or not he so intended, Carl von Clausewitz wrote about war for all time, not just for a period that now may be dismissed as the era of ‘old wars’.17 If we will the ends we have to will the means, and we must be prepared to make choices we would prefer to evade. An international order consistent with our definition of the good enough life, has to be protected by someone. If the genocides and slaughters that we all abhor are not to become routine, then we have to choose to unleash primarily American military power, the only global source of strategic effectiveness reliably able to do the job. Given his concerns, Shaw should be writing in praise of American strategy.

We solve prolif—removing the potential for future use of wmds as macguffins for international conflict

#### Comparative cost-benefit analysis is best

Richard L. Revesz (Dean and Lawrence King Professor of Law at New York University School of Law, JD Yale Law School) and Michael A Livermore. (JD NYU School of Law, Executive Director of the Institute for Policy Integrity, and Managing director of the NYU Law Review). Retaking Rationality How Cots-Benefit Analysis Can Better protect the Environment and Our Health. 2008. P. 1-4.

Governmental decisions are also fundamentally different from personal decisions in that they often affect people in the aggregate. In our individual lives, we come into contact with at least some of the consequences of our decisions. If we fail to consult a map, we pay the price: losing valuable time driving around in circles and listening to the complaints of our passengers. We are constantly confronted with the consequences of the choices that we have made. Not so for governments, however, which exercise authority by making decisions at a distance. Perhaps one of the most challenging aspects of governmental decisions is that they require a special kind of compassion—one that can seem, at first glance, cold and calculating, the antithesis of empathy. The aggregate and complex nature of governmental decisions does not address people as human beings, with concerns and interests, families and emotional relationships, secrets and sorrows. Rather, people are numbers stacked in a column or points on a graph, described not through their individual stories of triumph and despair, but by equations, functions, and dose-response curves. The language of governmental decisionmaking can seem to—and to a certain extent does—ignore what makes individuals unique and morally important. But, although the language of bureaucratic decisionmaking can be dehumanizing, it is also a prerequisite for the kind of compassion that is needed in contemporary society. Elaine Scarry has developed a comparison between individual compassion and statistical compassion.' Individual compassion is familiar—when we see a person suffering, or hear the story of some terrible tragedy, we are moved to take action. Statistical compassion seems foreign—we hear only a string of numbers but must comprehend "the concrete realities embedded there."' Individual compassion derives from our social nature, and may be hardwired directly into the human brain.' Statistical compassion calls on us to use our higher reasoning power to extend our natural compassion to the task of solving more abstract—but no less real—problems. Because compassion is not just about making us feel better—which we could do as easily by forgetting about a problem as by addressing it—we have a responsibility to make the best decisions that we can. This book argues that cost-benefit analysis, properly conducted, can improve environmental and public health policy. Cost-benefit analysis—the translation of human lives and acres of forest into the language of dollars and cents—can seem harsh and impersonal. But such an approach is also necessary to improve the quality of decisions that regulators make. Saving the most lives, and best protecting the quality of our environment and our health—in short, exercising our compassion most effectively—requires us to step back and use our best analytic tools. Sometimes, in order to save a life, we need to treat a person like a number. This is the challenge of statistical compassion. This book is about making good decisions. It focuses on the area of environmental, health and safety regulation. These regulations have been the source of numerous and hard-fought controversies over the past several decades, particularly at the federal level. Reaching the right decisions in the areas of environmental protection, increasing safety, and improving public health is clearly of high importance. Although it is admirable (and fashionable) for people to buy green or avoid products made in sweatshops, efforts taken at the individual level are not enough to address the pressing problems we face—there is a vital role for government in tackling these issues, and sound collective decisions concerning regulation are needed. There is a temptation to rely on gut-level decisionmaking in order to avoid economic analysis, which, to many, is a foreign language on top of seeming cold and unsympathetic. For government to make good decisions, however, it cannot abandon reasoned analysis. Because of the complex nature of governmental decisions, we have no choice but to deploy complex analytic tools in order to make the best choices possible. Failing to use these tools, which amounts to abandoning our duties to one another, is not a legitimate response. Rather, we must exercise statistical compassion by recognizing what numbers of lives saved represent: living and breathing human beings, unique, with rich inner lives and an interlocking web of emotional relationships. The acres of a forest can be tallied up in a chart, but that should not blind us to the beauty of a single stand of trees. We need to use complex tools to make good decisions while simultaneously remembering that we are not engaging in abstract exercises, but that we are having real effects on people and the environment. In our personal lives, it would be unwise not to shop around for the best price when making a major purchase, or to fail to think through our options when making a major life decision. It is equally foolish for government to fail to fully examine alternative policies when making regulatory decisions with life-or-death consequences. This reality has been recognized by four successive presidential administrations. Since 1981, the cost-benefit analysis of major regulations has been required by presidential order. Over the past twenty-five years, however, environmental and other progressive groups have declined to participate in the key governmental proceedings concerning the cost-benefit analysis of federal regulations, instead preferring to criticize the technique from the outside. The resulting asymmetry in political participation has had profound negative consequences, both for the state of federal regulation and for the technique of cost-benefit analysis itself. Ironically, this state of affairs has left progressives open to the charge of rejecting reason, when in fact strong environmental and public health pro-grams are often justified by cost-benefit analysis. It is time for progressive groups, as well as ordinary citizens, to retake the high ground by embracing and reforming cost-benefit analysis. The difference between being unthinking—failing to use the best tools to analyze policy—and unfeeling—making decisions without compassion—is unimportant: Both lead to bad policy. Calamities can result from the failure to use either emotion or reason. Our emotions provide us with the grounding for our principles, our innate interconnectedness, and our sense of obligation to others. We use our powers of reason to build on that emotional foundation, and act effectively to bring about a better world.

# 1ar

#### Even without absolute truth we can create provisional consensus and common understanding

Ferguson 2002 Yale Ferguson (Professor of International Relations at Rutgers) and Richard Mansbach (Professor of International Relations at Iowa State) 2002 International Relations and the “Third Debate,” ed. Jarvis

Although there may be no such thing as “absolute truth” (Hollis, 1994:240-247; Fernandez-Armesto, 1997:chap.6), there is often a sufficient amount of intersubjective consensus to make for a useful conversation. That conversation may not lead to proofs that satisfy the philosophical nit-pickers, but it can be educational and illuminating. We gain a degree of apparently useful “understanding” about the things we need (or prefer) to “know.”

#### Alt cedes energy policy to elites

Macias 2010 (Rebeca Macias, Visiting Scholar at the Canadian Institute of Resources Law University of Calgary, December 2010, “Public Participation in Energy and Natural Resources Development: A Theory and Criteria for Evaluation,” http://dspace.ucalgary.ca/bitstream/1880/48390/1/CriteriaOP34w.pdf)

The complexity of environmental decisions and their political impacts are strong arguments for citizens’ participation. It is argued that public participation enhances the accountability of environmental decision-making, as the public acts as a watchdog over government policies. As government tends to privilege market development, it may overlook democratic values.62 Participation can help to increase governments’ compliance with environmental and natural resources conservation.63 Participation “injects different ideas, preventing the agency from descending into closed-door thinking in an intellectual vacuum.”64

#### Policy debates about energy key to inclusive, productive solutions

Macias 2010 (Rebeca Macias, Visiting Scholar at the Canadian Institute of Resources Law University of Calgary, December 2010, “Public Participation in Energy and Natural Resources Development: A Theory and Criteria for Evaluation,” http://dspace.ucalgary.ca/bitstream/1880/48390/1/CriteriaOP34w.pdf)

In the area of energy and resources management, Barton points to a common divergence between technical and community opinions. The rationale for public participation in such matters relies on the fact that people want to be heard on the issues that have an effect on them.51 He also explains that in the case of risk management, for instance, because citizens refuse to have experts define what is acceptable for their community, technicians and local people might strongly disagree on the policy proposed by the government.52¶ In order to address the demand for participation and avoid having experts exclusively define public policy, public participation tends to promote inclusion in decision-making. As a result, the chances of marginalization from the deliberative process are decreased.53 Inclusion also prevents environmental injustices by widening the range of decision-makers and then tackling a larger variety of social groups’ concerns. As well as being inclusive, participation is also considered to be transformative of adversarial relationships because citizens are encouraged to search for means of working together.54 Citizens and government representatives come face to face to dialogue and seek the best outcome in a certain environmental decision-making process.¶ For all these reasons, the main substantive rationale for public participation is that it promotes better outcomes. Environmental decision-making is improved by a range of opinions, concerns, information and types of knowledge. When deliberation takes place, information and technologies will presumably be better applied.

#### Violence is decreasing due to hegemony- DA to the alt

Drezner 2005 Daniel W. Drezner Associate Professor of International Politics at the Fletcher School of Law and Diplomacy at Tufts University May 25, 2005 “Gregg Easterbrook, war, and the dangers of extrapolation” http://www.danieldrezner.com/archives/002087.html

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 of democracy are right out the window.