# ASU CR Cards Round 8 NDT

## 1NC

### 1

#### A. Interpretation and violation –

#### 1. Introducing “armed forces” only refers to human troops, not weapons systems – only we have intent to define

Lorber, 13 - J.D. Candidate, University of Pennsylvania Law School, Ph.D Candidate, Duke University Department of Political Science (Eric, “Executive Warmaking Authority and Offensive Cyber Operations: Can Existing Legislation Successfully Constrain Presidential Power?” 15 U. Pa. J. Const. L. 961, January, lexis)

As is evident from a textual analysis, n177 an examination of the legislative history, n178 and the broad policy purposes behind the creation of the Act, n179 [\*990] "armed forces" refers to U.S. soldiers and members of the armed forces, not weapon systems or capabilities such as offensive cyber weapons. Section 1547 does not specifically define "armed forces," but it states that "the term "introduction of United States Armed Forces' includes the assignment of members of such armed forces to command, coordinate, participate in the movement of, or accompany the regular or irregular military forces of any foreign country or government." n180 While this definition pertains to the broader phrase "introduction of armed forces," the clear implication is that only members of the armed forces count for the purposes of the definition under the WPR. Though not dispositive, the term "member" connotes a human individual who is part of an organization. n181 Thus, it appears that the term "armed forces" means human members of the United States armed forces. However, there exist two potential complications with this reading. First, the language of the statute states that "the term "introduction of United States Armed Forces' includes the assignment of members of such armed forces." n182 By using inclusionary - as opposed to exclusionary - language, one might argue that the term "armed forces" could include more than members. This argument is unconvincing however, given that a core principle of statutory interpretation, expressio unius, suggests that expression of one thing (i.e., members) implies the exclusion of others (such as non-members constituting armed forces). n183 Second, the term "member" does not explicitly reference "humans," and so could arguably refer to individual units and beings that are part of a larger whole (e.g., wolves can be members of a pack). As a result, though a textual analysis suggests that "armed forces" refers to human members of the armed forces, such a conclusion is not determinative. An examination of the legislative history also suggests that Congress clearly conceptualized "armed forces" as human members of the armed forces. For example, disputes over the term "armed forces" revolved around who could be considered members of the armed forces, not what constituted a member. Senator Thomas Eagleton, one of the Resolution's architects, proposed an amendment during the process providing that the Resolution cover military officers on loan to a civilian agency (such as the Central [\*991] Intelligence Agency). n184 This amendment was dropped after encountering pushback, n185 but the debate revolved around whether those military individuals on loan to the civilian agency were still members of the armed forces for the purposes of the WPR, suggesting that Congress considered the term to apply only to soldiers in the armed forces. Further, during the congressional hearings, the question of deployment of "armed forces" centered primarily on past U.S. deployment of troops to combat zones, n186 suggesting that Congress conceptualized "armed forces" to mean U.S. combat troops. The broad purpose of the Resolution aimed to prevent the large-scale but unauthorized deployments of U.S. troops into hostilities. n187 While examining the broad purpose of a legislative act is increasingly relied upon only after examining the text and legislative history, here it provides further support for those two alternate interpretive sources. n188 As one scholar has noted, "the War Powers Resolution, for example, is concerned with sending U.S. troops into harm's way." n189 The historical context of the War Powers Resolution is also important in determining its broad purpose; as the resolutions submitted during the Vietnam War and in the lead-up to the passage of the WPR suggest, Congress was concerned about its ability to effectively regulate the President's deployments of large numbers of U.S. troops to Southeast Asia, n190 as well as prevent the President from authorizing troop incursions into countries in that region. n191 The WPR was a reaction to the President's continued deployments of these troops into combat zones, and as such suggests that Congress's broad purpose was to prevent the unconstrained deployment of U.S. personnel, not weapons, into hostilities. This analysis suggests that, when defining the term "armed forces," Congress meant members of the armed forces who would be placed in [\*992] harm's way (i.e., into hostilities or imminent hostilities). Applied to offensive cyber operations, such a definition leads to the conclusion that the War Powers Resolution likely does not cover such activities. Worms, viruses, and kill switches are clearly not U.S. troops. Therefore, the key question regarding whether the WPR can govern cyber operations is not whether the operation is conducted independently or as part of a kinetic military operation. Rather, the key question is the delivery mechanism. For example, if military forces were deployed to launch the cyberattack, such an activity, if it were related to imminent hostilities with a foreign country, could trigger the WPR. This seems unlikely, however, for two reasons. First, it is unclear whether small-scale deployments where the soldiers are not participating or under threat of harm constitute the introduction of armed forces into hostilities under the War Powers Resolution. n192 Thus, individual operators deployed to plant viruses in particular enemy systems may not constitute armed forces introduced into hostilities or imminent hostilities. Second, such a tactical approach seems unlikely. If the target system is remote access, the military can attack it without placing personnel in harm's way. n193 If it is close access, there exist many other effective ways to target such systems. n194 As a result, unless U.S. troops are introduced into hostilities or imminent hostilities while deploying offensive cyber capabilities - which is highly unlikely - such operations will not trigger the War Powers Resolution.

#### 2. They don’t restrict a presidential authority – creating the military and deciding which weapons are available is Congressional authority. The president’s authority to conduct war remains the same, just with different weapons

Yoo 02 GW Bush’s Deputy Assistant Attorney General, Office of Legal Counsel, US Justice Department (John, Applying the War Powers Resolution to the War on Terrorism, Senate Judiciary Comm, April 17, 2002, S. HRG. 107–892. http://www.gpo.gov/fdsys/pkg/CHRG-107shrg85888/pdf/CHRG-107shrg85888.pdf, p. 11) PC

Of course, as the President has the constitutional authority to engage U.S. Armed Forces in hostilities, Congress has a broad range of war powers as well. Congress has the power to tax and to spend. Congress has the power to raise and support armies and to provide and maintain a navy. And Congress has the power to call forth the militia, and to make rules for the Government and regulation of the armed forces. In other words, although the President has the power of the sword, Congress has the power of the purse.

#### 3. Their restriction takes place before the hostilities – ‘Hostilities’ doesn’t apply to accidental conflict

Koh, 11, - Legal Adviser, U.S. Department of State, professor of law at Yale (LIBYA AND WAR POWERS HEARING BEFORE THE COMMITTEE ON FOREIGN RELATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION JUNE 28, 2011, <http://www.gpo.gov/fdsys/pkg/CHRG-112shrg68241/html/CHRG-112shrg68241.htm>)

Third, the risk of escalation is limited: U.S. military operations have not involved the presence of U.S. ground troops, or any significant chance of escalation into a broader conflict characterized by a large U.S. ground presence, major casualties, sustained active combat, or expanding geographical scope. Contrast this with the 1991 Desert Storm operation, which although also authorized by a United Nations Security Council resolution, presented ``over 400,000 [U.S.] troops in the area--the same order of magnitude as Vietnam at its peak--together with concomitant numbers of ships, planes, and tanks.'' \18\ **Prior administrations have found an absence of ``hostilities'' under the War Powers Resolution in situations ranging from Lebanon to Central America to Somalia to the Persian Gulf tanker controversy, although members of the United States Armed Forces were repeatedly engaged by the other side's forces and sustained casualties** in volatile geopolitical circumstances, in some cases running a greater risk of possible escalation than here.\19\ --------------------------------------------------------------------------- \18\ John Hart Ely ``War and Responsibility: Constitutional Lessons of Vietnam and its Aftermath'' 50 (1993). \19\ **For example**, in the Persian Gulf in 1987-88, **the Reagan administration found the War Powers Resolution's pullout provision inapplicable** to a reflagging program that was conducted in the shadow of the Iran-Iraq war; **that was preceded by an accidental attack on a U.S. Navy ship** that killed 37 crewmen; and that led to repeated instances of active combat with Iranian forces. See Grimmett, supra note 15, at 16-18.

#### Vote negative:

#### 1. Limits – Restrictions on war powers could include restrictions on any weapons system – nuclear weapons, land mine bans, cluster bombs, chemical weapons – it’s why we need a ‘human’ limit

Lobel, 8 - Professor of Law, University of Pittsburgh Law School (Jules, “Conflicts Between the Commander in Chief and Congress: Concurrent Power over the Conduct of War” 392 OHIO STATE LAW JOURNAL [Vol. 69:391, <http://moritzlaw.osu.edu/students/groups/oslj/files/2012/04/69.3.lobel_.pdf>)

The third theory—based on the distinction between general rules and specific tactics—also has surface appeal, but is unworkable when applied to specific issues because the line between policy and tactic is too amorphous and hazy to be useful in real world situations. For example, how does one decide whether the use of waterboarding as a technique of interrogation is a policy or specific tactic? Even if it is arguably a specific tactic, Congress could certainly prohibit that tactic as antithetical to a policy prohibiting cruel and inhumane treatment. So too, President Bush’s surge strategy in Iraq could be viewed as a tactic to promote a more stable Iraq, or as a general policy which Congress should be able to limit through use of its funding power. Congress can limit tactical decisions to use particular weapons such as chemical weapons, nuclear weapons, or cluster bombs by forbidding the production or use of such weapons, or simply refusing to fund them.42 Congress could also, however, enact more limited and specific restrictions to prohibit the use of nuclear weapons or land mines in a particular conflict or even a particular theater of war. Indeed, most specific tactics could be permitted or prohibited by a rule. In short, the distinctions between strategies and tactics, rules and detailed instructions, or policies and tactics are simply labels which are virtually indistinguishable. Labeling an activity with one of these terms is largely a distinction without a difference. Accordingly, these labels are not helpful to the real problem of determining the respective powers of Congress and the President.43

#### 2. Ground – troops are the true controversy:

Lorber, JD University of Pennsylvania, January 2013

(Eric, “Executive Warmaking Authority and Offensive Cyber Operations: Can Existing Legislation Successfully Constrain Presidential Power?” 15 U. Pa. J. Const. L. 961, Lexis)

The broad purpose of **the Resolution aimed to prevent the** large-scale but **unauthorized** **deployments of U.S. troops into hostilities**. n187 While examining the broad purpose of a legislative act is increasingly relied upon only after examining the text and legislative history, here it provides further support for those two alternate interpretive sources. n188 **As one scholar has noted**, "**the** W**ar** P**owers** R**esolution**, for example, **is concerned with sending U.S.** troops **into harm's way**." n189 **The historical context** of the War Powers Resolution **is** also **important** in determining its broad purpose; **as** the resolutions submitted during **the Vietnam War and** in the lead-up to the passage of the **WPR suggest**, **Congress was concerned about its ability to effectively regulate the President's deployments of large numbers of U.S. troops** to Southeast Asia, n190 as well as prevent the President from authorizing troop incursions into countries in that region. n191 **The WPR was a reaction to the** President's continued **deployments of these troops into combat zones**, **and** as such suggests that **Congress's broad purpose was to prevent the** unconstrained **deployment of U.S. personnel**, not weapons, **into hostilities**.

### 2

#### Counterplan Text: The United States federal government should fully fund a program to cover at least 4.8% of the surface of the Earth’s oceans in a monolayer of 0.1 μm diameter latex particles, either hollow, or of core-shell morphology, bearing a conventional stabilization system that is inactivated in salt water. The United States Congress should substantially increase statutory restrictions on the President’s authority to introduce armed forces into hostilities by prohibiting retaliatory nuclear attack before nuclear detonation in the United States.

#### CP solves warming and only costs $2 billion

Morgan 11 – (10/8/11, John, PhD in physical chemistry, runs R&D programmes at a Sydney startup company, research experience in chemical engineering in the US and at the Commonwealth Scientific and Industrial Research Organisation, Australia's national science agency, “Low intensity geoengineering – microbubbles and microspheres,” <http://bravenewclimate.com/2011/10/08/low-intensity-geoengineering-microbubbles-and-microspheres/>)

Is there another way to look at this? **The Achilles heel of the hydrosol approach is the short bubble lifetime. But are there other ways to brighten water?** Are there any other micron sized light scattering particles cheaply available in prodigious quantities, which float in water and don’t dissolve? **It turns out the answer is yes. Synthetic latex is produced on a huge scale** – 1010 kg in 2005. **A latex is a dispersion of polymer microspheres in water** (Figure 5). The particle size is typically around 0.1 – 0.5 μm. **The polymer content is high – about 50% by weight. And** its cheap **– a bit over a dollar per kilo wet. It looks like a bright white opaque liquid**, like wood glue, which is a polyvinylacetate latex. Its a bulk commodity used in adhesives, paper coatings, paint and many other applications. **Lets run the numbers on this and ask, what would it take to reverse current warming?** First we need to know how much light these particles scatter back to space. I used Mie theory to analyse scattering of 500 nm wavelength light (roughly the solar peak) from 0.1 μm diameter polystyrene spheres, as if the sun were overhead. **The back scattering from these very small particles is intense – 42% of overhead light returns to space. And this is just direct scattering. Some of the light that scatters forward will scatter off a second particle, and a third. Multiple scattering will see more than 42% of light returned to space.** **Since these particles attach to the surface, lets consider,** for the moment, **a monolayer on the water surface. This requires 1014 particles per square metre,** with a volume of 5.2×10-8 m3 per m2 (or 5 parts per billion of the top 10 m, for comparison with Seitz’ figures). Polystyrene has a density of 1050 kg m-3, so that’s a mass of 55 mg m-2. Over 3.16×1014 m2 of ocean that’s 1.7×1010 kg polymer. **What would this do to the earth’s energy balance?** Average insolation (accounting for cloud cover [Jin et al. 2002, cited by Seitz]) is 239 Wm-2. The monolayer cross sectional area fraction is pi/4. So the energy returned by direct overhead scattering is about 78 W. That’s huge compared to the current CO2 forcing of about 2.25 Wm-2. **Modelling reported by Seitz indicates an increase of ocean albedo of 0.05 translates to an increase of planetary albedo by 0.031** [Seitz 2010; Figure 5]. So I’ll assume planetary albedo increase is 60% of the ocean albedo increase, which means we need ocean backscattering of 3.75 Wm-2. We would only need 4.8% of a monolayer to offset current CO2 forcing **(ignoring the contribution from multiple scattering)**. 4.8% of a whole ocean monolayer is 8.3×108 kg of dry polymer, or about 1.7×109 kg wet latex. At say $1.20 per kg, this would cost $2.0 billion and account for 17% of 2005 global production capacity. **This is, surprisingly, well within reach. $2.0b to reverse global warming is cheap.** **Restricting dispersal to the mid latitudes where the greatest effect is achieved, using core-shell latex technology, and properly accounting for multiple scattering would see this cost drop even further.** Annual growth in latex production grew organically by 4.5% per annum between 2000-2005. **Ramping production by 17% would be completely feasible. The ongoing cost depends on the residence time of the particles at the ocean surface.** Equatorial currents run at about 1 ms-1, which would imply a traversal time of about 1 year for the Pacific ocean. Mid latitude the currents are much slower. The latex particles themselves will degrade in the environment, and there will be losses by association and entrainment in a complex marine environment. **But let’s provisionally estimate a cost of $2b per year. This is significantly cheaper than, say, stratospheric sulfur aerosol injection which is estimated at $25-50b per year, let alone space sunshades. And it doesn’t require exotic engineering, enabling R&D, or orbital launches** – **it uses existing materials at a rate well inside existing production capacity.** Conclusion **So consider this final elaboration of Russell Seitz’ bright idea: 0.1 μm diameter latex particles, possibly hollow, or of core-shell morphology, bearing a conventional stabilization system that is inactivated in salt water ensuring that the particles are retained at and near the surface, are produced in bulk using about 17% of existing production capacity and using commercial recipes, and are sprayed onto the sea from tanks aboard ships or crop dusting aircraft, oil rigs, and other structures, in the mid latitudes.** For a cost in the order of a mere $2b per year we could offset current global warming, subject to the many disclaimers and qualifications discussed above, and many others not mentioned. More limited, local applications, such as the direct cooling of coral reefs as envisaged by Seitz for the microbubble concept, are also possible.

#### Plan solves – creates enough political pressure for Obama to comply.

Barron 8 – David J. Barron, Professor of Law at Harvard Law School and Martin S. Lederman, Visiting Professor of Law at the Georgetown University Law Center, “The Commander in Chief at the Lowest Ebb -- A Constitutional History”, Harvard Law Review, February, 121 Harv. L. Rev. 941, Lexis

In addition to offering important guidance concerning the congressional role, our historical review also illuminates the practices of the President in creating the constitutional law of war powers at the "lowest ebb." Given the apparent advantages to the Executive of possessing preclusive powers in this area, it is tempting to think that Commanders in Chief would always have claimed a unilateral and unregulable authority to determine the conduct of military operations. And yet, as we show, for most of our history, the presidential practice was otherwise. Several of our most esteemed Presidents - Washington, Lincoln, and both Roosevelts, among others - never invoked the sort of preclusive claims of authority that some modern Presidents appear to embrace without pause. In fact, no Chief Executive did so in any clear way until the onset of the Korean War, even when they confronted problematic restrictions, some of which could not be fully interpreted away and some of which even purported to regulate troop deployments and the actions of troops already deployed. Even since claims of preclusive power emerged in full, the practice within the executive branch has waxed and waned. No consensus among modern Presidents has crystallized. Indeed, rather than denying the authority of Congress to act in this area, some modern Presidents, like their predecessors, have acknowledged the constitutionality of legislative regulation. They have therefore concentrated their efforts on making effective use of other presidential authorities and institutional [\*949] advantages to shape military matters to their preferred design. n11 In sum, there has been much less executive assertion of an inviolate power over the conduct of military campaigns than one might think. And, perhaps most importantly, until recently there has been almost no actual defiance of statutory limitations predicated on such a constitutional theory. This repeated, though not unbroken, deferential executive branch stance is not, we think, best understood as evidence of the timidity of prior Commanders in Chief. Nor do we think it is the accidental result of political conditions that just happened to make it expedient for all of these Executives to refrain from lodging such a constitutional objection. This consistent pattern of executive behavior is more accurately viewed as reflecting deeply rooted norms and understandings of how the Constitution structures conflict between the branches over war. In particular, this well-developed executive branch practice appears to be premised on the assumption that the constitutional plan requires the nation's chief commander to guard his supervisory powers over the military chain of command jealously, to be willing to act in times of exigency if Congress is not available for consultation, and to use the very powerful weapon of the veto to forestall unacceptable limits proposed in the midst of military conflict - but that otherwise, the Constitution compels the Commander in Chief to comply with legislative restrictions. In this way, the founding legal charter itself exhorts the President to justify controversial military judgments to a sympathetic but sometimes skeptical or demanding legislature and nation, not only for the sake of liberty, but also for effective and prudent conduct of military operations. Justice Jackson's famous instruction that "with all its defects, delays and inconveniences, men have discovered no technique for long preserving free government except that the Executive be under the law, and that the law be made by parliamentary deliberations" n12 continues to have a strong pull on the constitutional imagination. n13 What emerges from our analysis is how much pull it seemed to [\*950] have on the executive branch itself for most of our history of war powers development.

### 3

#### The judiciary adheres to political question deference now—but doctrinal repudiation would reverse that

Franck ‘12

[Thomas, Murray and Ida Becker Professor of Law, New York University School of Law Wolfgang Friedmann Memorial Award 1999, *Political Questions/Judicial Answers*]

Sensitive to this historical perspective, **many scholars**, but few judges, have openly decried the judiciary’s tendency to suspend at the water’s edge their jealous defense of the power to say what the law is. Professor Richard Falk, for example, has criticized judges’ “ad hoc subordinations to executive policy”5 and urged that if the object of judicial deference is to ensure a single coherent American foreign po1icy, then that objective is far more likely to be secured if the policy is made in accordance with rules “that are themselves not subject to political manipulation.”6 Moreover, as a nation publicly proclaiming its adherence to the rule of law, Falk notes, it is unedifying for America to refuse to subject to that rule the very aspect of its governance that is most important and apparent to the rest of the world.7 Professor Michael Tigar too has argued that the deference courts show to the political organs, when it becomes abdication, defeats the basic scheme of the Constitution because when judges speak of “the people” as “the ultimate guardian of principle” in political-question cases, they overlook the fact that “the people” are the “same undifferentiated mass” that “historically, unmistakably and, at times, militantly insisted that when executive power immediately threatens personal liberty, a judicial remedy must be available.” Professor Louis Henkin, while acknowledging that certain foreign relations questions are assigned by the Constitution to the discretion of the political branches, also rejects the notion that the judiciary can evade responsibility for deciding the appropriate limits to that discretion, particularly when its exercise comes into conflict with other rights or powers rooted in the Constitution or laws enacted in accordance with its strictures.9 His views echo earlier ones espoused by Professor Louis Jaffe, who argued that while the courts should listen to advice tendered by the political branches on matters of foreign pol icy and national security, “[t]his should not mean that the court must follow such advice, but that without it the court should not prostrate itself before the fancied needs of diplomacy and foreign policy. The claim of policy should be made concrete in the particular instance. Only so may its weight, its content, and its value be appreciated. The claims of diplomacy are not absolute; to question their compulsion is not treason.”° There has been little outright support from the judiciary for such open calls to repudiate the practice of refusing to adjudicate foreign affairs cases on their merits. While some judges do refuse to apply the doctrine, holding it inapplicable in the specific situation or passing over it in silence, virtually none have hitherto felt able to repudiate it frontally. On the other side, some judges continue to argue vigorously for the continued validity of judicial abdication in cases implicating foreign policy or national security. These proponents still rely occasion ally on the early shards of dicta and more rarely on archaic British precedents that run counter to the American constitutional ethos. More frequently today, their arguments rely primarily on a theory of constitutionalism—separation of powers—and several prudential reasons.

#### Reducing court deference breaks the political question doctrine

Lederman 11 (Martin, Professor of Law – Georgetown University Law Center, “War, Terror, and the Federal Courts, Ten Years After 9/11: Conference\*: Association of American Law Schools' Section on Federal Courts Program at the 2012 AALS Annual Meeting in Washington, D.C.,” American University Law Review, June, 61 Am. U.L. Rev. 1253, Lexis)

Number two: Numerous very important, contested, hotly debated topics have arisen in the last ten years, many of them in the Bush Administration, involving for example interrogation techniques, the scope of detention authority, habeas review, military commissions, targeted killings,and the use of force more broadly. On some of these questions, the federal courts - and the Supreme Court in particular - have had quite a lot to say; and on others, not so much, at least in part because of several different federal courts doctrines that prevent the courts from speaking too much about those. You're all familiar with standing limits, political questions, state secrets, etc. We're going to focus particularly on a couple of them, which are immunity doctrines and the weakening of the Bivens n2 and state court sorts of causes of action. We will also discuss the fact that there are many people who think the federal courts have become too involved at supervising and resolving substantive questions involving the political branches, including some of Judge Kavanaugh's colleagues, who have been particularly vocal about that, engaging in what appears to be a form of resistance to the Supreme Court's Boumediene n3 decision. By contrast, many other people think the courts have not been nearly involved enough at resolving some of the unresolved questions about the scope of interrogation and detention and military commissions and the like, that might be lingering from the last administration, or occurring now in the new administration, such as with respect to use of force. So that's the second broad topic - whether the federal courts have been too timid or too aggressive in this area.

#### PQD key to Sonar training

Gartland ‘12

Maj. Charles, B.A., University of Alaska - Anchorage; J.D., cum laude, Gonzaga University School of Law; LL.M., George Washington University Law School) is a United States Air Force judge advocate currently serving as the Environmental Liaison Officer for the Air Force Materiel Command, “ARTICLE: AT WAR AND PEACE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT: WHEN POLITICAL QUESTIONS AND THE ENVIRONMENT COLLIDE,” 68 A.F. L. Rev. 27

The public interest in conducting training exercises with active sonar under realistic conditions plainly outweighs the interests advanced by the plaintiffs" (emphasis added). n407 At least two Supreme Court Justices disagreed n408 with Chief Justice Roberts' characterization in Winter, and, arguably, four of them disagreed (depending on how the partial concurrence/dissent by Justice Breyer, partially joined by Justice Stevens, is construed). n409 Certainly the Ninth Circuit disagreed, n410 and that highlights a significant rub, namely, that the drastic remedy of an injunction appears to have no predictability whatsoever. In one nuclear detonation case, Committee for Nuclear Responsibility v. Schlesinger, the test goes forward; n411 another two years later, Enewetak, a different test is enjoined. n412 In one training case, Barcelo v. Brown, military training exercises are allowed to proceed, n413 whereas in others, Evans and Winter (until the Supreme Court phase) they are enjoined. n414 Such uncertainty is a natural outcome of the process unfolding in all these cases: a judicial decision to grant an injunction under NEPA against a national defense activity is--by the very nature of the four part injunction test--a policy decision; and people (and judges) disagree about what constitutes good public policy. Policy decisions lie with the legislative and executive branches, and in the case of national defense, the policy decision has already been settled by statute and the Constitution--both of which provide for a national defense establishment that, in protecting the Republic, allows statutes like NEPA to exist in the first place.

#### That’s key to overall Naval power and anti-submarine warfare.

Popeo et al ‘8

Daniel, Paul Kamenar, Washington Legal Foundation, Andrew McBride, Thomas McCarthy, Andrew Miller, William R. Dailey, Wiley Rein LLP, “Brief for Amici Curiae The Washington Legal Foundation, Rear Admiral James J. Carey, U.S. Navy (Ret.), National Defense Committee, and Allied Educational Foundation in Support of Petitioners,” http://www.wlf.org/upload/07-1239winter.pdf

Throughout our Nation's history, the Navy has played a vital role in major world events occurring during both times of war and peace. As a maritime Nation, the United States relies on the "Navy's ability to operate freely at sea to guarantee access, sustain trade and commerce, and partner with other nations to ensure not only regional security but defense of our own homeland." App. 314a (statement of Rear Admiral Ted N. Branch). For this reason, it has been recognized that this ability "to operate freely at sea is one of the most important enablers of national power- diplomatic, information, military and economic." App. 315a-316a (statement of Rear Admiral Ted N. Branch). The only way to ensure our Nation's ability to so operate at sea is through naval training. Indeed, it is a Navy maxim that "We train as we will fight so that we will fight as we have trained." J.A. 576 (statement of Captain Martin N. May). Antisubmarine warfare has long been a key component of naval warfare. Because submarine detection and antisubmarine warfare require the coordinated efforts of vast numbers of Navy personnel, repeated training in battle conditions is essential to naval readiness. And, in our modern era, advanced technologies enable our enemies to deploy submarines that are capable of carrying long-range weapons while operating in virtual silence, nearly wholly undetectable except through the use of MFA sonar. Thus, antisubmarine warfare training utilizing MFA sonar is an absolute necessity in preparing our Navy to detect and combat enemy submarines. It goes without saying that, in a time of armed conflict, naval training and readiness are indispensable. Indeed, with American troops currently deployed throughout the world and, specifically, engaged in war in Afghanistan and Iraq, the Navy's role in our national security has never been more important than at the present. Maintaining an effective and proficient Navy, therefore, is of the utmost importance to the United States' national defense and homeland security. It is for this reason that the President determined that "the COMPTUEX and JTFEX, including the use of mid-frequency active sonar in these exercises, are in the paramount interest of the United States." App. 232a. A. A Well-Trained Navy Has Always Been A Cornerstone Of Our National Defense. Naval training has undoubtedly been at the center of the U.S. Navy's prior wartime and peacetime successes. Only a well-trained navy could have successfully fought in both the Atlantic and Pacific oceans simultaneously, as the U.S. Navy demonstrated in World War II. During World War II, the U.S. Navy's antisubmarine training was largely responsible for defeating the German submarines that were dangerously close to securing victory in the Battle of the Atlantic. See THEODORE ROSCOE & RICHARD G. VOGE, UNITED STATES SUBMARINE OPERATIONS IN WORLD WAR II xviii (Naval Institute Press 1949). It was also the joint training exercises of Operation Tiger that prepared the U.S. Navy and Army for the Normandy Invasion. See Operational Archives, Naval Historical Center, Operation Tiger, available at http-//www.history. navy.mil/faqs/faq20-l.htm (last visited July 23, 2008). Without this preparation, one of the most important battles in world history, D-Day, may have resulted in devastating failure for the United States and its allies. The Cuban Missile Crisis presented another major world event in which the Navy's readiness was of critical importance to our national security. In 1962, naval forces under U.S. Atlantic Command maintained a month-long naval "quarantine" of the island of Cuba in order to prevent the Soviet Union's deployment of ballistic missiles there. Cuban Missile Crisis, 1962, available at http '//www. history, navy. mil/faqs/faq90-l.htm (last visited July 23, 2008). The immediate readiness of the U.S. Navy in these circumstances defused a situation that came as close as the United States and Soviet Union ever came to global nuclear war. Id. At a minimum, the Navy blockade was a demonstration of the United States' strength. Naturally, the beneficial effects of naval training did not end with World War II or even the Cold War. Naval training exercises have continued to adequately prepare the Navy for effective and safe military campaigns and have continued to symbolize a strong Nation at the ready to protect its interests at home and abroad. That a well-trained Navy indicates and symbolizes American strength is not a creation of fantasy. It is a theme well-recognized by our Nation's prior and current enemies. Indeed, the importance of the U.S. Navy was not overlooked by the Japanese in their bombing of Pearl Harbor, nor was the symbolism of a U.S. Navy destroyer lost in al-Qaeda's suicide bombing attack against the USS Cole. That the Navy has been a target of strategic and symbolic attacks from our Nation's enemies further demonstrates the need for proper training to ensure the safety and success of the Navy in its vital role of defending the homeland. Undoubtedly, thorough training is a requisite to an effective Navy. On-the-job training in combat, it follows, "is the worst possible way of training personnel" and can place the success of military missions "at significant risk." App. 278a (statement of Rear Admiral John M. Bird). Consequently, naval training should be performed prior to actual combat to ensure the preparedness and eventual success in our Navy's military missions. This seemingly obvious statement is, quite possibly, even more relevant to the Navy's mission of defending against enemy submarines. B. Training For Anti-Submarine Warfare Is A Critical Component Of Naval Readiness. The Navy is the only service—military or otherwise—that can address the threat from submarines, and any curtailment of its ability to train for this mission would decrease the Navy's ability to handle that threat. App. 315a (statement of Rear Admiral Ted N. Branch). For years, the Navy has employed SONAR to "identify and track submarines, determine water depth, locate mines, and provide for vessel safety." App. 266a (statement of Rear Admiral John M. Bird). The Navy started using SONAR after World War I, and every naval vessel engaged in antisubmarine activity was equipped with sonar systems by the start of World War II. App. 268a. Indeed, as indicated above, antisubmarine warfare was integral to the Navy's successful campaigns against German submarines in World War II. Antisubmarine warfare is a science in which considerable effort goes into making and maintaining contact with the submarine. App. 354a~356a; see also App. 278a ("ASW occurs over many hours or days. Unlike an aerial dogfight, over in minutes and even seconds, ASW is a cat and mouse game that requires large teams of personnel working in shifts around the clock to work through an ASW scenario.") This fact is even more applicable when quiet, diesel-electric submarines—submarines increasingly utilized by hostile nations—are involved; modern diesel-electric submarines are capable of defeating the best available passive sonar technology by "suppress[ing] emitted noise levels." App. 274a. In addition, the far-reaching range of weapons found on modern submarines make it possible for those submarines to avoid placing themselves within range of passive sonar. App. 274a. As a result, active sonar is necessary to detect the presence of diesel-electric submarines. App. 269a\_270a. The Nation's top naval officers agree that the Navy must be able to freely utilize MFAS during antisubmarine warfare training in order to properly defend against the threats posed by diesel-electric submarines. See, e.g., App. 311a-325a, 338a-347a, 350a-357a.. If the Navy were prevented from training with MFAS or other active sonar, and were limited to using passive sonar in certain situations, the survivability of the Navy's antisubmarine missions would ultimately be placed at "great risk." App. 269a (statement of Rear Admiral John M. Bird). "[Rlealistic and repetitive [antisubmarine warfare] training with **active** SONAR is necessary **f**or our forces to be confident and knowledgeable in the Navy's plans, tactics, and procedures to perform and survive in situations leading up to hostilities as well as combat." App. 277a. Therefore, blanket mitigation measures on MFAS training "would dramatically reduce the realism of [antisubmarine warfare] training" and would be fraught with "severe national security consequences." App. 273a (statement of Rear Admiral John M. Bird). C. The Navy's Use Of MFA Sonar In The Challenged Military Exercises Is Indispensable To Our National Security In This Time Of Armed Hostilities Across the Globe. It is clear that the COMPTUEX and JTFEX training exercises are the only way the Navy's Pacific Fleet can gain the realistic training that is necessary, especially during a time of wa**r**. These exercises represent the singular opportunity for 6,000-plus Sailors and Marines to train together in a realistic environment prior to deployment and to gain proficiency in MFAS. App. 270a-271a; App. 343a. Anytime a strike group is prevented from becoming fully proficient in MFAS, and therefore cannot be certified as combat ready, national security is negatively affected. App. 271a (statement of Rear Admiral John M. Bird). And, considering the heightened sensibilities in a time of war, any interference creates a severe impact on training and certification of readiness to perform realistic antisubmarine warfare. Because the stakes of antisubmarine warfare are so high, contact with an enemy submarine is not surrendered unless there is an order to do so. App. 355a. Even a few minutes of MFAS shutdown "would be potentially fatal in combat." App. 355a-356a (statement of Vice Admiral Samuel J. Locklear, III). As a result, a single lost contact with the submarine "cripples certification for the units involved" in the exercises. App. 356a>\* see also id. ("It may take days to get to the pivotal attack in antisubmarine warfare, but only minutes to confound the results upon which certification is based."). For these reasons, the Chief of Naval Operations, who is specifically responsible for organizing, training, equipping, preparing and maintaining the readiness of Navy forces, described COMPTUEX and JTFEX as "indispensable" training exercises. App. 342a (statement of Admiral Gary Roughead). Unsuccessful naval training in the area of antisubmarine warfare can have far-reaching consequences. As Rear Admiral Ted N. Branch recognized Any restriction or disadvantage imposed on our [antisubmarine warfare] capability that impedes the U.S. Navy's ability to retain control of the sea or project naval forces may . . . result in nothing less than a breakdown of the global system, a significant change in our international standing, and an alteration in our established way of life.

#### That unleashes a laundry list of nuclear conflicts

Eaglen ‘11

(Mackenzie research fellow for national security – Heritage, and Bryan McGrath, former naval officer and director – Delex Consulting, Studies and Analysis, “Thinking About a Day Without Sea Power: Implications for U.S. Defense Policy,” Heritage Foundation

Global Implications. Under a scenario of dramatically reduced naval power, the United States would cease to be active in any international alliances. While it is reasonable to assume that land and air forces would be similarly reduced in this scenario, the lack of credible maritime capability to move their bulk and establish forward bases would render these forces irrelevant, even if the Army and Air Force were retained at today’s levels. In Iraq and Afghanistan today, 90 percent of material arrives by sea, although material bound for Afghanistan must then make a laborious journey by land into theater. China’s claims on the South China Sea, previously disputed by virtually all nations in the region and routinely contested by U.S. and partner naval forces, are accepted as a fait accompli, effectively turning the region into a “Chinese lake.” China establishes expansive oil and gas exploration with new deepwater drilling technology and secures its local sea lanes from intervention. Korea, unified in 2017 after the implosion of the North, signs a mutual defense treaty with China and solidifies their relationship. Japan is increasingly isolated and in 2020–2025 executes long-rumored plans to create an indigenous nuclear weapons capability.[11] By 2025, Japan has 25 mobile nuclear-armed missiles ostensibly targeting China, toward which Japan’s historical animus remains strong. China’s entente with Russia leaves the Eurasian landmass dominated by Russia looking west and China looking east and south. Each cedes a sphere of dominance to the other and remains largely unconcerned with the events in the other’s sphere. Worldwide, trade in foodstuffs collapses. Expanding populations in the Middle East increase pressure on their governments, which are already stressed as the breakdown in world trade disproportionately affects food importers. Piracy increases worldwide, driving food transportation costs even higher. In the Arctic, Russia aggressively asserts its dominance and effectively shoulders out other nations with legitimate claims to seabed resources. No naval power exists to counter Russia’s claims. India, recognizing that its previous role as a balancer to China has lost relevance with the retrenchment of the Americans, agrees to supplement Chinese naval power in the Indian Ocean and Persian Gulf to protect the flow of oil to Southeast Asia. In exchange, China agrees to exercise increased influence on its client state Pakistan. The great typhoon of 2023 strikes Bangladesh, killing 23,000 people initially, and 200,000 more die in the subsequent weeks and months as the international community provides little humanitarian relief. Cholera and malaria are epidemic. Iran dominates the Persian Gulf and is a nuclear power. Its navy aggressively patrols the Gulf while the Revolutionary Guard Navy harasses shipping and oil infrastructure to force Gulf Cooperation Council (GCC) countries into Tehran’s orbit. Russia supplies Iran with a steady flow of military technology and nuclear industry expertise. Lacking a regional threat, the Iranians happily control the flow of oil from the Gulf and benefit economically from the “protection” provided to other GCC nations. In Egypt, the decade-long experiment in participatory democracy ends with the ascendance of the Muslim Brotherhood in a violent seizure of power. The United States is identified closely with the previous coalition government, and riots break out at the U.S. embassy. Americans in Egypt are left to their own devices because the U.S. has no forces in the Mediterranean capable of performing a noncombatant evacuation when the government closes major airports. Led by Iran, a coalition of Egypt, Syria, Jordan, and Iraq attacks Israel. Over 300,000 die in six months of fighting that includes a limited nuclear exchange between Iran and Israel. Israel is defeated, and the State of Palestine is declared in its place. Massive “refugee” camps are created to house the internally displaced Israelis, but a humanitarian nightmare ensues from the inability of conquering forces to support them. The NATO alliance is shattered. The security of European nations depends increasingly on the lack of external threats and the nuclear capability of France, Britain, and Germany, which overcame its reticence to military capability in light of America’s retrenchment. Europe depends for its energy security on Russia and Iran, which control the main supply lines and sources of oil and gas to Europe. Major European nations stand down their militaries and instead make limited contributions to a new EU military constabulary force. No European nation maintains the ability to conduct significant out-of-area operations, and Europe as a whole maintains little airlift capacity. Implications for America’s Economy. If the United States slashed its Navy and ended its mission as a guarantor of the free flow of transoceanic goods and trade, globalized world trade would decrease substantially. As early as 1890, noted U.S. naval officer and historian Alfred Thayer Mahan described the world’s oceans as a “great highway…a wide common,” underscoring the long-running importance of the seas to trade.[12] Geographically organized trading blocs develop as the maritime highways suffer from insecurity and rising fuel prices. Asia prospers thanks to internal trade and Middle Eastern oil, Europe muddles along on the largesse of Russia and Iran, and the Western Hemisphere declines to a “new normal” with the exception of energy-independent Brazil. For America, Venezuelan oil grows in importance as other supplies decline. Mexico runs out of oil—as predicted—when it fails to take advantage of Western oil technology and investment. Nigerian output, which for five years had been secured through a partnership of the U.S. Navy and Nigerian maritime forces, is decimated by the bloody civil war of 2021. Canadian exports, which a decade earlier had been strong as a result of the oil shale industry, decline as a result of environmental concerns in Canada and elsewhere about the “fracking” (hydraulic fracturing) process used to free oil from shale. State and non-state actors increase the hazards to seaborne shipping, which are compounded by the necessity of traversing key chokepoints that are easily targeted by those who wish to restrict trade. These chokepoints include the Strait of Hormuz, which Iran could quickly close to trade if it wishes. More than half of the world’s oil is transported by sea. “From 1970 to 2006, the amount of goods transported via the oceans of the world…increased from 2.6 billion tons to 7.4 billion tons, an increase of over 284%.”[13] In 2010, “$40 billion dollars [sic] worth of oil passes through the world’s geographic ‘chokepoints’ on a daily basis…not to mention $3.2 trillion…annually in commerce that moves underwater on transoceanic cables.”[14] These quantities of goods simply cannot be moved by any other means. Thus, a reduction of sea trade reduces overall international trade. U.S. consumers face a greatly diminished selection of goods because domestic production largely disappeared in the decades before the global depression. As countries increasingly focus on regional rather than global trade, costs rise and Americans are forced to accept a much lower standard of living. Some domestic manufacturing improves, but at significant cost. In addition, shippers avoid U.S. ports due to the onerous container inspection regime implemented after investigators discover that the second dirty bomb was smuggled into the U.S. in a shipping container on an innocuous Panamanian-flagged freighter. As a result, American consumers bear higher shipping costs. The market also constrains the variety of goods available to the U.S. consumer and increases their cost. A Congressional Budget Office (CBO) report makes this abundantly clear. A one-week shutdown of the Los Angeles and Long Beach ports would lead to production losses of $65 million to $150 million (in 2006 dollars) per day. A three-year closure would cost $45 billion to $70 billion per year ($125 million to $200 million per day). Perhaps even more shocking, the simulation estimated that employment would shrink by approximately 1 million jobs.[15] These estimates demonstrate the effects of closing only the Los Angeles and Long Beach ports. On a national scale, such a shutdown would be catastrophic. The Government Accountability Office notes that: [O]ver 95 percent of U.S. international trade is transported by water[;] thus, the safety and economic security of the United States depends in large part on the secure use of the world’s seaports and waterways. A successful attack on a major seaport could potentially result in a dramatic slowdown in the international supply chain with impacts in the billions of dollars.[16]

### 4

#### The aff’s use of legal methods to restrain the president legitimates violence, resulting in unending militarism.

Morrissey 2011 [John, Department of Geography at the National University of Ireland, “Liberal Lawfare and Biopolitics: US Juridical Warfare in the War on Terror,” *Geopolitics* 16:280-305]

Nearly two centuries ago, Prussian military strategist, Carl von Clausewitz, observed how war is merely a “continuation of political commerce” by “other means”.70 Today, the lawfare of the US military is a continuation of war by legal means. Indeed, for US Deputy Judge Advocate General, Major General Charles Dunlap, it “has become a key aspect of modern war”.71 For Dunlap and his colleagues in the JAG corps, the law is a “force multiplier”, as Harvard legal scholar, David Kennedy, explains: it “structures logistics, command, and control”; it “legitimates, and facilitates” violence; it “privileges killing”; it identifies legal “openings that can be made to seem persuasive”, promissory, necessary and indeed therapeutic; and, of course, it is “a communication tool” too because defining the battlefield is not only a matter of “privileging killing”, it is also a “rhetorical claim”.72 Viewed in this way, the law can be seen to in fact “contribute to the proliferation of violence rather than to its containment”, as Eyal Weizman has instructively shown in the case of recent Israeli lawfare in Gaza.73 In the US wars in Iraq, Afghanistan and broader war on terror, the Department of Defense has actively sought to legalize its use of biopolitical violence against all those deemed a threat. Harvey Rishikof, the former Chair of the Department of National Security Strategy at the National War College in Washington, recently underlined ‘juridical warfare’ (his preferred designation over ‘lawfare’) as a pivotal “legal instrument” for insurgents in the asymmetric war on terror.74 For Rishikof and his contemporaries, juridical warfare is always understood to mean the legal strategies of the weak ‘against’ the United States; it is never acknowledged as a legal strategy ‘of’ the United States. However, juridical warfare has been a proactive component of US military strategy overseas for some time, and since the September 11 attacks in New York and Washington in 2001, a 15 renewed focus on juridical warfare has occurred, with the JAG Corps playing a central role in reforming, prioritizing and mobilizing the law as an active player in the war on terror.75 Deputy Judge Advocate General, Major General Charles Dunlap, recently outlined some of the key concerns facing his corps and the broader US military; foremost of which is the imposing of unnecessary legal restraints on forward-deployed military personnel.76 For Dunlap, imposing legal restraints on the battlefield as a “matter of policy” merely “play[s] into the hands of those who would use [international law] to wage lawfare against us”.77 Dunlap’s counter-strategy is simply “adhering to the rule of law”, which “understands that sometimes the legitimate pursuit of military objectives will foreseeably – and inevitably – cause the death of noncombatants”; indeed, he implores that “this tenet of international law be thoroughly understood”.78 But ‘the’ rule of international law that Dunlap has in mind is merely a selective and suitably enabling set of malleable legal conventions that legitimate the unleashing of military violence.79 As David Kennedy illuminates so brilliantly in Of War and Law: We need to remember what it means to say that compliance with international law “legitimates.” It means, of course, that killing, maiming, humiliating, wounding people is legally privileged, authorized, permitted, and justified”.80 The recent ‘special issue on juridical warfare’ in the US military’s flagship journal, Joint Force Quarterly, brought together a range of leading judge advocates, specialists in military law, and former legal counsels to the Chairman of the Joint Chiefs of Staff. All contributions addressed the question of “[w]hich international conventions govern the confinement and interrogation of terrorists and how”.81 The use of the term ‘terrorists’ instead of suspects sets the tone for the ensuing debate: in an impatient defense of ‘detention’, Colonel James Terry bemoans the “limitations inherent in the Detainee Treatment Act of 2005 and the Military Commissions Act of 2006” (which he underlines only address detainees at the US Naval Base at Guantanamo) and asserts that “requirements inherent in the war on terror will likely warrant expansion of habeas 16 corpus limitations”;82 considering ‘rendition’, Colonel Kevin Cieply asks the shocking question “[i]s rendition simply recourse to the beast at a necessary time”;83 Colonel Peter Cullen argues for the necessity of the “role of targeted killing in the campaign against terror”;84 Commander Brian Hoyt contends that it is “time to re-examine U.S. policy on the [international criminal] court, and it should be done through a strategic lens”;85 while Colonel James Terry furnishes an additional concluding essay with the stunningly instructive title ‘The International Criminal Court: A Concept Whose Time Has Not Come’.86 These rather chilling commentaries attest to one central concern of the JAG Corps and the broader military-political executive at the Pentagon: that enemies must not be allowed to exploit “real, perceived, or even orchestrated incidents of law-of-war violations being employed as an unconventional means of confronting American military power”.87 And such thinking is entirely consistent with the defining National Defense Strategy of the Bush administration, which signalled the means to win the war on terror as follows: “we will defeat adversaries at the time, place, and in the manner of our choosing”.88 If US warfare in the war on terror is evidently underscored by a ‘manner of our choosing’ preference – both at the Pentagon and in the battlefield – this in turn prompts an especially proactive ‘juridical warfare’ that must be simultaneously pursued to legally capacitate, regulate and maximize any, and all, military operations. The 2005 National Defense Strategy underlined the challenge thus: Many of the current legal arrangements that govern overseas posture date from an earlier era. Today, challenges are more diverse and complex, our prospective contingencies are more widely dispersed, and our international partners are more numerous. International agreements relevant to our posture must reflect these circumstances and support greater operational flexibility.89 It went on to underline its consequent key juridical tactic and what I argue is a critical weapon in the US military-legal arsenal in the war on terror: the securing of ‘Status of Forces Agreements’ – 17 to “provide legal protections” against “transfers of U.S. personnel to the International Criminal Court”.90

#### The alternative is to reject their understanding of the law as an independent neutral entity with the power to restrict practices apart from practices. Instead, we should conceive of the law and practice as co-constitutive—this opens up the space to change the relationship between lived decisionmaking and the autocracy of bureaucratic legal determinations.

Krassman 2012 [Susan, Professor at the Institute for Criminological Research at the University of Hamburg. “Targeted Killing and Its Law: On a Mutually Constitutive Relationship,” *Leiden Journal of International Law* 25.03]

Foucault did not elaborate on a comprehensive theory of law – a fact that critics have attributed to his allegedly underestimating law's political and social relevance. Some statements by Foucault may have provoked this interpretation, among them his assertion that law historically ‘recedes’ with,46 or is being ‘colonized’ by,47 forms of knowledge that are addressed at governing people and populations. It is, though, precisely this analytical perspective that allows us to capture the mutually productive relationship between targeted killing and the law. In contrast to a widely shared critique, then, Foucault did not read law merely as a negative instrument of constraint. He referred, instead, to a particular mode of juridical power that operates in terms of repressive effects.48 Moreover, rather than losing significance coextensively with the ancient sovereign power, law enters new alliances, particularly with certain knowledge practices and attendant expertise.49 This linkage proves to be relevant in the present context, considering not only the interchange between the legal and political discourse on targeted killing, but notably the relationship between law and security. According to Foucault, social phenomena cannot be isolated from and are only decipherable within the practices, procedures, and forms of knowledge that allow them to surface as such.50 In this sense, ‘all phenomena are singular, every historical or social fact is a singularity’.51 Hence, they need to be studied within their historically and locally specific contexts, so as to account for both the subject's singularity and the conditions of its emergence. It is against this background that a crucial question to be posed is how targeted killing could emerge on the political stage as a subject of legal debate. Furthermore, this analytical perspective on power and knowledge intrinsically being interlinked highlights that our access to reality always entails a productive moment. Modes of thinking, or what Foucault calls rationalities, render reality conceivable and thus manageable.52 They implicate certain ways of seeing things, and they induce truth effects whilst translating into practices and technologies of government. These do not merely address and describe their subject; they constitute or produce it.53 Law is to be approached accordingly.54 It cannot be extracted from the forms of knowledge that enact it, and it is in this sense that law is only conceivable as practice. Even if we only think of the law in ideal terms, as being designated to contain governmental interference, for example, or to provide citizens’ rights, it is already a practice and a form of enacting the law. To enforce the law is always a form of enactment, since it involves a productive moment of bringing certain forms of knowledge into play and of rendering legal norms meaningful in the first place. Law is susceptible to certain forms of knowledge and rationalities in a way that these constitute it and shape legal claims. Rather than on the application of norms, legal reasoning is on the production of norms. Legality, within this account of law, then, is not only due to a normative authority that, based in our political culture, is external to law, nor is it something that is just inherent in law, epitomized by the principles that constitute law's ‘inner morality’.55 Rather, the enforcement of law and its attendant reasoning produce their own – legal – truth effects. Independently of the purported intentions of the interlocutors, the juridical discourse on targeted killing leads to, in the first instance, conceiving of and receiving the subject in legal terms. When targeted killing surfaced on the political stage, appropriate laws appeared to be already at hand. ‘There are more than enough rules for governing drone warfare’, reads the conclusion of a legal reasoning on targeted killing.56 Yet, accommodating the practice in legal terms means that international law itself is undergoing a transformation. The notion of dispositifs is useful in analysing such processes of transformation. It enables us to grasp the minute displacements of established legal concepts that,57 while undergoing a transformation, at the same time prove to be faithful to their previous readings. The displacement of some core features of the traditional conception of the modern state reframes the reading of existing law. Hence, to give just one example for such a rereading of international law: legal scholars raised the argument that neither the characterization of an international armed conflict holds – ‘since al Qaeda is not a state and has no government and is therefore incapable of fighting as a party to an inter-state conflict’58 – nor that of an internal conflict. Instead, the notion of dealing with a non-international conflict,59 which, in view of its global nature, purportedly ‘closely resembles’ an international armed conflict, serves to provide ‘a fuller and more comprehensive set of rules’.60 Established norms and rules of international law are preserved formally, but filled with a radically different meaning so as to eventually integrate the figure of a terrorist network into its conventional understanding. Legal requirements are thus meant to hold for a drone programme that is accomplished both by military agencies in war zones and by military and intelligence agencies targeting terror suspects beyond these zones,61 since the addressed is no longer a state, but a terrorist network. However, to conceive of law as a practice does not imply that law would be susceptible to any form of knowledge. Not only is its reading itself based on a genealogy of practices established over a longer period.62 Most notably, the respective forms of knowledge are also embedded in varying procedures and strategic configurations. If law is subject to an endless deference of meaning,63 this is not the case in the sense of arbitrary but historically contingent practices, but in the sense of historically contingent practices. Knowledge, then, is not merely an interpretive scheme of law. Rather than merely on meaning, focus is on practices that, while materializing and producing attendant truth effects, shape the distinctions we make between legal and illegal measures. What is more, as regards anticipatory techniques to prevent future harm, this perspective allows for our scrutinizing the division made between what is presumably known and what is yet to be known, and between what is presumably unknown and has yet to be rendered intelligible. This prospect, as will be seen in the following, is crucial for a rereading of existing law. It was the identification of a new order of threat since the terror attacks of 9/11 that brought about a turning point in the reading of international law. The identification of threats in general provides a space for transforming the unknowable into new forms of knowledge. The indeterminateness itself of legal norms proves to be a tool for introducing a new reading of law.

### Solvency

#### Executive will circumvent the plan.

Barron & Lederman, 8 --- \*Professor of Law at Harvard, AND \*\* Visiting Professor of Law at Georgetown

(February 2008, David J. Barron and Martin S. Lederman, Harvard Law Review, “THE COMMANDER IN CHIEF AT THE LOWEST EBB -- A CONSTITUTIONAL HISTORY,” 121 Harv. L. Rev. 941)

VII. Conclusion

Powers once claimed by the Executive are not easily relinquished. One sees from our narrative how, in a very real sense, the constitutional law of presidential power is often made through accretion. A current administration eagerly seizes upon the loose claims of its predecessors, and applies them in ways perhaps never intended or at least not foreseen or contemplated at the time they were first uttered. The unreflective notion that the "conduct of campaigns" is for the President alone to determine has slowly insinuated itself into the consciousness of the political departments (and, at times, into public debate), and has gradually been invoked in order to question all manner [\*1112] of regulations, from requirements to purchase airplanes, to limitations on deployments in advance of the outbreak of hostilities, to criminal prohibitions against the use of torture and cruel treatment. In this regard, the claims of the current Administration represent as clear an example of living constitutionalism in practice as one is likely to encounter. There is a radical disjuncture between the approach to constitutional war powers the current President has asserted and the one that prevailed at the moment of ratification and for much of our history that followed. But that dramatic deviation did not come from nowhere. Rarely does our constitutional framework admit of such sudden creations. Instead, the new claims have drawn upon those elements in prior presidential practice most favorable to them. That does not mean our constitutional tradition is foreordained to develop so as to embrace unchecked executive authority over the conduct of military campaigns. At the same time, it would be wrong to assume, as some have suggested, that the emergence of such claims will be necessarily self-defeating, inevitably inspiring a popular and legislative reaction that will leave the presidency especially weakened. In light of the unique public fears that terrorism engenders, the more substantial concern is an opposite one. It is entirely possible that the emergence of these claims of preclusive power will subtly but increasingly influence future Executives to eschew the harder work of accepting legislative constraints as legitimate and actively working to make them tolerable by building public support for modifications. The temptation to argue that the President has an obligation to protect the prerogatives of the office asserted by his or her predecessors will be great. Congress's capacity to effectively check such defiance will be comparatively weak. After all, the President can veto any effort to legislatively respond to defiant actions, and impeachment is neither an easy nor an attractive remedy.

#### Lack of intelligence prevents effective checks – plan can’t overcome institutional barriers

Kennedy, 10– Robert, Professor at the Sam Nunn School of International Affairs, Georgia Institute of Technology(*The Road to War*, Praeger Security International, 127-129)

First, **the information needed for effective decision making is often difficult to acquire.** President George W. **Bush** was even more aggressive than Clinton in keeping information out of legislative hands.6a While his administration formally claimed executive privilege only six times,5s it **employed many of the techniques to keep information from Congress that his father had employed so successfully.** **Aware that members of Congress could challenge his preferred policies**, **limiting information often permitted the president** and senior members of his administration **to define the issues and limit congressional scrutiny and debate.** **When members of Congress requested information** in the form of documents or testimony, frequently **administration officials declared their willingness to comply and subsequently frustrated congressional efforts by either delaying delivery, excising content**, or both, **or refusing to testify.** **Such tactics often are highly successful** when a Congress is in the hands of the president's party, as was the case as the decision to attack Iraq was looming. Second, **when information is denied** **congress**ional committees, if they deem the information critical to their decision-making processes, they **can issue a subpoena to acquire the information. However, in the highly politicized and partisan environment** that characterized much of Bush's tenure, it is not surprising that **congressional subpoenas** of administration officials **or threats or citations for contempt were unlikely.** **Only the chairman, vice chairman, or member designated by the chairman of the Senate intelligence committee can issues subpoenas.**6s House intelligence committee subpoenas can be issued by the chairman of the full committee in consultation, but consultation only with the ranking minority member, or by vote of the committee.6T **To** take the further step and **declare a person in contempt**, **both committees require a majority decision** of committee members **to forward the request to their respective houses, which in turn requires a majority decision in those chambers.** **Such procedures make the use of Congress's subpoena or contempt powers difficult.** This is particularly true when the chamber concerned is in the hands of the party that occupies the White House, which was the case as war approached. Of course **the problem is not peculiar to one party**. However, as former Congressman Mickey Edwards argued, demanding that the executive branch comply with legitimate congressional requests for information is not just "the obligation only of the party that opposes the policies of the President in power." It is the obligation of every congressman. Members are not sitting in Congress as a representative of their party or as a representative of the President of the United States. They are in Congress with "certain constitutional obligations." "It is not supposed to be the opposition party that holds a President accountable, it is supposed to be the opposition institution of government."6s Edwards went on to note: I think what's happened is that **too many members of Congress have allowed their party interests**.. . [**to dominate**], **believing that if the president were to have political difficulties it would hurt the party and hurt them and so forth.** **They have allowed their political and party interests and**, quote, "**loyalty to the president**". .. **to trump their institutional obligations**. . . .6e Finally, as we have seen over time, **Congress has grown accustomed to deferring to the president** on foreign policy and national security. As a consequence, congressional intelligence committees spend much of their time diligently working on intelligence community authorizations, examining their budgets, investigating accusations of intelligence community wrongdoing, and challenging the executive on intelligence efforts that might be contrary to the law. Though the Senate Select **Committee on Intelligence** is principally tasked to "make every effort to assure that the appropriate departments and agencies of the United States provide informed and timely intelligence necessary for the executive and legislative branches to make sound decisions affecting the security and vital interests of the Nation"7o and its House counterpart is tasked to receive all intelligence from U.S. intelligence agencies, **evidence suggests these committees spend relatively little time ensuring that the quality of the intelligence product meets the demands of effective decision making.** **This is apparently largely left to the executive branch.** Had the congressional intelligence committees been dutifully fulfilling their statutory mandate, carefully probing the intelligence community on the evidence they possessed that might substantiate the Bush administration contentions, they would have been aware of such deficiencies even before the National Intelligence Estimate was made available to Congress in October 20A2, more than a week before both houses of Congress voted in favor of the Iraq War Resolution. Moreover, once the estimate was made available to members of Congress, few members ever read it. **According to one report, no more than six Senators and a handful of representatives read beyond the five-page executive summary.**Tl Had they done so they would have found ample evidence that the facile conclusions were supported at best by extremely weak intelligence. They also would have better understood exceptions taken to the overall conclusions by many, including intelligence officials from the departments of State and Energy, and perhaps come to realize that the entire executive branch **case for going to war** based **on Iraq**'s possession of weapons of mass destruction was built on a house of cards. As a result, they would have been in a better position to inform their colleagues in both houses before the decision was made on whether to authorize the president to go to war. However as one senior intelligence committee member put it to me during an interview, "I don't think most members [of Congress], including myself, doubted the conclusions [of the Intelligence Estimate] that Saddam Hussein had weapons of mass destruction....I believed he had weapons of mass destruction. I didn't feel the need to challenge that conclusion."T2 **The failure of Congress to probe the quality of the intelligence**/ in many cases to take time to read the National Intelligence Estimate **or even, in some cases**, to **read the executive summary, may have been driven by a variety of factors-workload, politics, or deference to the executive branch in the area of foreign policy and security.** Whatever the excuse in any individual case may have been, it has led to an appalling loss of lives, heavily taxed the American economy, polarized the nation, caused severe damage to America's reputation abroad, and perhaps even undermined rather than strengthened American security. It is clear that **for Congress as a whole and for the congressional committees charged with intelligence oversight, there has been an abdication of responsibility.**

### Warming

#### Rising CO2 underpins growth in food yield – solves global famine and extinction of all terrestrial life

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

The availability of **atmospheric carbon dioxide is the sine qua non for all plant growth and** thence for all marine and terrestrial life forms. The purpose of this paper is to show that **proposed reductions in anthropogenic emissions of carbon dioxide** (CO2) **to below the level of observed annual incremental biospheric absorption** of those emissions **would reduce the growth of the basic feedstock of all life forms**. **Agronomists have for long known and demonstrated** in controlled experiments both **in greenhouses and** in field studies **the dramatic impact of increases in its level on crop yields**. These studies have all been local. The **regression analysis** here **of historic data on global food production shows it may** well **be more dependent on increases in** the availability of **atmospheric** carbon dioxide (henceforth written as [**CO2**]) **than** on changes in **fertilizer** consumption **and global mean temperature** (GMT). This implies that **if the drastic reductions in** total **anthropogenic emissions of CO2** to be **sought at Copenhagen** (December 2009) **are adopted** and applied, **they will, even if they aim at only a 60% reduction** on the 2000 global level by 2050, **bring emissions to below** the incremental volume of their **biospheric absorption**. That could seriously imperil growth of global food production. We show how in its role as a fertilizer that raises global Net Primary Productivity (NPP), increases in [CO2] have a natural negative feedback mechanism that offsets a large proportion of growing emissions: more [CO2] causes more plant growth, but more plant growth takes up more CO2 thus limiting the further rise. This contrasts with the unproven positive feedback assumed in all models deployed by the IPCC whereby, allegedly, rising [CO2] will result in falling biospheric absorption and ever larger increases in [CO2]. We show **there is no sign in the observations** since 1958 **of “saturation” of the capacity of the planet to continue absorbing more** than half of all anthropogenic emissions of **CO2**, so there is no evidence for the IPCC’s positive feedback. Biospheric absorption of increases in anthropogenic CO2 emissions would only have to increase from the average 57% of all anthropogenic emissions from 1958 to 2008 to 60% to achieve the likely Copenhagen 60% emissions reduction target. The rapid growth of absorption of total anthropogenic emissions to over 6% p.a. between 1997 and 2006 relative to total emissions growth at 2.6% p.a. over that period (Le Quéré 2008) confirms this manner of attaining the Copenhagen target is easily attainable—and helps to explain the growth of food production at rates in excess of global population growth. It also limited the growth rate of aggregate [CO2] between 1099 1958 and 2008 to only 0.41% p.a. Our results show that with warming **in the absence of growing carbon fertilization**, **agricultural production could be less by more than 10% by 2080 than at present** (2007:Table 5.8). **That means starvation for most of a global population likely then to be at least 50% larger than now.**

#### If aff solvency is true, they destroy global agriculture and fishery productivity – comparatively worse than warming

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

**If the Stern** (2007), **Garnaut** (2008) **and Hansen** 2008 **recommendations for anthropogenic emission reduction targets are adopted** at Copenhagen (December 2009) **and globally implemented**, **they will reduce emissions below the growing level of photosynthetic uptakes, and are then likely to lead to the large reductions in agricultural, forestry, and fishery productivity** indicated both by our regression results above and by Cline (2007). **This will certainly cause more immediate hardship to more people than** the as yet non-evident **“dangerous” climate change** asserted in the advocacy of the IPCC (Solomon et al. 2007).

#### Famine causes global nuclear war – expert consensus.

FDI 12 – (5/25, Future Directions International, independent, not-for-profit research institute based in Perth Western Australia, workshop report including the following contributors, Major General John Hartley AO (Retd), CEO and Institute, Director Future Directions International, Roundtable Chairman, Lindsay Falvey, Professor, Fellow Clare Hall University of Cambridge, past/foundation Dean of Land and Food and Chair of Agriculture at the University of Melbourne, Monika Barthwal-Datta, Food Security Programme Leader, Centre for International Security Studies, University of Sydney, Philip Hirsch, Professor, Director Mekong Research Group, University of Sydney, Bill Pritchard, Associate Professor, School of Geography, University of Sydney, Simon Hearn, Principal Advisor, Australian Centre for International Agricultural Research, Rudi Appels, Professor, Centre for Comparative Genomics, Murdoch University, Bill Kean, former Executive Director, Office of the Director General, World Health Organization, member of the Australian Institute of International Affairs, and MORE, “International Conflict Triggers and Potential Conflict Points Resulting from Food and Water Insecurity,” http://www.futuredirections.org.au/files/Workshop\_Report\_-\_Intl\_Conflict\_Triggers\_-\_May\_25.pdf)

There is little dispute that conflict can lead to food and water crises. This paper will consider parts of the world, however, where **food** and water **insecurity can be the cause of conflict and**, at worst, result in **war**. While dealing predominately with food and water issues, the paper also recognises the nexus that exists between food and water and energy security. **There is a growing appreciation that the conflicts in the next century will most likely be fought over a lack of resources. Yet**, in a sense, **this is not new. Researchers point to the French and Russian revolutions as conflicts induced by a lack of food**. More recently, **Germany’s World War Two efforts are said to have been inspired**, at least in part, **by its perceived need to gain access to more food**. Yet **the general sense** among those that attended FDI’s recent workshops, **was that the scale of the problem in the future could be significantly greater as a result of population pressures**, changing weather, **urbanisation, migration, loss of arable land and other farm inputs, and increased affluence** in the developing world. In his book, Small Farmers Secure Food, Lindsay Falvey, a participant in FDI’s March 2012 workshop on the issue of food and conflict, clearly expresses the problem and why countries across the globe are starting to take note. . He writes (p.36), “…**if people are hungry, especially in cities, the state is not stable – riots, violence, breakdown of law and order and migration result**.” “**Hunger feeds anarchy**.” This view is also shared by Julian Cribb, who in his book, The Coming Famine, writes that **if “large regions of the world run short of food, land or water in the decades that lie ahead, then wholesale, bloody wars are liable to follow.”** He continues: “**A**n increasingly **credible scenario for World War 3 is not so much a confrontation of super powers** and their allies, **as a festering, self-perpetuating chain of resource conflicts**.” He also says: “The wars of the 21st Century are less likely to be global conflicts with sharply defined sides and huge armies, than a scrappy mass of failed states, rebellions, civil strife, insurgencies, terrorism and genocides, sparked by bloody competition over dwindling resources.” As another workshop participant put it, **people do not go to war to kill; they go to war over resources**, either **to protect or to gain** the resources for themselves. Another observed that hunger results in passivity not conflict. Conflict is over resources, not because people are going hungry. **A study by the International Peace Research Institute indicates that where food security is an issue, it is more likely to result in some form of conflict**. Darfur, Rwanda, Eritrea and the Balkans experienced such wars. Governments, especially in developed countries, are increasingly aware of this phenomenon. **The UK Ministry of Defence, the CIA, the US C**enter for **S**trategic and **I**nternational **S**tudies **and the Oslo Peace Research Institute, all identify famine as a potential trigger for conflicts and** possibly even nuclear war**.**

#### Consensus of experts agree no impact to warming

Hsu 10

Jeremy, Live Science Staff, July 19, pg. <http://www.livescience.com/culture/can-humans-survive-extinction-doomsday-100719.html>

His views deviate sharply from those of **most experts**, who **don't view climate change as the end for humans. Even the worst-case scenarios discussed by the Intergovernmental Panel on Climate Change don't foresee human extinction. "The scenarios that the mainstream climate community are advancing are not end-of-humanity, catastrophic scenarios," said Roger Pielke Jr., a climate policy analyst at the U**niversity of **C**olorado at **Boulder**. Humans have the technological tools to begin tackling climate change, if not quite enough yet to solve the problem, Pielke said. He added that doom-mongering did little to encourage people to take action. "My view of politics is that the long-term, high-risk scenarios are really difficult to use to motivate short-term, incremental action," Pielke explained. "The rhetoric of fear and alarm that some people tend toward is counterproductive." Searching for solutions One technological solution to climate change already exists through carbon capture and storage, according to Wallace **Broecker, a** geochemist and **renowned climate scientist at Columbia University**'s Lamont-Doherty Earth Observatory in New York City. But Broecker **remained skeptical** that governments or industry would commit the resources needed to slow the rise of carbon dioxide (CO2) levels, and predicted that more drastic geoengineering might become necessary to stabilize the planet. "**The rise in CO2 isn't going to kill many people, and it's not going to kill humanity**," Broecker said. "But it's going to change the entire wild ecology of the planet, melt a lot of ice, acidify the ocean, change the availability of water and change crop yields, so we're essentially doing an experiment whose result remains uncertain."

#### Prefer our ev – their authors are too short-term and ignore adaptation

Goklany 11 (Indur M., science and technology policy analyst for the US Dept of the Interior, “Misled on Climate Change: How the UN IPCC (and others) Exaggerate the Impacts of Global Warming” December 2011, <http://goklany.org/library/Reason%20CC%20and%20Development%202011.pdf>)

A third approach would be to fix the root cause of why developing countries are deemed to be most at-risk, namely, poverty. Sustained economic growth would, as is evident from the experience of developed countries, address virtually all problems of poverty, not just that portion exacerbated by global warming. It is far more certain that sustainable economic growth will provide greater benefits than emission reductions: while there is no doubt that poverty leads to disease and death, **there is substantial doubt regarding the reality and magnitude of the negative impact of global warming. This is especially true as assessments often ignore improvements in adaptive capacity.** Of these three approaches, human well-being in poorer countries is likely to be advanced most effectively by sustained economic development and least by emission reductions. In addition, because of the inertia of the climate system, economic development is likely to bear fruit faster than any emission reductions. These figures also indicate that the compound effect of economic development and technological change can result in quite dramatic improvements even over the relatively short period for which these figures were developed. Figure 5, for instance, covered 26 years. By contrast, **climate change impacts analyses frequently look 50 to 100 years into the future**. Over such long periods, the compounded effect could well be spectacular**. Longer term analyses of climate-sensitive indicators of human well-being show that the combination of** economic growth and technological change can, over decades, reduce negative impacts on human beings by an order of magnitude, that is, **a factor of ten, or more**. In some instances, **this combination has virtually eliminated such negative impacts.** But, **since impact assessments generally fail to fully account for increases in economic development and technological change, they substantially** overestimate future net damages from global warming. It may be argued that the high levels of economic development depicted in Figure 6 are unlikely. But if that’s the case, then economic growth used to drive the IPCC’s scenarios are equally unlikely, which necessarily means that the estimates of emissions, temperature increases, and impacts and damages of GW projected by the IPCC are also overestimates. B. Secular Technological Change **The second major reason why future adaptive capacity has been underestimated** (**and the impacts of global warming systematically overestimated) is that few impact studies consider secular technological change.** 25 **Most assume that no new technologies will come on line**, although some do assume greater adoption of existing technologies with higher GDP per capita and, much less frequently, a modest generic improvement in productivity. 26 Such an assumption may have been appropriate during the Medieval Warm Period, when the pace of technological change was slow, but nowadays technological change is fast (as indicated in Figures 1 through 5) and, arguably, accelerating. 27 It is unlikely that we will see a halt to technological change unless so-called precautionary policies are instituted that count the costs of technology but ignore its benefits, as some governments have already done for genetically modified crops and various pesticides. So how much of a difference in impact would consideration of both economic development and technological change have made? If impacts were to be estimated for five or so years into the future, ignoring changes in adaptive capacity between now and then probably would not be fatal because neither economic development nor technological change would likely advance substantially during that period. However, **the time horizon of climate change impact assessments is often on the order of 35–100 years or more.** The Fast Track Assessments use a base year of 1990 to estimate impacts for 2025, 2055 and 2085. **Over such periods one ought to expect substantial advances in adaptive capacity due to increases in economic development, technological change and human capital**. As already noted, retrospective assessments indicate that **over the span of a few decades, changes in economic development and technologies can substantially reduce, if not eliminate, adverse environmental impacts and improve human well-being, as measured by a variety of objective indicators.** 41 **Thus, not fully accounting for changes in the level of economic development and secular technological change would understate future adaptive capacity, which then could overstate impacts by one or more orders of magnitude** if the time horizon is several decades into the future. The assumption that there would be little or no improved or new technologies that would become available between 1990 and 2100 (or 2200), as assumed in most climate change impact assessments, is clearly naïve. In fact, a comparison of today’s world against the world of 1990 (the base year used in most impacts studies to date) shows that even during this brief 20-year span, this assumption is ingvalid for many, if not most, human enterprises. Since 1990, for example, the portion of the developing world’s population living in absolute poverty declined from 42% to 25%, and in sub-Saharan Africa Internet users increased from 0 to 50 million, while cellular phone users went from 0 per 100 to 33 per 100.

#### Consensus and empirical studies disprove their ocean acidification impact.

Duarte et. al. 09 – (11/24/09, Carlos M. Duarte is a research professor with the Spanish Council for Scientific Research at IMEDEA, , I.E. Hendriks, and M. Álvarez, Department of Global Change Research. IMEDEA (CSIC-UIB), Instituto Mediterráneo de Estudios Avanzados, “Vulnerability of marine biodiversity to ocean acidification: A meta-analysis,” Estuarine, Coastal and Shelf Science Volume 86, Issue 2, 20 January 2010, Pages 157-164, sciencedirect)

In summary, **our analysis shows that marine biota is more resistant to ocean acidification than suggested by pessimistic predictions identifying ocean acidification as a major threat to marine biodiversity** ( [Kleypas et al., 1999] , [Orr et al., 2005] , [Raven, 2005] , [Sponberg, 2007] and [Zondervan et al., 2001] ), **which may not be the widespread problem conjured into the 21st century**. **Ocean acidification will enhance growth of marine autotrophs and reduce fertility and metabolic rates, but effects are likely to be minor along the range of pCO2 predicted for the 21st century, and feedbacks** between positive responses of autotrophs and pH may **further buffer the impacts**. Particularly sensitive processes like calcification may be affected, while **bivalves seem to be most vulnerable** to changes in ambient pH. **Modellers and chemical oceanographers need to improve their predictions on the impacts of ocean acidification by incorporating natural variability in pCO2 in marine waters, the small-scale physical processes that detach the organismal chemosphere from the bulk water properties and the potential for homeostasis resulting from active processes at the cellular level.** The predictions need also consider how the gradual changes conducive to the changes in pH expected during the 21st century may depart from the impacts extrapolated from experiments involving the sudden exposure of organisms to reduced pH. Ocean acidification needs be carefully monitored and its effects better understood, while especially synergistic effects and complex interactions between acidification and other stressors need to be studied, as these synergies may amplify the otherwise limited impacts of ocean acidification. Science and society should not forget other major threats to marine biodiversity like overfishing, habitat destruction, increased nutrient inputs and associated oxygen depletion and warming ( [Dobson et al., 2006] , [Jackson et al., 2001] , [Kennish, 2002] , [Thomas et al., 2004] and [Valiela, 2006] ). **The attention that ocean acidification** as a sole threat to marine biodiversity **has drawn recently might not be fully justified concerning the limited impact of experimental acidification on organism processes as shown by the meta-analysis presented here.**

### Miscalc

#### Nuclear accidents wouldn’t escalate

Kenneth Waltz, The Spread of Nuclear Weapons: A Debate, 1995, p. 93-94

“Love is like war,” the chaplain says in Bertolt Brecht’s Mother Courage, “it always finds a way.” For half a cen­tury, nuclear war has not found a way. The old saying, “accidents will happen,” is translated as Murphy’s Law holding that anything that can go wrong will go wrong. Enough has gone wrong, and Scott Sagan has recorded many of the nuclear accidents that have, or have nearly, taken place. Yet none of them has caused anybody to blow anybody else up. In a speech given to American scientists in 1960, C. P. Snow said this: “We know, with the certainty of statistical truth, that if enough of these weapons are made—by enough different states—some of them are going to blow up. Through accident, or folly, or madness—but the motives don’t matter. What does mat­ter is the nature of the statistical fact.” In 1960, statistical fact told Snow that within “at the most, ten years some of these bombs are going off.” Statistical fact now tells us that we are twenty-five years overdue. But the novelist and scientist overlooked the fact that there are no “statistical facts.”’ Half a century of nuclear peace has to be explained since divergence from historical experience is dramatic. Never in modern history, conventionally dated from 1648, have the great and major powers of the world en­joyed such a long period of peace. Scott Sagan empha­sizes the problems and the conditions that conduce to pessimism. I emphasize the likely solutions and the conditions that conduce to optimism, bearing in mind that nothing in this world is ever certain.

#### Risk of backlash prevents accidental war

Kenneth Waltz, The Spread of Nuclear Weapons: A Debate, 1995, p. 111

Deterrence is also a considerable guarantee against accidents, since it causes countries to take good care of their weapons, and against anonymous use, since those firing the weapons can neither know that they will be undetected nor what form of punishment detection might bring. In life, uncertainties abound. In a conven­tional world, they more easily lead to war because less is at stake. Even so, it is difficult to think of wars that have started by accident even before nuclear weapons were invented. It is hard to believe that nuclear war may begin accidentally, when less frightening conventional wars have rarely done so.

#### No Russia war---no motive or capability

Betts 13 Richard is the Arnold A. Saltzman Professor of War and Peace Studies @ Columbia. “The Lost Logic of Deterrence,” Foreign Affairs, March/April, Vol. 92, Issue 2, Online

These continuities with the Cold War would make sense only between intense adversaries. Washington and Moscow remain in an adversarial relationship, but not an intense one. If the Cold War is really over, and the West really won, then continuing implicit deterrence does less to protect against a negligible threat from Russia than to feed suspicions that aggravate political friction. In contrast to during the Cold War, it is now hard to make the case that Russia is more a threat to NATO than the reverse. First, the East-West balance of military capabilities, which at the height of the Cold War was favorable to the Warsaw Pact or at best even, has not only shifted to NATO's advantage; it has become utterly lopsided. Russia is now a lonely fraction of what the old Warsaw Pact was. It not only lost its old eastern European allies; those allies are now arrayed on the other side, as members of NATO. By every significant measure of power -- military spending, men under arms, population, economic strength, control of territory -- NATO enjoys massive advantages over Russia. The only capability that keeps Russia militarily potent is its nuclear arsenal. There is no plausible way, however, that Moscow's nuclear weapons could be used for aggression, except as a backstop for a conventional offensive -- for which NATO's capabilities are now far greater.¶ Russia's intentions constitute no more of a threat than its capabilities. Although Moscow's ruling elites push distasteful policies, there is no plausible way they could think a military attack on the West would serve their interests. During the twentieth century, there were intense territorial conflicts between the two sides and a titanic struggle between them over whose ideology would dominate the world. Vladimir Putin's Russia is authoritarian, but unlike the Soviet Union, it is not the vanguard of a globe-spanning revolutionary ideal.

#### No Indo-Pak conflict and no nuclear escalation- deterrence

A. Vinod Kumar 6/30/13 MPhil in disarmament studies and an Associate Fellow at Institute for Defense Studies and Analyses, New Delhi, 6/30/13, "Nuclear Deterrence Works in Indo-Pak Ties," http://www.indepthnews.info/index.php/global-issues/1650-nuclear-deterrence-works-in-indo-pak-ties

NEW DELHI (IDN | [IDSA](http://www.idsa.in/)) - For over two decades, a dominant section of western analysts harped

on the volatilities of the India and Pakistan nuclear dyad, often overselling the ‘South Asia as a nuclear flashpoint’ axiom, and portending a potential nuclear flare-up in every major stand-off between the two countries. The turbulence in the sub-continent propelled such presages, with one crisis after another billowing towards serious confrontations, but eventually easing out on all occasions. While the optimists described this as evidence of nuclear deterrence gradually consolidating in this dyad, the pessimists saw in it the ingredients of instability that could lead to a nuclear conflict. Though there is no denial of the fact that the three major crises since the 1998 nuclear tests – Kargil (1999), the Parliament attack and Operation Parakram (2001-2002) and the Mumbai terror strike (2008) – brought the two rivals precariously close to nuclear showdowns, not once had their leaderships lost complete faith in the efficacy of mutual deterrence.

## 2NC

### Warming

#### Specifically, rice and agriculture is key to Asian economy and stability

Singleton et al 10 – (2010, Grant, PhD, Senior Scientist, International Rice Research Institute, Florencia Palis, PhD, agricultural anthropologist and statistician working in Asia, Madonna Casimero, PhD, project scientist at the Irrigated Rice Research Consortium, “Research to Impact: Case Studies for Natural Resource Management for Irrigated Rice in Asia,” p. 1)

**Rice is the staple food of about half of the world’s population, the majority of which is located in Asia**. **Rice supplies as much as 80% of the daily caloric intake** of the teeming population of Asia, where two-thirds of the world’s impoverished population lives. It is estimated that 2**.3 billion farmers and their households dpeend on rice as their main source of livelihood** (Mohanty 2010). In Southeast Asia alone, about 24 million farmers depend on lowland rice agriculture, wheras, in South Asia, the figures are two to Three times higher. **Irrigated rice is grown on approximately 50% of the rice area in Asia** and generates approximately 75% of the total rice production. **Rice also plays a major role in all facets of peoples’ lives in Asia.** This is evidenced in their cosmology (i.e., calendar, time perception, etc.), language, community structure, rituals, songs, material culture, and perception of the landscape, among others (Conklin et al 1980). The term “eating” is often synonymous with “eating rice.” The Chinese word for rice is the same as the wor dofr food. In Thailand, when you call your family to a meal, you say, “eat rice.” In Japan, the word for cooked rice is the same as the word for meal. For many Asians, meals are incomplete unless they contain rice, as it “uniquely sustains the human body in a way no other food can” (Hamilton 2003: 23). Also, in the Philippines, rice is associated with an abundant life. After wedding ceremonies, the bride and groom are showered with rice to indicate more blessings from God. Further, social and economic activities are also directly related to preparing and irrigating the land, planting, maintaining the crops, irrigation, harvesting, drying, and storage (Conklin et al 1980). Hence, rice is not only nourishment to the body but it also has high significance to the social, economic, and cultural aspects of Asian people that are deeply woven into the fabric of Asian cultures and civilization. Agriculture remains an economic backbone in most Asian countries. **Rice, being the staple food of Asia**, and hence a political commodity, **has remained a major component** of Asian agriculture. **Since**, in recent history, **rice has become a primary element in the agricultural component of the gross domestic product** (GDP) **of** many **Asian countries, Hamilton (**2003) **observed that** rice may be the key to unity in a culturally diverse Asia. **The recent global rice crisis** in 2008 **stimulated Asian governments to allocate more** investment **in rice research** and extension **to increase the rice supply** and achieve rice self-sufficiency for the importing countries, and a rice surplus for the exporting countries. **With its political, economic, social, and cultural significance, a continued increase in rice productivity is critically important for increasing food security, reducing poverty** and hunger, **and enhancing environmental sustainability**. However, the **sustained productivity** of this critically important irrigated rice ecosystem **is challenged** by declining water availability, conversion of prime lands to alternate uses, the increasing shortage of labor, climate variability and climate change, and widespread concern regarding the environment.

#### Rice is important yo – yield growth is key

Zeigler 10 – (2010, Eric, PhD in plant pathology, Director General, International Rice Research Institute, “Forward,” in *Rice in the Global Economy,* International Rice Research Institute, http://books.irri.org/9789712202582\_content.pdf)

**Rice is the most important food crop of the developing world**. It is the staple food of about half the world’s population. **Roughly 900 million of the world’s poor depend on rice as producers or** as **consumers**. On average, **rice accounts for nearly half of the food expenses of poor people and a ﬁfth of their total household expenses**. It is well established that the **rapid productivity growth of rice** resulting from the use of improved varieties, fertilizers, and irrigation (popularly known as the Green Revolution) **increased production and led to a long-term decline in rice prices**. **This has been the major factor helping to reduce poverty in Asia** over the past several decades. Despite the past achievements, **rice productivity growth will remain essential in the future** for several important reasons. **Rice yield growth has slowed considerably in recent years** and has failed to keep up with population growth, **leading to shortages and higher prices** that have adversely affected the poor. **This was demonstrated by the food crisis** and the rice price spike experienced **in 2008. Clearly, food security remains somewhat tenuous despite** the **rapid economic growth** experienced in many parts of the world. **The ongoing changes in the economy**, resource competition from other sectors, environmental changes, increasing commercialization of rice farming, **and the importance of international trade mean that the way rice will be produced in the future will be substantially different**. Some traditional rice-growing areas may lose their comparative advantage while others may become new growth centers for rice. Changes will also occur in gender roles in rice farming and demographic proﬁ les of rice farmers as the nonfarm sector expands in the course of economic growth. **These changes will have far-reaching implications for crop production and for social organization** of the farm household economy. Clearly, **there is a need to develop a new vision for future rice farming given these global trends and likely scenarios.** This vision is needed to strategically position investments in rice research, technology delivery, and the design of policy reforms.

#### That causes Asian war.

Auslin 09 – (2/5, Michael, PhD, former associate professor of history and senior research fellow at the MacMillan Center for International and Area Studies at Yale University, resident scholar, American Enterprise Institute, “Averting Disaster: Preventing the worst case scenario in Asia,” http://www.weeklystandard.com/Content/Public/Articles/000/000/016/115jtnqw.asp)

AS THEY DEAL WITH a collapsing world economy, **policymakers** in Washington and around the globe **must not forget that when a depression strikes, war can follow. Nowhere is this truer than in Asia, the most heavily armed region on earth and riven with ancient hatreds and territorial rivalries. Collapsing trade flows can lead to political tension, nationalist outbursts, growing distrust, and ultimately, military miscalculation. The result would be disaster** on top of an already dire situation. No one should think that Asia is on the verge of conflict. But **it is also important to remember what has helped keep the peace in this region for so long**. **Phenomenal growth rates** in Japan, South Korea, Hong Kong, Singapore, China and elsewhere since the 1960s **have naturally turned national attention inward, to development and stability. This has gradually led to increased political confidence, diplomatic initiatives, and in many nations the move toward more democratic systems. America has directly benefited** as well, and not merely from years of lower consumer prices, but **also from the general conditions of peace in Asia.** Yet policymakers need to remember that even during these decades of growth, moments of economic shock, such as the 1973 Oil Crisis, led to instability and bursts of terrorist activity in Japan, while the uneven pace of growth in China has led to tens of thousands of armed clashes in the poor interior of the country. Now imagine such instability multiplied region-wide. The **economic collapse** Japan is facing, and China's potential slowdown, dwarfs any previous economic troubles, including the 1998 Asian Currency Crisis. Newly urbanized workers rioting for jobs or living wages, conflict over natural resources, further saber-rattling from North Korea, all can take on lives of their own. This is the nightmare of governments in the region, and particularly of democracies from newer ones like Thailand and Mongolia to established states like Japan and South Korea. How will overburdened political leaders react to internal unrest? What happens if Chinese shopkeepers in Indonesia are attacked, or a Japanese naval ship collides with a Korean fishing vessel? Quite simply, Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. This would be a political and humanitarian disaster turning the clock back decades in Asia. **It would almost certainly drag America in** at some point, as well. First of all, **we have alliance responsibilities to Japan, South Korea, Australia, and the Philippines should any of them come under armed attack**. Failure on our part to live up to those responsibilities could mean the end of America's credibility in Asia. Secondly, peace in Asia has been kept in good measure by the continued U.S. military presence since World War II. There have been terrible localized conflicts, of course, but nothing approaching **a systemic conflagration** like the 1940s. Today, such a conflict **would be far more bloody, and it is unclear if** the **America**n military, **already stretched** too **thin** by wars in Afghanistan and Iraq, **could contain the crisis**. Nor is it clear that the American people, worn out from war and economic distress, would be willing to shed even more blood and treasure for lands across the ocean. **The result could be a historic changing of the geopolitical map in the world's most populous region. Perhaps China would emerge as the undisputed hegemon. Possibly democracies like Japan and South Korea would link up to oppose any aggressor. India might decide it could move into the vacuum.** All of this is guess-work, of course, but it has happened repeatedly throughout history. **There is no reason to believe we are immune from the same types of miscalculation and greed that have destroyed international systems in the past.**

#### Asian war goes nuclear

Dibb 01 – (2001, Paul, emeritus professor of strategic and defence studies at The Australian National University, Winter, “Strategic Trends: Asia at a Crossroads.” Naval War College Review, Vol. 54, Issue 1. ebsco)

**The areas of maximum danger and instability in the world today are in Asia, followed by the Middle East and parts of the former Soviet Union. The strategic situation in Asia is more uncertain and potentially threatening than anywhere** in Europe. Unlike in Europe, it **is possible to envisage war in Asia involving the major powers: remnants of Cold War ideological confrontation still exist across the Taiwan Straits and on the Korea**n Peninsula; **India and Pakistan have nuclear weapons and ballistic missiles, and these two countries are more confrontational than at any time since the early 1970s; in Southeast Asia, Indonesia**--which is the world's fourth-largest country--**faces a highly uncertain future that could lead to its breakup. The Asia-Pacific region spends more on defense** (about $150 billion a year) t**han any other part of the world except the United States and Nato Europe. China and Japan are amongst the top four or five global military spenders**. **Asia also has more nuclear powers than any other region of the world.** **Asia's security is at a crossroads: the region could go in the direction of peace and cooperation, or it could slide into confrontation and military conflict**. There are positive tendencies, including the resurgence of economic growth and the spread of democracy, which would encourage an optimistic view. But **there are a number of negative tendencies that must be of serious concern. There are deep-seated historical, territorial, ideological, and religious differences** in Asia. Also, **the region has no history of successful multilateral security cooperation or arms control**. Such multilateral institutions as the Association of Southeast Asian Nations and the ASEAN Regional Forum have shown themselves to be ineffective when confronted with major crises

#### CO2 fertilization is the root cause and biggest enabling factor – wouldn’t work otherwise.

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

**The case is different with** another potentially important omitted variable, **the improved crop varieties that created the “Green Revolution”.** **The most comprehensive analysis** is probably that by Evenson and Gollin (2003a) summarizing their book (2003b). Table 1 of the former **shows** the results of their analysis, indicating **that while improved varieties had significant impacts on yields across the world, in all cases the yield increases attributable to “other inputs” was larger,** by an order of magnitude, at least double in many cases. **These authors** define “other inputs” as the residual not accounted for by modern varieties, and they **did not consider [CO2] explicitly**. **It seems likely that rises in [CO2] were a major contributor not only perhaps to the “other inputs” but also to some of the yield increase attributable to modern varieties**, since **that could not happen without photosynthesis based on [CO2].** Thus **while it is likely that improved varieties contribute to the large correlation** between yield and [CO2] reported above, **the latter is in effect a proxy for the role of the improved varieties**. Correspondingly, the improved varieties also help to explain the on-going rapid growth of the biosphere’s uptakes of [CO2] that is evident in our Fig.2.

#### Newest most qualified evidence concludes neg – satellite remote sensing is the only way to get a global climate picture – CO2 fertilization is true.

Bala et al. 13 – (2013, **Govindasamy** **Bala**, PhD, Associate Professor, Divecha Center for Climate Change and Center for Atmospheric and Oceanic Sciences, Indian Institute of Science, Bangalore, formerly physicist at the University of California's Lawrence Livermore National Laboratory, **Rajiv K. Chaturvedi**, PhD in ecology and climate change, National Environmental Sciences Fellow, Centre for Sustainable Technologies, Indian Institute of Science, Bangalore, **Hirofumi Hashimoto**, PhD in Agriculture, Research Scientist NASA Ames Research Center & California State University, Monterey, **Rama Nemani**, PhD in remote sensing and forestry, Director of Ecological Forecasting Laboratory, NASA Ames Research Center, **Jaideep Joshi**, Centre for Ecological Sciences, Indian Institute of Science, Bangalore, **Hosahalli V. Gangamani**, Divecha Center for Climate Change and Center for Atmospheric and Oceanic Sciences, “Trends and Variability of AVHRR-Derived NPP in India,” Remote Sens. 2013, 5, 810-829)

Abstract: **In this paper, we estimate the trends and variability in Advanced Very High Resolution Radiometer** (AVHRR)-**derived terrestrial net primary productivity** (NPP) **over India** for the period 1982–2006. **We find an increasing trend of 3.9% per decade** (r = 0.78, R2 = 0.61) during the analysis period. **A multivariate linear regression** of NPP with temperature, precipitation, atmospheric CO2 concentration, soil water and surface solar radiation (r = 0.80, R2 = 0.65) **indicates that the increasing trend is** partly **driven by increasing atmospheric CO2 concentration and the consequent CO2 fertilization of the ecosystems**. However, human interventions may have also played a key role in the NPP increase: non-forest NPP growth is largely driven by increases in irrigated area and fertilizer use, while forest NPP is influenced by plantation and forest conservation programs. A similar multivariate regression of interannual NPP anomalies with temperature, precipitation, soil water, solar radiation and CO2 anomalies suggests that the interannual variability in NPP is primarily driven by precipitation and temperature variability. Mean seasonal NPP is largest during post-monsoon and lowest during the pre-monsoon period, thereby indicating the importance of soil moisture for vegetation productivity. 1. Introduction **Terrestrial net primary productivity** (**NPP**) **is one of the most important ecosystem variable**s that have been studied extensively during the last 40 years [1]. **It is a fundamental ecological variable, not only because it measures the terrestrial carbon dioxide assimilation, but it also indicates the type** (e.g., crops, forests) **of the land surface area and status of a wide range of ecological processes**. Practical considerations for estimating NPP exist in its utility to measure crop yield, forest productivity and other economically and socially significant products of vegetation origin. **Determining the trend and variability of terrestrial NPP and its response to climate change is critical for understanding** the potential carbon cycle changes in response to temperature, precipitation and other **factors such as CO2 fertilization**. **Modern ecology relies heavily on experiments**, both in laboratory and in field settings. However, true global measurements could only be made using satellite remote sensing which provides large sample sizes. **Global ecosystem models provide the basis for computing a satellite-based estimate of NPP.** These models range from simple ones based on light use efficiency (LUE) to more mechanistic models based on “Soil-Vegetation-Atmospheric-Transfer” (SVAT) schemes designed to capture variability in biospheric processes. **LUE-based models are less complex and easily use remotely sensed data and map primary productivity** of the terrestrial biosphere **over large areas**. Satellite data-driven LUE models such as C-Fix [2], Carnegie-AMES-Stanford-Approach (CASA) [3], Global Production Efficiency Model (GLO-PEM) [4], Simple Diagnostic Biosphere Model (SDBM) [5], Terrestrial Uptake and Release of Carbon (TURC) [6] and Moderate Resolution Imaging Spectroradiometer (MODIS) NPP algorithm [7–9] have been developed to produce spatiotemporal pattern of NPP over continents or global land surface. Estimates of daily gross primary productivity (GPP) and annual net primary productivity (NPP) at the 1-km spatial resolution are now produced operationally for the global terrestrial surface using imagery fromthe MODIS sensor [9]. NPP products can also be derived from process-based SVAT schemes [10].

#### Historical data proves the relationship demonstrated by lab and field tests – reductions would directly cause lower food yields and higher prices.

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

Section 2 outlined **our regressions show**ing **that growth of [CO2] is strongly associated with the increase in world food production** from 1962 and 1980 to 2003. Being **based on historic outcomes they provide exceptionally strong support for the “laboratory” results from localized greenhouse and “FACE” field trials**, confirming the unequivocal fertilizing effect of elevated [CO2] on crop yields. **We noted** that there is **a potential problem of auto-correlation** of the data on the growth of the concentration of atmospheric CO2 due to its continuous growth (albeit at the slow rate of less than 0.5% p.a.). This is a problem with all time series that show steady growth including the CPI, GDP, world population, and many others. **The regressions reported here all pass the Durbin-Watson test statistic for absence of auto-correlation**. **Moreover our regressions show such drastic reductions may well have the capacity to produce major declines in global food crop yields**, with concomitant rises in grain and other food prices given on-going population growth, as is the corollary of Cline’s analysis (2007). This finding is similar to Freeman Dyson’s (2007): **The** fundamental **reason** why **carbon dioxide in the atmosphere is critically important to biology is that there is so little of it**. **A field of corn growing in full sunlight in the middle of the day uses up all the carbon dioxide within a meter of the ground in about five minutes**. If the air were not constantly stirred by convection currents and winds, the corn would stop growing…

#### Confirmed independently by a ton of lab and field tests – massive increases for C3 crops and trees.

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

The **aggregative data used in our regression** showing the powerful fertilizing capability of growing levels of [CO2] **are confirmed by innumerable micro studies of the yield enhancement resulting from enriching** real **greenhouses by injecting them with CO2**. **There are also very many studies of “free-air CO2 enrichment”** (FACE) **field experiments that have confirmed the large fertilizing effect** of elevated [CO2] levels even in open fields. The experiments release jets of CO2-enriched air or pure CO2 gas into the fields: “**exposure to elevated CO2 resulted in a 31% increase in the light-saturated leaf photosynthetic rate and a 28% increase in the diurnal photosynthetic rate of carbon assimilation when averaged across all FACE experiments and species**”. **Trees showed the greatest response, followed by** fertilized C3 crops (e.g. **wheat**). Thus trees showed a 28% increase in above-ground dry matter production, but crop yields increased by “only” about 15 to 17%—and **many wheat farmers would be quite content with that** (Ainsworth and Long, 2005:354–5, 358).7

#### Their author is wrong – free air experiments don’t disprove CO2 fertilization, temperature doesn’t eliminate yield increases, and C3 crops like rice, wheat, and soy are key

Curtin 09 – (2009, Tim, not an Idso, economist, and a former advisor to the EU, World Bank, and an emeritus faculty member of Australian National University, “Climate Change and Food Production,” Energy & Environment (a super qualled peer reviewed journal), Vol 20, No 7, 2009, google scholar)

**The “recent studies” cited by Stern** (Parry et al. 2004, Warren et al. 2006, Long et al. 2005) **offer no evidence of any decline in cereal production during** the period of recent **global warming**.3 **Parry** et al. (2004) **state** “most **plants growing in atmospheric CO2** higher than ambient **exhibit increased rates of photosynthesis**” (2004:55). Moreover, pace Stern’s claim, **this paper displays the yield increases associated with elevated CO2** (2004: Fig1). The paper by **Warren** et al. (2006) **also admits “CO2 fertilization is the strongest driver of uncertainty in the results”** (2006:5), **which hardly supports Stern’s claim that** it shows “**the carbon fertilization effect is smaller than previously thought**”, not least because **the paper produced no data of its own** showing any decline in the CO2 fertilization effect.4 Similarly **the findings of Long et al.** (2005, 2006a) **are quite different** from Stern’s assertions. **What they actually showed was that while FACE** (free-air concentration enrichment) **experiments** to determine the effect of elevated atmospheric CO2 on photosynthesis and yield of various crops **showed reduced yields** as compared with those from greenhouse or other semi-enclosed chamber experiments, **the yield increases at 550 ppm CO2 remained strong, at 12–14% for the C3 crops, rice, wheat and soybeans**. These yield increases were recorded despite the significantly higher temperatures (more than 1o C) **in the FACE plots than outside them** (Long et al. 2005, Table 1 and Fig.1). Stern’s claims are also not supported by the findings of Long et al. (2006a) that **rising temperature does not** fully **offset rising yields in C3 crops** resulting from the reduction in Rubisco-based respiration **produced by elevated CO2** (see also Long et al. 2006b:326).

**None of these papers considers the impact of the widely proposed reduction in emissions by 80%** from the 2000 level **by 2050, and the resulting declining atmospheric concentration of CO2 on global agricultural, forestry, and fishery yields**, but **they** do simulate zero fertilization effects in order to derive worst-case outcomes of rising atmospheric CO2. Thus **Parry et al. show the “additional risk of hunger without CO2 effects”** (2004:Fig.14). Ironically Warren’s Figure 3.1 contradicts Stern’s account of this paper by showing “that world wheat yields decline by 22% for a temperature rise of 3–4° C above 1990 in the absence of CO2 fertilization” (2006:28, see also comments below on similar findings of Cline 2007). Ironically, **these** authors’ **zero fertilization scenarios confirm that with** Stern-type **emission reduction policies there would be a** potentially catastrophic impact on world food production, because of the reduction in CO2 fertilization that these policies would produce.

#### Prefer our ev – their authors are too short-term and ignore adaptation

Goklany 11 (Indur M., science and technology policy analyst for the US Dept of the Interior, “Misled on Climate Change: How the UN IPCC (and others) Exaggerate the Impacts of Global Warming” December 2011, <http://goklany.org/library/Reason%20CC%20and%20Development%202011.pdf>)

A third approach would be to fix the root cause of why developing countries are deemed to be most at-risk, namely, poverty. Sustained economic growth would, as is evident from the experience of developed countries, address virtually all problems of poverty, not just that portion exacerbated by global warming. It is far more certain that sustainable economic growth will provide greater benefits than emission reductions: while there is no doubt that poverty leads to disease and death, **there is substantial doubt regarding the reality and magnitude of the negative impact of global warming. This is especially true as assessments often ignore improvements in adaptive capacity.** Of these three approaches, human well-being in poorer countries is likely to be advanced most effectively by sustained economic development and least by emission reductions. In addition, because of the inertia of the climate system, economic development is likely to bear fruit faster than any emission reductions. These figures also indicate that the compound effect of economic development and technological change can result in quite dramatic improvements even over the relatively short period for which these figures were developed. Figure 5, for instance, covered 26 years. By contrast, **climate change impacts analyses frequently look 50 to 100 years into the future**. Over such long periods, the compounded effect could well be spectacular**. Longer term analyses of climate-sensitive indicators of human well-being show that the combination of** economic growth and technological change can, over decades, reduce negative impacts on human beings by an order of magnitude, that is, **a factor of ten, or more**. In some instances, **this combination has virtually eliminated such negative impacts.** But, **since impact assessments generally fail to fully account for increases in economic development and technological change, they substantially** overestimate future net damages from global warming. It may be argued that the high levels of economic development depicted in Figure 6 are unlikely. But if that’s the case, then economic growth used to drive the IPCC’s scenarios are equally unlikely, which necessarily means that the estimates of emissions, temperature increases, and impacts and damages of GW projected by the IPCC are also overestimates. B. Secular Technological Change **The second major reason why future adaptive capacity has been underestimated** (**and the impacts of global warming systematically overestimated) is that few impact studies consider secular technological change.** 25 **Most assume that no new technologies will come on line**, although some do assume greater adoption of existing technologies with higher GDP per capita and, much less frequently, a modest generic improvement in productivity. 26 Such an assumption may have been appropriate during the Medieval Warm Period, when the pace of technological change was slow, but nowadays technological change is fast (as indicated in Figures 1 through 5) and, arguably, accelerating. 27 It is unlikely that we will see a halt to technological change unless so-called precautionary policies are instituted that count the costs of technology but ignore its benefits, as some governments have already done for genetically modified crops and various pesticides. So how much of a difference in impact would consideration of both economic development and technological change have made? If impacts were to be estimated for five or so years into the future, ignoring changes in adaptive capacity between now and then probably would not be fatal because neither economic development nor technological change would likely advance substantially during that period. However, **the time horizon of climate change impact assessments is often on the order of 35–100 years or more.** The Fast Track Assessments use a base year of 1990 to estimate impacts for 2025, 2055 and 2085. **Over such periods one ought to expect substantial advances in adaptive capacity due to increases in economic development, technological change and human capital**. As already noted, retrospective assessments indicate that **over the span of a few decades, changes in economic development and technologies can substantially reduce, if not eliminate, adverse environmental impacts and improve human well-being, as measured by a variety of objective indicators.** 41 **Thus, not fully accounting for changes in the level of economic development and secular technological change would understate future adaptive capacity, which then could overstate impacts by one or more orders of magnitude** if the time horizon is several decades into the future. The assumption that there would be little or no improved or new technologies that would become available between 1990 and 2100 (or 2200), as assumed in most climate change impact assessments, is clearly naïve. In fact, a comparison of today’s world against the world of 1990 (the base year used in most impacts studies to date) shows that even during this brief 20-year span, this assumption is ingvalid for many, if not most, human enterprises. Since 1990, for example, the portion of the developing world’s population living in absolute poverty declined from 42% to 25%, and in sub-Saharan Africa Internet users increased from 0 to 50 million, while cellular phone users went from 0 per 100 to 33 per 100.

#### Ocean pH variability takes out the impact

WSJ 12 (Wall Street Journal, “Taking Fears of Acid Oceans With a Grain of Salt,” 1/7/2012, http://online.wsj.com/article/SB10001424052970203550304577138561444464028.html, NP)

Coral reefs around the world are suffering badly from overfishing and various forms of pollution. Yet many experts argue that the greatest threat to them is the acidification of the oceans from the dissolving of man-made carbon dioxide emissions. The effect of acidification, according to J.E.N. Veron, an Australian coral scientist, will be "nothing less than catastrophic.... What were once thriving coral gardens that supported the greatest biodiversity of the marine realm will become red-black bacterial slime, and they will stay that way." This is a common view. The Natural Resources Defense Council has called ocean acidification "the scariest environmental problem you've never heard of." Sigourney Weaver, who narrated a film about the issue, said that "the scientists are freaked out." The head of the National Oceanic and Atmospheric Administration calls it global warming's "equally evil twin." But do the scientific data support such alarm? Last month scientists at San Diego's Scripps Institution of Oceanography and other authors published a study showing how much the pH level (measuring alkalinity versus acidity) varies naturally between parts of the ocean and at different times of the day, month and year. "On both a monthly and annual scale, even the most stable open ocean sites see pH changes many times larger than the annual rate of acidification," say the authors of the study, adding that because good instruments to measure ocean pH have only recently been deployed,

"this variation has been under-appreciated." Over coral reefs, the pH decline between dusk and dawn is almost half as much as the decrease in average pH expected over the next 100 years. The noise is greater than the signal. Another recent study, by scientists from the U.K., Hawaii and Massachusetts, concluded that "marine and freshwater assemblages have always experienced variable pH conditions," and that "in many freshwater lakes, pH changes that are orders of magnitude greater than those projected for the 22nd-century oceans can occur over periods of hours." This adds to other hints that the ocean-acidification problem may have been exaggerated. For a start, the ocean is alkaline and in no danger of becoming acid (despite headlines like that from Reuters in 2009: "Climate Change Turning Seas Acid"). If the average pH of the ocean drops to 7.8 from 8.1 by 2100 as predicted, it will still be well above seven, the neutral point where alkalinity becomes acidity. The central concern is that lower pH will make it harder for corals, clams and other "calcifier" creatures to make calcium carbonate skeletons and shells. Yet this concern also may be overstated. Off Papua New Guinea and the Italian island of Ischia, where natural carbon-dioxide bubbles from volcanic vents make the sea less alkaline, and off the Yucatan, where underwater springs make seawater actually acidic, studies have shown that at least some kinds of calcifiers still thrive—at least as far down as pH 7.8. In a recent experiment in the Mediterranean, reported in Nature Climate Change, corals and mollusks were transplanted to lower pH sites, where they proved "able to calcify and grow at even faster than normal rates when exposed to the high [carbon-dioxide] levels projected for the next 300 years." In any case, freshwater mussels thrive in Scottish rivers, where the pH is as low as five. Laboratory experiments find that more marine creatures thrive than suffer when carbon dioxide lowers the pH level to 7.8. This is because the carbon dioxide dissolves mainly as bicarbonate, which many calcifiers use as raw material for carbonate. Human beings have indeed placed marine ecosystems under terrible pressure, but the chief culprits are overfishing and pollution. By comparison, a very slow reduction in the alkalinity of the oceans, well within the range of natural variation, is a modest threat, and it certainly does not merit apocalyptic headlines.

#### Overwhelming scientific proof votes neg.

Ridley 10 – (Matt Ridley, PhD in zoology, former science editor of The Economist, science journalist, “The Rational Optimist: How Prosperity Evolves,” p. 340-341)

Lest my critics still accuse me of cherry-picking studies, **let me refer them also to the results of Hendriks et al**. (2010, Estuarine, Coastal and Shelf Science 86:157). Far from being a cherry-picked study**, this is a massive meta-analysis. The authors observed that `warnings that ocean acidification is a major threat to marine biodiversity are largely based on the analysis of predicted changes in ocean chemical fields’ rather than empirical data. So they constructed a database of 372 studies in which the responses of 44 different marine species to ocean acidification** induced by equilibrating seawater with CO2-enriched air had been actually measured. They found that **only a minority of studies demonstrated `significant responses to acidification’** and there was no significant mean effect even in these studies. **They concluded that the world's marine biota are `more resistant to ocean acidification than suggested by pessimistic predictions identifying ocean acidification as a major threat to marine biodiversity**’ and that ocean acidification `may not be the widespread problem conjured into the 21st century…Biological processes can provide homeostasis against changes in pH in bulk waters of the range predicted during the 21st century.’ **This important paper alone contradicts Hoegh-Gudlberg’s assertion that `the vast bulk of scientific evidence shows that calcifiers… are being heavily impacted already’.**

### CP

#### The CP is the real deal – it fully offsets global warming.

Morgan 11 – (10/8/11, John, PhD in physical chemistry, runs R&D programmes at a Sydney startup company, research experience in chemical engineering in the US and at the Commonwealth Scientific and Industrial Research Organisation, Australia's national science agency, “Low intensity geoengineering – microbubbles and microspheres,” <http://bravenewclimate.com/2011/10/08/low-intensity-geoengineering-microbubbles-and-microspheres/>)

But **what if there was a geoengineering approach that used no materials, almost no energy, works at sea level, with cheap technology we could start deploying at scale today**? **That’s exactly what Russell Seitz at Harvard is proposing.** In this post **I want to look at his idea of increasing the reflectivity of the oceans with tiny microbubbles, It’s a fascinating, low impact concept, though not without some challenges.** So **I’ll also propose a different means to the same end that addresses these issues, and of course has some of its own**. Then we can talk about how crazy it all is. Bright Water In a remarkable paper published just over a year ago – which I highly recommend reading – **Seitz proposed injecting microbubbles of air into seawater, effectively creating an “inverse cloud”. Sunlight is scattered back into space from these bubbles**. This concept has no material inputs, bubble sparging equipment is cheap and low power, and could be installed on ships already travelling the worlds waterways. **We don’t need to launch giant lenses into space or build giant balloon tethered pipelines to the stratosphere. We have a much more down to earth delivery system already in place, in the form of more than 10 000 ships at sea, 1300 working oil rigs and many thousands of retired platforms** (3500 in the Gulf of Mexico alone) **not to mention islands and suitable coastlines. It’s the little bubbles of nothing that make it really something** **The appeal of this technique comes from the fact that you only need very small bubbles to scatter light.** Leveraging the cube law relationship for volume gives you a lot of scattering power if you can make really small bubbles. The air from a single 1 cm bubble, could fill a trillion 1 μm bubbles. **Seawater naturally contains up to 1 ppm by volume of air as larger bubbles – in the 10-100 μm range. Their reflectance can be measured, but is so small as to be irrelevant to the Earth’s energy balance**. But **if this quantity of air were broken down to 1 μm bubbles, there would be a million more of them, and Seitz estimates the backscattered light would amount to several watts per square metre**. **That’s some serious power.** Light scattering from small spherical particles is calculated using Mie theory, a fairly horrendous piece of mathematical machinery. Seitz reports Mie theory scattering results 1 μm radius bubbles at various concentrations. At 0.2 ppm of air in water as 1 μm radius bubbles, the albedo (reflectivity) increase is 1%, equal to the current CO2 forcing (Figure 2). **This is an astonishing result: global warming is fully offset by 0.2 parts per million of 1 μm bubbles! Using the IPCC mid-range climate sensitivity** of 0.7 K per Wm-2 **the global average temperature would decrease by about 1 degree, more than the 0.74 K warming seen in the 20th century.** The NCAR CAM3.1 climate model was used to look at the effect of 1 ppm of 1 μm bubbles in a 780 ppm CO2 scenario – double our current CO2 level. Under this extravagant CO22 burden the model nevertheless indicated a cooling of 2.7 K [Seitz 2010; Figure 5]. So **microbubbles really could be a powerful engineered response to climate change, if we can deploy them.**

#### Seitz proposal is scientifically rigorous – he uses state of the art modeling to test the proposed benefits of his system.

Kinitsch, ‘10

[“Could Tiny Bubbles Cool the Planet?”, 3-26-10, Science Magazine

<http://news.sciencemag.org/physics/2010/03/could-tiny-bubbles-cool-planet>, RSR]

Computer simulations show that tiny bubbles could have a profound cooling effect. Using a model that simulates how light, water, and air interact, Seitz found that microbubbles could double the reflectivity of water at a concentration of only one part per million by volume. When Seitz plugged that data into a climate model, he found that the microbubble strategy could cool the planet by up to 3°C. He has submitted a paper on the concept he calls “Bright Water" to the journal Climatic Change.

#### Bright water is SOFT GEOENGINEERING which is distinct – doesn’t have negative environmental effects, is reversible, and is localized – highly different from other SRM techniques. Also, the CP can quickly be scaled globally to solve.

Olson 12 – (Sept/Oct 2012, Robert, Senior Fellow at Institute for Advanced Futures and was the Institute’s Director of Research for fifteen years, working as a consultant to leaders in a wide range of government agencies, corporations, and non-profit organizations, member of the National Advisory Council for Environmental Technology and Policy (NACEPT) and primary author of the NACEPT report The Environmental Future: Emerging Challenges and Opportunities for EPA. former project director at the Office of Technology Assessment of the U.S. Congress, Fellow of the Center for Cooperative Global Development at the American University and Resident Fellow at the University of Illinois Center for Advanced Study, “Environment: Science and Policy for Sustainable Development,” Environment Magazine, http://www.see.ed.ac.uk/~shs/Climate%20change/Geo-politics/Bright%20water.pdf)

**The following is a set of criteria for** what might be called “**soft geoengineering**” using technologies that touch gently on biological and social systems. 1. **Can be applied locally** 2. **Scalable to larger areas** 3. **Low or no anticipated negative impacts** on ecosystems or society 4. **Rapid reversibility** if problems do arise 5. **Has multiple benefits**, beyond impacts on climate 6. **Analogous to natural processes** 7. **Effects** are **large enough** soon enough to be worthwhile 8. Cost-effective with mature technologies deployed at moderate scale **Most geoengineering technologies fair badly when judged by these criteria**, **especially the more powerful “solar radiation management”** (SRM) **methods** that cool the global climate by reflecting solar radiation back into space. Most of today’s controversy and criticism deals with potential impacts on ecosystems and society of SRM approaches, such as **injecting aerosols** into the stratosphere or brightening clouds over the ocean by lofting fine particles of salt in seawater. Another SRM approach, putting “**sun shields**” in near-Earth orbit or at a more distant point where the gravitational pull of the earth and sun are equal, fails on every criterion. **Increasing the reflectivity of** large **desert areas** could have moderately strong cooling effects, but would have massive environmental impacts on the covered areas. 8 A very different geoengineering method, “carbon dioxide removal” (CDR), cools the climate by removing carbon dioxide from the atmosphere. Most CDR methods pose comparatively low risks and have attracted comparatively little criticism, with the exception of an approach called ocean fertilization, which risks disrupting ocean ecosystems. But most CDR approaches have a fatal flaw: Their effects are not large enough soon enough. To make a significant difference they would have to be used over several centuries—time we do not have. 9 **There are a handful of approaches**, however, **that may meet all or most of the “soft geoengineering” criteria**. None of the technologies described next are presented as ready for widespread use, but rather as deserving greater attention and serious consideration. **Bright Water** The “deep blue sea” that covers three-fourths of the earth’s surface absorbs solar heat like black asphalt. Though water is normally dark, adding a tiny fraction of air can create a hydrosol—a suspension of air bubbles—that makes water brighter. Hydrosols are, in a sense, clouds turned inside out: Clouds are aerosols of water drops too small to fall through the air, while **hydrosols are clouds of air bubbles too small to rise rapidly through water**. **They** are almost optically identical. Both **reflect solar energy by light scattering.** Russell **Seitz**, a Fellow of the Department of Physics at Harvard University, **has proposed using “microbubbles” as an SRM geoengineering method**. 10 Very small (micrometer-sized) bubbles are extremely reflective and slow to dissipate. He calculates that one part per million by volume of air in the form of microbubbles can double the reflectivity of water, and **one kilogram** (2.2 pounds) **of air can brighten a square kilometer of water**. Seitz envisions compressed air lines running like submarine cables out to offshore dispersion arrays and ships earning carbon credits by laying hydrosol wakes, which are dispersed for free by currents. He says **simply brightening a large pond can have an equivalent effect to putting white roofs on 10,000 buildings**—for little more than the cost of one roof. 11 **Unlike stratospheric aerosols, which spread on a global scale, hydrosols can be used locally**. **Seitz imagines water bodies** like Galveston Bay or Chesapeake Bay staying 5 degrees K cooler, **providing “outdoor air conditioning”** for Houston, Texas, and Baltimore, Maryland, and **sharply reducing electric power demand**; or **protecting coral reefs from the stress caused by rising ocean temperatures**; **or focusing largescale bright water production on the Arctic Ocean** in summer **to minimize ice melting**. **Brightening water is also a novel way to reduce evaporation**. Solar evaporation is already a significant issue and global warming will make it even bigger. California loses more than 10% of its irrigation supply to evaporation, Australia loses roughly 40%, and countries in the Middle East lose more than 50%. Evaporating water also concentrates pollutants and reduces hydropower production. Seitz argues that micro-financed devices like a small wind turbine or solar-cell array can run vortex microbubble generators to reduce evaporation from village ponds in developing nations. The same thing can be done with larger scale technology in reservoirs and lakes, extending the water supply during the dry season and increasing river flow. 12 The economics of hydrosol water brightening depends on the cost of compressed air needed to generate and replace microbubbles. That will depend in many locations on the cost of electricity, but in virtually all hydropower reservoirs and the rivers that feed them compressed air can be generated at almost no cost by using inexpensive trompes and ram pumps that operate without electric motors using very low head hydropower. These water- powered devices are extremely simple - some have no moving parts at all – and they have been used over many decades for other purposes. One such, the Ragged Chutes trompe in Cobalt, Ontario, has been continuously providing compressed air for mine ventilation for over 100 years. A trompe on the scale of Ragged Chutes could continuously brighten a 100 km stretch of river without any external energy input. 13 Many questions remain about the practicality and cost of this approach, but a first look suggests that “bright water” does meet the criteria for being a promising soft geoengineering technology.

## 1NR

### CP

#### The soil is already dead. Only increasing CO2 is key

Mwangi et al 98 (Peterson Mwangi, Agricultural Economist with the Kenya Agricultural Research Institute, John Lynam, Senior Scientist with the Rockefeller Foundation, Nairobi, Kenya, and R.M. Hassan, Dept of Agricultural Economics at the University of Pretoria, Maize Technology Development and Transfer, A GIS Application for Research Planning in Kenya, 1998, p. 200

Kenyan agriculture, to a very significant extent, has maintained or increased productivity by mining soil capital. The time is fast approaching when Kenyan farmers will have to increase fertilizer use significantly just to maintain existing levels of productivity. Fertilizer will be an essential element of future productivity increases, even with substantial improvement in use of organic sources and improved efficiency in the use of total nutrients. Therefore, what happens to fertilizer use under market liberalization is a critical issue to be considered in devising strategies to improve agricultural productivity in Kenya.

#### Erosion is a natural phenomenon

**Ontario Ministry of Agrcultural, food, and rural affairs 2003** (Soil Erosion, causes and effects, http://www.omafra.gov.on.ca/english/engineer/facts/87-040.htm)

**Soil erosion is a naturally occurring process on all land. The agents of soil erosion are water and wind**, each contributing a significant amount of soil loss each year in Ontario.¶ **Soil erosion may be a slow process that continues relatively unnoticed,** or it may occur at an alarming rate causing serious loss of topsoil. The loss of soil from farmland may be reflected in reduced crop production potential, lower surface water quality and damaged drainage networks.

#### No biodiversity impact

Ridder 2008 – PhD, School of Geography and Environmental Studies, University of Tasmania (Ben, Biodiversity And Conservation, 17.4, “Questioning the ecosystem services argument for biodiversity conservation”) \*ES = environmental services

The low resilience assumption Advocates of the conservation of biodiversity tend not to acknowledge the distinction between resilient and sensitive ES. This ‘low resilience assumption’ gives rise to, and is reinforced by the almost ubiquitous claim within the conservation literature that ES depend on biodiversity. An extreme example of this claim is made by the Ehrlichs in Extinction. They state that “all [ecosystem services] will be threatened if the rate of extinctions continues to increase” then observe that attempts to artificially replicate natural processes “are no more than partially successful in most cases. Nature nearly always does it better. When society sacrifices natural services for some other gain… it must pay the costs of substitution” (Ehrlich and Ehrlich 1982, pp. 95–96). This assertion—that the only alternative to protecting every species is a world in which all ES have been substituted by artificial alternatives—is an extreme example of the ‘low resilience assumption’. Paul Ehrlich revisits this flawed logic in 1997 i nhis response (with four co-authors) to doubts expressed by Mark Sagoff regarding economic arguments for species conservation (Ehrlich et al. 1997, p. 101). The claim that ES depend on biodiversity is also notably present in the controversial Issues in Ecology paper on biodiversity and ecosystem functioning (Naeem et al. 1999) that sparked the debate mentioned in the introduction. This appears to reflect a general tendency among authors in this field (e.g., Hector et al. 2001; Lawler et al. 2002; Lyons et al. 2005). Although such authors may not actually articulate the low resilience assumption, presenting such claims in the absence of any clarification indicates its influence. That the low resilience assumption is largely false is apparent in the number of examples of species extinctions that have not brought about catastrophic ecosystem collapse and decline in ES, and in the generally limited ecosystem influence of species on the cusp of extinction. These issues have been raised by numerous authors, although given the absence of systematic attempts to verify propositions of this sort, the evidence assembled is usually anecdotal and we are forced to trust that an unbiased account of the situation has been presented. Fortunately a number of highly respected people have discussed this topic, not least being the prominent conservation biologist David Ehrenfeld. In 1978 he described the ‘conservation dilemma’, which “arises on the increasingly frequent occasions when we encounter a threatened part of Nature but can find no rational reason for keeping it” (Ehrenfeld 1981, p. 177). He continued with the following observation: Have there been permanent and significant ‘resource’ effects of the extinction, in the wild, of John Bartram’s great discovery, the beautiful tree Franklinia alatamaha, which had almost vanished from the earth when Bartram first set eyes upon it? Or a thousand species of tiny beetles that we never knew existed before or after their probable extermination? Can we even be certain than the eastern forests of the United States suffer the loss of their passenger pigeons and chestnuts in some tangible way that affects their vitality or permanence, their value to us? (p. 192) Later, at the first conference on biodiversity, Ehrenfeld (1988) reflected that most species “do not seem to have any conventional value at all” and that the rarest species are “the ones least likely to be missed… by no stretch of the imagination can we make them out to be vital cogs in the ecological machine” (p. 215). The appearance of comments within the environmental literature that are consistent with Ehrenfeld’s—and from authors whose academic standing is also worthy of respect—is uncommon but not unheard of (e.g**., Tudge 1989; Ghilarov 1996; Sagoff 1997; Slobodkin 2001; Western 2001).** The low resilience assumption is also undermined by the overwhelming tendency for the protection of specific endangered species to be justified by moral or aesthetic arguments, or a basic appeal to the necessity of conserving biodiversity, rather than by emphasising the actual ES these species provide or might be able to provide humanity. Often the only services that can be promoted in this regard relate to the ‘scientific’ or ‘cultural’ value of conserving a particular species, and the tourism revenue that might be associated with its continued existence. The preservation of such services is of an entirely different order compared with the collapse of human civilization predicted by the more pessimistic environmental authors. The popularity of the low resilience assumption is in part explained by the increased rhetorical force of arguments that highlight connections between the conservation of biodiversity, human survival and economic profit. However, it needs to be acknowledged by those who employ this approach that a number of negative implications are associated with any use of economic arguments to justify the conservation of biodiversity.

### T

#### Broad interpretations cause unmanageable research burdens – that outweighs their education claims

Taylor III, now a JD from William and Mary, 2005

(Jarred, “Searching for a More Perfect Union,” https://docs.google.com/document/d/1ypiOXjRVPWzNxDsFVJ0S1n-QfIGtXzp7Y59meEwd-bE/edit?hl=en\_US)

**It would take** even the most seasoned scholaryears of research **and hundreds of pages to** adequately **analyze** the development of **any presidential power** over the course of American history; **war power is** certainly **no exception**. Every President since George Washington has interpreted the martial prerogatives of his office in different ways, and most have set some sort of precedent for succeeding officeholders. Nevertheless, some of the major changes in executive military power bear highlighting.

#### Topic coherence – if their interpretation is correct, then including ‘offensive cyber operations’ in the topic would be redundant and unnecessary, since cyber command falls under the uniformed services – this means their interpretation isn’t predictable

USSTRATCOM, 13(“U.S. Cyber Command” current as of August, http://www.stratcom.mil/factsheets/Cyber\_Command/)

USCYBERCOM is a sub-unified command subordinate to U. S. Strategic Command (USSTRATCOM). Service elements include: Army Cyber Command (ARCYBER); Air Forces Cyber (AFCYBER); Fleet Cyber Command (FLTCYBERCOM); and Marine Forces Cyber Command (MARFORCYBER). The Command is also standing up dedicated Cyber Mission Teams to accomplish the three elements of our mission.

#### Forces are non-nuclear – the aff restricts an activity, not armed forces

US Defense Report 3 (RESOURCES ALLOCATED TO MISSION AND SUPPORT ACTIVITIES, http://www.iwar.org.uk/military/resources/us-defense-report/2003/14\_Appendix\_Resources\_Allocated.pdf, da 3-26-14) PC

Section 113(l) of Title 10, United States Code, requires the Department of Defense (DoD) to identify resources allocated to mission and support activities in each of the five preceding fiscal years. In response to that requirement, Appendix C provides year-by- year comparisons of:¶ • DoD funding (in constant dollars) allocated to forces and infrastructure (Table C-1).1¶ • DoD manpower allocated to forces and infrastructure (Tables C-2 through C-7). • DoD manpower in management headquarters and headquarters support activities,¶ compared to active-duty military end-strength (Table C-8).¶ Data for the reporting period (FY 1999-2003) have been normalized for definitional or accounting changes.¶ As shown in Table C-1, the Department is allocating about 43% of Total Obligational Authority (TOA) to infrastructure activities in FY 2003, down from about 44% in the preceding year. Tables C-2 through C-8, which address DoD manpower, show continued reductions in manpower for infrastructure activities. This is an important measure of the Department’s progress in improving the efficiency of its support operations. The efficiencies achieved result from initiatives in the Quadrennial Defense Review and Defense Reform Initiatives, including savings from previous base realignment and closure rounds, strategic and competitive sourcing initiatives, and privatization and reengineering efforts.¶ DEFINITIONS¶ In tracking annual resource allocations, this appendix uses mission and infrastructure definitions that support macro-level comparisons of DoD resources such as those presented here. The definitions are based on the 2001 Quadrennial Defense Review, the Future Years Defense Program (FYDP), and a soon-to-be-published Institute for Defense Analyses publication, DoD Force and Infrastructure Categories: A FYDP-Based Conceptual Model of Department of Defense Programs and Resources, prepared for the¶ Office of the Secretary of Defense. The definitions are consistent with the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (P.L. 99-433). This Act requires that combat units, and their organic support, be routinely assigned to the combatant commanders and that the military departments retain the activities that create and sustain those forces. This feature of U.S. law provides the demarcation line between forces (military units assigned to combatant commanders) and infrastructure (activities retained by the military departments). In addition to more precisely distinguishing forces from infrastructure, the force subcategories have been updated to reflect current operational concepts. The infrastructure subcategories likewise have been updated and streamlined.¶ The sections that follow define the force and infrastructure categories addressed in this appendix. Each FYDP program element is assigned to one and only one force or infrastructure category.¶ FORCE CATEGORIES¶ • Expeditionary Forces. Operating forces designed primarily for nonnuclear operations outside the United States. Includes combat units (and their organic support) such as divisions, tactical aircraft squadrons, and aircraft carriers.¶ • Deterrence and Protection Forces. Operating forces designed primarily to deter or defeat direct attacks on the United States and its territories. Also includes those agencies engaged in U.S. international policy activities under the direct supervision of the Office of the Secretary of Defense.¶ • Other Forces. Includes most intelligence, space, and combat-related command, control, and communications programs, such as cryptologic activities, satellite communications, and airborne command posts.

#### USAF = regular components of DOD

Farlex 13 The Free Dictionary By Farlex, “United States Armed Forces,” Accessed 7-23, http://www.thefreedictionary.com/United+States+Armed+Forces

Used to denote collectively only the regular components of the Army, Navy, Air Force, Marine Corps, and Coast Guard. See also Armed Forces of the United States.

#### US Code excludes weapons from the air force

US Code No Date – "10 USC § 8062 - Policy; composition; aircraft authorization" www.law.cornell.edu/uscode/text/10/8062

(a) It is the intent of Congress to provide an Air Force that is capable, in conjunction with the other armed forces, of—¶ (1) preserving the peace and security, and providing for the defense, of the United States, the Commonwealths and possessions, and any areas occupied by the United States;¶ (2) supporting the national policies;¶ (3) implementing the national objectives; and¶ (4) overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.¶ (b) **There is a United States Air Force within the Department of the Air Force.**¶ (c) In general, **the Air Force includes aviation forces both combat and service not otherwise assigned**. It shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations. It is responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war.¶ (d) **The Air Force consists of—**¶ **(1) the Regular Air Force, the Air National Guard of the United States, the Air National Guard while in the service of the United States, and the Air Force Reserve;**¶ **(2) all persons appointed or enlisted in, or conscripted into, the Air Force without component; and**¶ **(3) all Air Force units and other Air Force organizations, with their installations and supporting and auxiliary combat, training, administrative, and logistic elements; and all members of the Air Force, including those not assigned to units; necessary to form the basis for a complete and immediate mobilization for the national defense in the event of a national emergency**.¶ (e) Subject to subsection (f) of this section, chapter 831 of this title, and the strength authorized by law pursuant to section 115 of this title, the authorized strength of the Air Force is 70 Regular Air Force groups and such separate Regular Air Force squadrons, reserve groups, and supporting and auxiliary regular and reserve units as required.¶ (f) **There are authorized for the Air Force 24,000 serviceable aircraft or 225,000 airframe tons of serviceable aircraft, whichever the Secretary of the Air Force considers appropriate to carry out this section. This subsection does not apply to guided missiles.**¶ (g)¶ (1) Effective October 1, 2011, the Secretary of the Air Force shall maintain a total aircraft inventory of strategic airlift aircraft of not less than 301 aircraft. Effective on the date that is 45 days after the date on which the report under section 141(c)(3) of the National Defense Authorization Act for Fiscal Year 2013 is submitted to the congressional defense committees, the Secretary shall maintain a total aircraft inventory of strategic airlift aircraft of not less than 275 aircraft.¶ (2) In this subsection:¶ (A) **The term “strategic airlift aircraft” means an aircraft**—¶ (i) that has a cargo capacity of at least 150,000 pounds; and¶ (ii) that is capable of transporting outsized cargo an unrefueled range of at least 2,400 nautical miles.¶ (B) The term “outsized cargo” means any single item of equipment that exceeds 1,090 inches in length, 117 inches in width, or 105 inches in height.¶ (h)¶ (1) Beginning October 1, 2011, the Secretary of the Air Force may not retire more than six B–1 aircraft.¶ (2) The Secretary shall maintain in a common capability configuration not less than 36 B–1 aircraft as combat-coded aircraft.¶ (3) In this subsection, the term “combat-coded aircraft” means aircraft assigned to meet the primary.

#### Here is evidence for that

Friedman, 99 **–** US District Court Judge (TOM CAMPBELL, et al., Plaintiffs, v. WILLIAM JEFFERSON CLINTON, President of the United States, Defendant. Civil Action No. 99-1072 (PLF) UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA 52 F. Supp. 2d 34; 1999 U.S. Dist. LEXIS 8630 June 8, 1999, Decided, lexis)

Finally, the War Powers Resolution explicitly provides that authority to introduce forces into hostilities shall not be inferred "from any provision of law . . . including any provision contained in any appropriations Act, unless such provision specifically authorizes the introduction of United States Armed Forces into hostilities or into such situations and states that it is intended to constitute specific statutory authorization within the meaning of [the War Powers Resolution]," or "from any treaty . . . unless such [\*\*6] treaty is implemented by legislation specifically authorizing the introduction of United States [\*37] Armed Forces into hostilities or into such situations and stating that it is intended to constitute specific statutory authorization within the meaning of [the War Powers Resolution]." 50 U.S.C. § 1547(a) (emphasis added).

#### Here is a nuclear specific card that there was a specific amendment during the war powers debate, and it was rejected in the WPR – it was intended to exclude nuclear weapons from that particular phrase

Peter Raven-Hansen October 1989; Professor of Law, George Washington University National Law Center “SPECIAL ISSUE: THE UNITED STATES CONSTITUTION IN ITS THIRD CENTURY: FOREIGN AFFAIRS: DISTRIBUTION OF CONSTITUTIONAL AUTHORITY: NUCLEAR WAR POWERS” The American Society of International Law, American Journal of International Law 83 A.J.I.L. 786; Lexis Nexis Academic

The statutory argument against delegation rests on the War Powers Resolution. Section 8(a)(1) of the Resolution provides that authorization for the introduction of U.S. armed forces into hostilities shall not be inferred from any provision of law (whether or not in effect before the date of the enactment of this joint resolution), including any provision contained in any appropriation Act, unless such provision specifically authorizes [such introduction] and states that it is intended to constitute specific statutory authorization within the meaning of this joint resolution. n35 Congress has never specifically delegated nuclear war power to the President. How specific that delegation would have to be to satisfy this provision of the Resolution is unclear. The Court has long applied a canon of liberal statutory construction to legislation affecting the war powers, n36 and it has declined "to require the Congress to employ magical passwords" to satisfy the same kind of rule of construction in the Administrative Procedure Act. n37 It would not make sense, moreover, to require appropriations acts or other legislation predating the Resolution to contain "magical passwords" acknowledging an intent to authorize military force within the meaning of the Resolution. Nor, in light of its legislative history, is it tenable to argue that the Resolution itself cut off all prior delegations of nuclear war power resting on appropriations. During debate on an early version of the war powers legislation, the Senate overwhelmingly defeated an amendment that would have required "the prior, explicit authorization of Congress" for first use of nuclear weapons. n38 Even Senator Eagleton, a vigorous opponent of presidential claims of independent war power, argued and voted against the amendment, explaining that "[t]his bill is not the proper vehicle for restricting the President's use of weapons previously appropriated by Congress to the executive arsenal. . . ." n39

#### The soldier who presses the button to launch the nuke isn’t in hostilities --- NDAA proves

Healey & Wilson 13 – Jason Healey is the director of the Cyber Statecraft Initiative at the Atlantic Council. AND\*\*\* A.J. Wilson is a visiting fellow at the

Atlantic Council, 2013, “Cyber Conflict and the War Powers

Resolution: Congressional Oversight

of Hostilities in the Fifth Domain,” jnslp.com/wp-content/uploads/2010/08/11\_Dycus.pdf‎

War Powers and Offensive Cyber Operations¶ **In a report submitted to Congress in November 2011, pursuant to a mandate in section 934 of the National Defense Authorization Act for fiscal year 2011, the Pentagon, quoting the WPR’s operative language, stated that:**8 **Cyber operations might not include the introduction of armed forces personnel into the area of hostilities.** Cyber operations may, however, be a component of larger operations that could trigger notification and reporting in accordance with the War Powers Resolution. The Department will continue to assess each of its actions in cyberspace to determine when the requirements of the War Powers Resolution may apply to those actions. **With the focus on “personnel,” this passage makes clear that** the WPR will typically not apply to exclusively cyber conflicts**. With cyber warriors executing such operations from** centers inside the U**nited** S**tates**, such as the CYBERCOM facility at Fort Meade, Maryland, at a significant distance from the systems they are attacking and well out of harm’s way. Thus, there is no relevant “introduction” of armed forces. Without such an “introduction,” even the reporting requirements are not triggered. ¶ **The view that there can be no introduction of forces into cyberspace follows naturally from the administration’s argument that the purpose of the WPR is simply to keep US service personnel out of harm’s way unless authorized by Congress. If devastating** unmanned missions do not fall under the scopeof the resolution, it is reasonable to argue that a conflict conducted in cyberspace does not either.¶ Arguing the point, an administration lawyer might ask, rhetorically, what exactly do cyber operations “introduce”? On a literal, physical level, electrical currents are redirected; but nothing is physically added to—nor, for that matter, taken away from—the hostile system. To detect any “introduction” at all, we must descend into metaphor; and even there, **all that is really introduced is lines of code, packets of data: in other words, information. At most, this information constitutes the cyber equivalent of a weapon. “Armed forces,” by contrast, consist traditionally of weapons plus the flesh and blood personnel who wield them. And that brings us back to our cyber-soldier who, without leaving leafy Maryland, can choreograph electrons in Chongqing**. Finally, even if armed forces are being introduced, there are no relevant “hostilities” for the same reason: no boots on the ground, no active exchanges of fire, and no body bags.

## 2NR

### Warming

#### **C3 crops matter more than C4 crops.**

Ziska, Research Plant Physiologist at the USDA, 2k

[Lewis, “The impact of elevated CO2 on yield loss from a C3 and C4 weed in field-grown soybean”, Global Change Biology, 2000, Vol. 6, RSR]

The ways in which different photosynthetic pathways respond to enhanced [CO2] is particularly relevant to crop/weed interactions in agricultural systems. This is because many of the most `troublesome' weedy species (i.e. those which are inadequately controlled) are C4 plants, while most major crops are C3 plants (see Patterson 1995b). For example, among the 18 most troublesome weeds in the world (Holm et al. 1977), 14 are C4, whereas of the 86 plant species which supply most of the world's food, only ®ve are C4 species (Patterson 1995a). Because of this variable distribution of the C4 and C3 pathway between weed and crop species, many experiments and most reviews concerned with weeds and rising [CO2] have focused on C3 crop/C4 weed interactions (e.g. Patterson et al. 1984; Patterson 1986, 1993; Patterson & Flint 1990; 1995a; Alberto et al. 1996; Froud-Williams 1996). Data obtained from these greenhouse and growth chamber experiments are consistent with the photosynthetic pathways i.e. that higher [CO2] favours the vegetative growth of C3 over C4 species.

#### Several studies show that CO2 improves crop resistance to weeds

NIPCC 2009 (Nongovernmental International Panel on Climate Change, “Climate Change Reconsidered,” June, http://www.nipccreport.org/reports/2009/pdf/CCR2009FullReport.pdf)

These **several studies suggest that, contrary to what is claimed by the IPCC, the ongoing rise in the air’s CO2 content will not favor the growth of weedy species over** that of **crops** and native plants. In fact, **it may provide non-weeds greater protection against weed-induced decreases in their productivity and growth. Future increases in the air’s CO2 content may actually increase the competitiveness of non-weeds over weeds**.

### CP

#### Actors empirically intervene to solve – their author’s conclusion

**Kerr Center 1 –** for Sustainable Agriculture

[http://www.kerrcenter.com/HTML/green\_excerpt1.html]pc

It wasn't indestructible or immutable, then or now. As there are today, back then there were those who ignored the problems in agriculture as well as those who tried to address them. Conservationist and president Theodore Roosevelt recognized the danger and pronounced in his down-to-earth manner: "When the soil is gone, men must go; and the process does not take long." In the U.S. government’s Bureau of Soils, one scientist in particular, Hugh Howard Bennett, spoke out and wrote on the issue and began to study rates of erosion in test plots, including one in Oklahoma. But it took a dramatic event like the Dust Bowl-- when the soil loss was so easy to see-- to get people to really pay attention. Soil erosion-- the removal of topsoil by wind or water-- is the most dramatic way that topsoil can be degraded. During the terrible drought of the 30's in the Great Plains, wind picked up soil from withered fields and blew it literally across the country. The severity of the situation caused the U.S. Congress in 1935 to begin considering a bill to create the Soil Conservation Service (SCS), an agency of the federal government that would address the nation’s soil erosion problems. Hugh Bennett was scheduled to testify in favor of the plan on an April morning. Usually concise and to the point, he instead gave detailed information about erosion problems in state after state. As he warmed to his subject, the sky slowly darkened with dust. Bennett, of course, knew what was coming. It was a dust storm, carrying topsoil from prairies 2000 miles west. While the dust obscured the great white buildings of official Washington, the Congress was persuaded to pass a bill establishing the SCS, the first soil conservation act by any government in history. The Soil Conservation Service moved quickly to stop or reduce erosion. The government bought some erodible farmland and paid farmers not to farm other marginal acres. Billions of trees were set out in rows at the edges of fields--shelter belts-- to break the wind. Blowing fields were seeded to grass. Within two years the SCS was working with 50,000 farmers. The work of the SCS, now renamed the Natural Resources Conservation Service (NRCS) has continued to the present day, through a variety of programs. In 1974, conservation practices had reduced soil erosion on the Great Plains by 221 million tons annually.