# 1AC

### 1AC – Heg Advantage

#### CONTENTION 1: HEGEMONY

**Plan solves grid collapse---SMRs make bases resilient and deters attack**

**Andres and Breetz 11** Richard B, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University and Hanna L, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, February, "Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications", www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf

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

**Grid failure wrecks US critical mission operations**

**Stockton 11** Paul, assistant secretary of defense for Homeland Defense and Americas’ Security Affairs, “Ten Years After 9/11: Challenges for the Decade to Come”, <http://www.hsaj.org/?fullarticle=7.2.11>

The cyber threat to the DIB is only part of a much larger challenge to DoD. Potential adversaries are seeking asymmetric means to cripple our force projection, warfighting, and sustainment capabilities, by targeting the critical civilian and defense supporting assets (within the United States and abroad) on which our forces depend. This challenge is not limited to man-made threats; DoD must also execute its mission-essential functions in the face of disruptions caused by naturally occurring hazards.20 Threats and hazards to DoD mission execution include incidents such as earthquakes, naturally occurring pandemics, solar weather events, and industrial accidents, as well as kinetic or virtual attacks by state or non-state actors. Threats can also emanate from insiders with ties to foreign counterintelligence organizations, homegrown terrorists, or individuals with a malicious agenda. From a DoD perspective, this global convergence of unprecedented threats and hazards, and vulnerabilities and consequences, is a particularly problematic reality of the post-Cold War world. Successfully deploying and sustaining our military forces are increasingly a function of interdependent supply chains and privately owned infrastructure within the United States and abroad, including transportation networks, cyber systems, commercial corridors, communications pathways, and energy grids. This infrastructure largely falls outside DoD direct control. Adversary actions to destroy, disrupt, or manipulate this highly vulnerable homeland- and foreign-based infrastructure may be relatively easy to achieve and extremely tough to counter. Attacking such “soft,” diffuse infrastructure systems could significantly affect our military forces globally – potentially blinding them, neutering their command and control, degrading their mobility, and isolating them from their principal sources of logistics support. The Defense Critical Infrastructure Program (DCIP) under Mission Assurance seeks to improve execution of DoD assigned missions to make them more resilient. This is accomplished through the assessment of the supporting commercial infrastructure relied upon by key nodes during execution. By building resilience into the system and ensuring this support is well maintained, DoD aims to ensure it can "take a punch as well as deliver one."21 It also provides the department the means to prioritize investments across all DoD components and assigned missions to the most critical issues faced by the department through the use of risk decision packages (RDP).22 The commercial power supply on which DoD depends exemplifies both the novel challenges we face and the great progress we are making with other federal agencies and the private sector. Today’s commercial electric power grid has a great deal of resilience against the sort of disruptive events that have traditionally been factored into the grid’s design. Yet, the grid will increasingly confront threats beyond that traditional design basis. This complex risk environment includes: disruptive or deliberate attacks, either physical or cyber in nature; severe natural hazards such as geomagnetic storms and natural disasters with cascading regional and national impacts (as in NLE 11); long supply chain lead times for key replacement electric power equipment; transition to automated control systems and other smart grid technologies without robust security; and more frequent interruptions in fuel supplies to electricity-generating plants. These risks are magnified by globalization, urbanization, and the highly interconnected nature of people, economies, information, and infrastructure systems. The department is highly dependent on commercial power grids and energy sources. As the largest consumer of energy in the United States, DoD is dependent on commercial electricity sources outside its ownership and control for secure, uninterrupted power to support critical missions. In fact, approximately 99 percent of the electricity consumed by DoD facilities originates offsite, while approximately 85 percent of critical electricity infrastructure itself is commercially owned. This situation only underscores the importance of our partnership with DHS and its work to protect the nation’s critical infrastructure – a mission that serves not only the national defense but also the larger national purpose of sustaining our economic health and competitiveness. DoD has traditionally assumed that the commercial grid will be subject only to infrequent, weather-related, and short-term disruptions, and that available backup power is sufficient to meet critical mission needs. As noted in the February 2008 Report of the Defense Science Board Task Force on DoD Energy Strategy, “In most cases, neither the grid nor on-base backup power provides sufficient reliability to ensure continuity of critical national priority functions and oversight of strategic missions in the face of a long term (several months) outage.”23 Similarly, a 2009 GAO Report on Actions Needed to Improve the Identification and Management of Electrical Power Risks and Vulnerabilities to DoD Critical Assets stated that DoD mission-critical assets rely primarily on commercial electric power and are vulnerable to disruptions in electric power supplies.24 Moreover, these vulnerabilities may cascade into other critical infrastructure that uses the grid – communications, water, transportation, and pipelines – that, in turn, is needed for the normal operation of the grid, as well as its quick recovery in emergency situations. To remedy this situation, the Defense Science Board (DSB) Task Force recommended that DoD take a broad-based approach, including a focused analysis of critical functions and supporting assets, a more realistic assessment of electricity outage cause and duration, and an integrated approach to risk management that includes greater efficiency, renewable resources, distributed generation, and increased reliability. DoD Mission Assurance is designed to carry forward the DSB recommendations. Yet, for a variety of reasons – technical, financial, regulatory, and legal – DoD has limited ability to manage electrical power demand and supply on its installations. As noted above, DHS is the lead agency for critical infrastructure protection by law and pursuant to Homeland Security Presidential Directive 7. The Department of Energy (DOE) is the lead agency on energy matters. And within DoD, energy and energy security roles and responsibilities are distributed and shared, with different entities managing security against physical, nuclear, and cyber threats; cost and regulatory compliance; and the response to natural disasters. And of course, production and delivery of electric power to most DoD installations are controlled by commercial entities that are regulated by state and local utility commissions. The resulting paradox: DoD is dependent on a commercial power system over which it does not – and never will – exercise control.

#### SMRs resolve convoy risks---islanding and reduced fuel needs

Bourget 11 Remy, worked at Center for Advanced Defense Studies, “Small Modular Reactors: Opportunity for Global Leadership and Innovation”, 7/1, Google Cache

Small Modular Reactors offer unambiguous national security advantages. Unlike other alternative energy sources such as solar and wind power, nuclear reactors can be relied on for energy 24/7, making them a very stable source of energy. The fragility of the U.S. electric grid was underscored in 2003 by a blackout which swept the north-east United States, affecting 45 million Americans. The electric grid is especially vulnerable to cyber-attack, though some experts claim it has already been penetrated and “prepared in advance” for cyber war. Putting greater military reliance on nuclear energy mitigates this risk. Small reactors would help to “island” domestic bases, making them invulnerable to such attacks. Another security advantage is independence from oil. Currently, cutting off the oil supply would cripple US defenses. Reactors deployed to Forward Operating Bases would reduce the need for fuel convoys, saving American lives and eliminating the possibility of a crisis on the scale of Pakistan's 2008 closure of the Khyber Pass. Proliferation is another important security concern, and there are two opposing views in the SMR debate. Some claim that because thorium is not a fissile material and there is only low-grade uranium used to start the fission reaction, the Liquid Fluoride Thorium Reactor model will avoid many of the security and proliferation concerns associated with traditional reactors. Ninety percent enriched uranium is needed for weapons, but only 20% (at most) would be used in the thorium reactions. Other scientists dispute this claim, saying that it is relatively easy to enrich uranium from 20% to 90%, which is weapons-grade. The environmental aspects of SMRs are also hotly debated. The smaller size of the modular reactors means they have smaller “radiological footprints” - a strong environmental case for the use of SMRs. However, opponents argue that more small reactors will produce more hazardous waste because they use more fuel per unit of energy produced than traditional reactors. They also argue that the radioactivity of thorium is 200 times that of the same mass of uranium. This point is still in dispute because other scientific models indicate that thorium reactors are more efficient and could produce 10,000 times less waste than a pressurized water reactor. This would help military bases achieve their goal of reducing carbon emissions 28% by 2020. Their small size also allows them to be buried underground to contain potential leaks. Additionally, Molten Salt Reactors that use thorium have a natural safety mechanism which does not require a cooling system run by vulnerable computers. This makes disastrous meltdowns like Fukushima, Three Mile Island and Chernobyl next to impossible. Naval vessels have been operating similar small reactors for decades without a single disaster. Proponents of SMRs argue that they overcome many of the financial drawbacks faced by traditional reactors. The overhead costs are lower, requiring only several hundred million compared to the $10 billion required for a traditional twin-core complex. However, opponents dispute this calculation, saying that the material cost per kilowatt of a reactor goes up as the size goes down, making the same amount of energy produced by numerous small reactors ultimately more expensive than one big one. If the reactors turn out to be economical, it could save the DoD billions in electric bills. The air conditioning bill alone for Iraq and Afghanistan is $20 billion each year. Another benefit is construction time. They take only three years to become operational, instead of five to six. It would also take less time to repair the reactors if they were damaged during an attack. Having a decentralized system of modular reactors makes it more difficult for enemies to achieve a decisive hit that will cripple a base's energy supply. Some argue that as a highly advanced industrialized nation, the US would be one of the few countries with the capabilities to manufacture the reactors, stimulating job growth. Others say that contracts would inevitably be given to another country like China that competes with lower wages. Congress must first decide what the nation's energy priorities are, then weigh the costs and benefits of developing Small Modular Reactors. This process will involve defining the precise scientific aspects of SMRs more clearly than has been done in the past. Ultimately, DOD and Congress must assess the question of whether the security benefits of SMRs are worth the potential costs. The United States has a history of bold innovation, but now the Chinese are trailblazing the development of thorium-based reactors, which could have major implications on great-power politics. The US still has the chance to lead the way in the next generation of nuclear energy, but recent budgetary decisions suggest a missed opportunity.

#### Convoy and fuel dependency risks collapsing mission effectiveness

Voth 12 Jeffrey M, President of Herren Associates leading a team of consultants advising the federal government on issues of national security, energy and environment, health care and critical information technology infrastructure, George Washing University Homeland Security Policy Institute, “In Defense of Energy – A Call to Action”, April 11, <http://securitydebrief.com/2012/04/11/in-defense-of-energy-a-call-to-action/>

Last month, the Pentagon released its widely anticipated roadmap to transform operational energy security. As published in a World Politics Review briefing, energy security has become a strategic as well as an operational imperative for U.S. national security. As tensions continue to escalate with Iran in the Strait of Hormuz, it has become clear that the U.S. military urgently requires new approaches and innovative technologies to improve fuel efficiency, increase endurance, enhance operational flexibility and support a forward presence for allied forces while reducing the vulnerability inherent in a long supply-line tether. Assured access to reliable and sustainable supplies of energy is central to the military’s ability to meet operational requirements globally, whether keeping the seas safe of pirates operating off the coast of Africa, providing humanitarian assistance in the wake of natural disasters in the Pacific or supporting counterterrorism missions in the Middle East. From both a strategic and an operational perspective, the call to action is clear. Rapid employment of energy-efficient technologies and smarter systems will be required to transform the military’s energy-security posture while meeting the increasing electric-power demands required for enhanced combat capability. As recently outlined by Chairman of the Joint Chiefs of Staff Gen. Martin Dempsey, “Without improving our energy security, we are not merely standing still as a military or as a nation, we are falling behind.”

**Loss of mission effectiveness results in nuclear war in every hotspot---specifically Korea**

**Kagan and O’Hanlon 7** Frederick, resident scholar at AEI and Michael, senior fellow in foreign policy at Brookings, “The Case for Larger Ground Forces”, April 2007, http://www.aei.org/files/2007/04/24/20070424\_Kagan20070424.pdf

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

#### Korean war causes extinction

Chol 11 Kim Myong Chol is author of a number of books and papers in Korean, Japanese and English on North Korea, including Kim Jong-il's Strategy for Reunification. He has a PhD from the Democratic People's Republic of Korea's Academy of Social Sciences "Dangerous games" Aug 20 www.atimes.com/atimes/Korea/MH20Dg01.html

The divided and heavily armed Korean Peninsula remains the most inflammable global flashpoint, with any conflict sparked there likely to become a full-blown thermonuclear war involving the world's fourth-most powerful nuclear weapons state and its most powerful. ¶ Any incident in Korea by design, accident, or miscalculation could erupt into a devastating DPRK-US war, with the Metropolitan US serving as a main war theater. ¶ Rodong Sinmun warned on August 16: "The Korean Peninsula is faced with the worst crisis ever. An all-out war can be triggered by any accident." ¶ Recent incidents illustrate the real danger of miscalculation leading to a total shooting war, given the volatile situation on the Land of Morning Calm. ¶ 1. The most recent case in point is the August 10 shelling of North Korea by the South. Frightened South Korea marines on Yeonpyeong Island mistook three noises from a North Korean construction site across the narrow channel for artillery rounds, taking an hour to respond with three to five artillery rounds. ¶ The episode serves as a potent reminder to the world that the slightest incident can lead to war. A reportedly malfunctioning firefinder counter-artillery radar system seems to partly account for the panicky South Korean reaction. ¶ South Korean conservative newspaper the Joong Ang Daily reported August 17: ¶ "A military source said that radar installed to detect hostile fire did not work last week when North Korea fired five shots toward the Northern Limit Line (NLL), the disputed maritime border, on Aug 10. ¶ "'We must confirm the location of the source of the firing through the ARTHUR (Artillery Hunting Radar) and HALO (hostile artillery location) systems, but ARTHUR failed to operate, resulting in a failure to determine the source of the fire,' said the source." ¶ BBC reported on November 25 last year the aggressive nature of troops on the South Korea-held five islands in North Korean waters. ¶ "Seen in this sense, they (five islands including Yeonpyeong Island) could provide staging bases for flanking amphibious attacks into North Korea if South Korea ever takes the offensive." ¶ 2. An almost catastrophic incident took place at dawn on June 17 near Inchon. South Korean marines stationed on Gyodong Island near Inchon Airport fired rifles at a civilian South Korean jetliner Airbus A320 with 119 people aboard as it was descending to land, after mistaking it for a North Korean military aircraft. ¶ The Asiana Airlines flight was carrying 119 people from the Chinese city of Chengdu. ¶ About 600 civilian aircraft fly near the island every day, including those flying across the NLL, but they face a perennial risk of being misidentified as a hostile warplane. ¶ It is nothing short of a miracle that the Airbus A320 was not hit and nobody harmed. ¶ 3. On March 26, 2010, the high-tech South Korean corvette Sokcho fired 130 rounds at flocks of birds, mistaking them for a hostile flying object. The innocent birds looked like a North Korean warplane just at a time when an alleged North Korean midget submarine had managed to escape with impunity after torpedoing the hapless Cheonan deep inside security-tight South Korean waters. ¶ The South Korean military's habit of firing at the wrong target increases the risk of an incident running out of control. ¶ CNN aired a story December 16, headlined: "General: South Korea Drill Could Cause Chain Reaction." ¶ F/A-18 pilot-turned Marine Corp General James Cartwright told the press in the Pentagon, "What we worry about, obviously, is if that it [the drill] is misunderstood or if it's taken advantage of as an opportunity. ¶ "If North Korea were to react to that in a negative way and fire back at those firing positions on the islands, that would start potentially a chain reaction of firing and counter-firing. ¶ "What you don't want to have happen out of that is ... for us to lose control of the escalation. That's the concern." ¶ Agence France-Presse on December 11 quoted former chief of US intelligence retired admiral Dennis Blair as saying that South Korea "will be taking military action against North Korea". ¶ New Korean war differs from other wars¶ Obama and the Americans seem to be incapable of realizing that North Korea is the wrong enemy, much less that a new Korean War would be fundamentally different from all other wars including the two world wars. ¶ Two things will distinguish a likely American Conflict or DPRK-US War from previous wars. ¶ The first essential difference is that the US mainland will become the main theater of war for the first time since the US Civil War (1861-1865), giving the Americans an opportunity to know what it is like to have war fought on their own land, not on faraway soil. ¶ The US previously prospered by waging aggressive wars on other countries. Thus far, the Americans could afford to feel safe and comfortable while watching TV footage of war scenes from Afghanistan, Iraq, Pakistan and Libya as if they were fires raging across the river. ¶ The utmost collateral damage has been that some American veterans were killed or returned home as amputees, with post traumatic stress disorder, only to be left unemployed and homeless. ¶ However, this will no longer be the case. ¶ At long last, it is Americans' turn to have see their homeland ravaged.¶ An young North Korea in 1950-53 was unable to carry the war all the way across the Pacific Ocean to strike back, but the present-day North Korea stands out as a fortress nuclear weapons state that can withstand massive American ICBM (Intercontinental ballistic missile) attacks and launch direct retaliatory transpacific strikes on the Metropolitan USA. ¶ The second essential difference is that the next war in Korea, that is, the American Conflict or the DPRK-USA War would be the first actual full-fledged nuclear, thermonuclear war that mankind has ever seen, in no way similar to the type of nuclear warfare described in science fiction novels or films. ¶ North Korea is unique among the nuclear powers in two respects: One is that the Far Eastern country, founded by legendary peerless hero Kim Il-sung, is the first country to engage and badly maul the world's only superpower in three years of modern warfare when it was most powerful, after vanquishing Nazi Germany and Imperial Japan. ¶ The other is that North Korea is fully ready to go the length of fighting [hu]mankind's first and last nuclear exchange with the US. ¶ The DPRK led by two Kim Il-sungs - the ever-victorious iron-willed brilliant commander Kim Jong-il and his heir designate Kim Jong-eun - is different from Russia under Nikita Khrushchev which backed down in the 1962 Cuban missile crisis. ¶ Khrushchev and his company never fought the Americans in war. As a rule, most countries are afraid to engage the Americans. As the case is with them, North Korea is the last to favor war with the Americans. ¶ However, it is no exaggeration to say that the two North Korean leaders are just one click away from ordering a retaliatory nuclear strike on the US military forces in Guam, Hawaii and metropolitan centers on the US mainland. ¶ On behalf of Supreme Leader Kim Jong-il, Kim Jong-eun will fire highly destructive weapons of like Americans have never heard of or imagined to evaporate the US. ¶ The North Koreans are too proud of being descendents of the ancient civilizations of Koguryo 2,000 years ago and Dankun Korea 5,000 years ago, to leave the Land of morning Calm divided forever with the southern half under the control of the trigger-happy, predatory US. The North Koreans prefer to fight and die in honor rather than kowtow to the arrogant Americans. ¶ At the expense of comforts of a better life, North Koreans have devoted more than half a century to preparing for nuclear war with the Americans. All available resources have been used to convert the whole country into a fortress, including arming the entire population and indigenously turning out all types of nuclear thermonuclear weapons, and developing long-range delivery capabilities and digital warfare assets. ¶ An apocalyptic Day After Tommorow-like scenario will unfold throughout the US, with the skyscrapers of major cities consumed in a sea of thermonuclear conflagration. The nuclear exchange will begin with retaliatory North Korean ICBMs detonating hydrogen bombs in outer space far above the US mainland, leaving most of the country powerless. ¶ New York, Washington, Chicago, San Francisco and major cities should be torched by ICBMs streaking from North Korea with scores of nuclear power stations exploding, each spewing as much radioactive fallout as 150-180 H-bombs.

#### Incentive theory is effective --- Obama’s already adopted it for tailored deterrence

JEFFREY S. LANTIS 9, Associate Professor in the Department of Political Science at The College of Wooster, “Strategic Culture and Tailored Deterrence: Bridging the Gap between Theory and Practice”, Contemporary Security Policy, Vol.30, No.3 (December 2009), pp.467-485, http://www.contemporarysecuritypolicy.org/assets/CSP-30-3-Lantis.pdf

Conclusion¶ This article has identified a set of scope conditions that may provide stronger links between academic research on strategic culture and doctrinal development. Specifically, it contends that strong national cultural identities, dominant leaders, and powerful military organizations are important players in strategic development as well as important receptors for strategic targeting. And while some doctrinal statements on tailored deterrence were formulated during the Bush administration, cultural dimensions continue to be relevant for progressive models of deterrence in the Obama administration and beyond.¶ Broadly speaking, this study has several implications for policy-making and academic research. First, while the lack of cultural understanding may not be sufficient to cause deterrence failures, defence planners should more openly embrace the theme of variation in instruments and incentive structures associated with deterrence of specific threats**.** This is not to say that government strategists fail to recognize variation in national interest calculations. Indeed, the actual record of American behaviour in the past four years since the appearance of the concept suggests that both Bush administration and Obama administration strategists are mindful of the need for gradation in deterrence policies. However, there remains a gap between basic doctrinal statements and the kinds of contemporary academic research initiatives that are underway. The extent to which the government reaches out to academics for assistance in refining scope conditions and enhancing cross-national comparative studies of strategic culture will play a role in determining the success of tailoring deterrence in the modern era.¶ Second, acceptance of this need for variation in deterrence strategies should, whenever possible, incorporate more sophisticated levels of attention to institutions, values, and culture in target countries. As one senior State Department official in the Bush administration, Kerry Kartchner, argued, '[strategic culture offers the promise of providing insight into motivations and intentions that are not readily explained by-other frameworks, and that may help make sense of forces we might otherwise overlook, misunderstand, or misinterpret'. 6 Organizational culture can be especially significant in shaping security policy. Jouejati argues that Syria's defeats in aerial combat in the Arab-Israeli wars prompted key military and government officials to embark on a ballistic missile and chemical weapons programme as a means of deterrent.87 Framing adversary conceptions of material concerns in a cultural context also may be helpful. Threats communicated by President George H.W. Bush directly to Saddam Hussein to deter the use of chemical and biological weapons in the first Persian Gulf War seem to have effectively conveyed the sense of physical and civilizational/cultural security at risk. Finally, these links are of real interest to policy-makers. A more nuanced approach to tailored deterrence may help overcome what a recent Defense Science Board study called 'problems of strategic communication'.¶ Third, more cross-national comparisons are needed for systematic attention to cultural determinants of strategy. Studies of strategic culture often apply the theory to a single case or make general comparisons with other like-minded countries. More rigorous cross-national comparison can promote cumulative knowledge in the field. As Stein argues, different strategic cultures may mediate the effectiveness of types of deterrence messages. It is imperative that we set about a more systematic approach to understanding these effects. Tailoring deterrence policies to address the ideational foundations of material national security interests seems an especially promising theme of investigation.

**Hegemony prevents extinction**

**Barnett 11** (Thomas P.M., Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat., worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense, “The New Rules: Leadership Fatigue Puts U.S., and Globalization, at Crossroads,” March 7 <http://www.worldpoliticsreview.com/articles/8099/the-new-rules-leadership-fatigue-puts-u-s-and-globalization-at-crossroads>)

Events in Libya are a further reminder for Americans that we **stand at a crossroads in our continuing evolution as the world's sole full-service superpower**. Unfortunately, we are increasingly seeking change without cost, and shirking from risk because we are tired of the responsibility. We don't know who we are anymore, and our president is a big part of that problem. Instead of leading us, he explains to us. Barack Obama would have us believe that he is practicing strategic patience. But many experts and ordinary citizens alike have concluded that he is actually beset by strategic incoherence -- in effect, a man overmatched by the job. It is worth first examining the larger picture: We live in a time of arguably **the greatest structural change in the global order yet endured**, with this historical moment's most amazing feature being its relative and absolute **lack of mass violence**. That is something to consider when Americans contemplate military intervention in Libya, because if we do take the step to prevent larger-scale killing by engaging in some killing of our own, we will not be adding to some fantastically imagined global death count stemming from the ongoing "megalomania" and "evil" of American "empire." We'll be engaging in the same sort of system-administering activity that has marked our stunningly successful stewardship of global order since World War II. Let me be more blunt: As the **guardian of globalization**, the U.S. military has been the **greatest force for peace the world has ever known**. Had America been removed from the global dynamics that governed the 20th century, the **mass murder never would have ended**. Indeed, it's entirely conceivable **there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation.**  But the world did not keep sliding down that **path of perpetual war**. Instead, America stepped up and changed everything by **ushering in our now-perpetual great-power peace**. We introduced the **international liberal trade order known as globalization** and played loyal Leviathan over its spread. What resulted was the collapse of empires, **an explosion of democracy**, the **persistent spread of human rights**, the liberation of women, **the doubling of life expectancy**, a roughly **10-fold increase in adjusted global GDP** and a **profound and persistent reduction in** battle deaths from **state-based conflicts.** That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as the Facebook revolutions erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these calculations suggest a 90 percent absolute drop and a 99 percent relative drop in deaths due to war. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both encourage and accommodate. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms, deeply embedded in the geometry to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

#### Status seeking is inevitable --- heg is key to solve war

Wohlforth 9 – professor of government at Dartmouth (William, “Unipolarity, Status Competition, and Great Power War,” World Affairs, January, project muse)

The upshot is a near scholarly consensus that unpolarity’s consequences for great power conflict are indeterminate and that a power shift resulting in a return to bipolarity or multipolarity will not raise the specter of great power war. This article questions the consensus on two counts. First, I show that it depends crucially on a dubious assumption about human motivation. Prominent theories of war are based on the assumption that people are mainly motivated by the instrumental pursuit of tangible ends such as physical security and material prosperity. This is why such theories seem irrelevant to interactions among great powers in an international environment that diminishes the utility of war for the pursuit of such ends. Yet we know that people are motivated by a great many noninstrumental motives, not least by concerns regarding their social status. 3 As John Harsanyi noted, “Apart from economic payoffs, social status (social rank) seems to be the most important incentive and motivating force of social behavior.”4 This proposition rests on much firmer scientific ground now than when Harsanyi expressed it a generation ago, as cumulating research shows that humans appear to be hardwired for sensitivity to status and that relative standing is a powerful and independent motivator of behavior.5 [End Page 29] Second, I question the dominant view that status quo evaluations are relatively independent of the distribution of capabilities. If the status of states depends in some measure on their relative capabilities, and if states derive utility from status, then different distributions of capabilities may affect levels of satisfaction, just as different income distributions may affect levels of status competition in domestic settings. 6 Building on research in psychology and sociology, I argue that even capabilities distributions among major powers foster ambiguous status hierarchies, which generate more dissatisfaction and clashes over the status quo. And the more stratified the distribution of capabilities, the less likely such status competition is. Unipolarity thus generates far fewer incentives than either bipolarity or multipolarity for direct great power positional competition over status. Elites in the other major powers continue to prefer higher status, but in a unipolar system they face comparatively weak incentives to translate that preference into costly action. And the absence of such incentives matters because social status is a positional good—something whose value depends on how much one has in relation to others.7 “If everyone has high status,” Randall Schweller notes, “no one does.”8 While one actor might increase its status, all cannot simultaneously do so. High status is thus inherently scarce, and competitions for status tend to be zero sum.9

#### We control empirics

Wohlforth 8—Daniel Webster Professor of Government, Dartmouth. BA in IR, MA in IR and MPhil and PhD in pol sci, Yale (William, Unipolarity, Status Competition, and Great Power War, October 2008, World Politics Vol. 61, Iss. 1; pg. 28, 31 pgs, Proquest)

Despite increasingly compelling findings concerning the importance of status seeking in human behavior, research on its connection to war waned some three decades ago.38 Yet empirical studies of the relationship between both systemic and dyadic capabilities distributions and war have continued to cumulate. If the relationships implied by the status theory run afoul of well-established patterns or general historical findings, then there is little reason to continue investigating them. **The clearest empirical implication** of the theory **is that** status **competition is unlikely to cause great power military conflict in unipolar systems**. If status competition is an important contributory cause of great power war, then, ceteris paribus, unipolar systems should be markedly less war-prone than bipolar or multipolar systems. And this appears to be the case. As Daniel Geller notes in a review of the empirical literature: "**The only polar structure that appears to influence conflict probability is unipolarity**."39 In addition, a larger number of studies at the dyadic level support the related expectation that narrow capabilities gaps and ambiguous or unstable capabilities hierarchies increase the probability of war.40 These studies are based entirely on post-sixteenth-century European history, and most are limited to the post-1815 period covered by the standard data sets. Though the systems coded as unipolar, near-unipolar, and hegemonic are all marked by a high concentration of capabilities in a single state, these studies operationalize unipolarity in a variety of ways, often very differently from the definition adopted here. An ongoing collaborative project looking at ancient interstate systems over the course of two thousand years suggests that historical systems that come closest to the definition of unipolarity used here exhibit precisely the behavioral properties implied by the theory. 41 As David C. Kang's research shows, the East Asian system between 1300 and 1900 was an unusually stratified unipolar structure, with an economic and militarily dominant China interacting with a small number of geographically proximate, clearly weaker East Asian states.42 Status politics existed, but actors were channeled by elaborate cultural understandings and interstate practices into clearly recognized ranks. Warfare was exceedingly rare, and the major outbreaks occurred precisely when the theory would predict: when China's capabilities waned, reducing the clarity of the underlying material hierarchy and increasing status dissonance for lesser powers. Much more research is needed, but initial exploration of other arguably unipolar systems-for example, Rome, Assyria, the Amarna system-appears consistent with the hypothesis.43 Status Competition and Causal Mechanisms Both theory and evidence demonstrate convincingly that competition for status is a driver of human behavior, and social identity theory and related literatures suggest the conditions under which it might come to the fore in great power relations. Both the systemic and dyadic findings presented in large-N studies are broadly consistent with the theory, but they are also consistent with power transition and other rationalist theories of hegemonic war.

**Effective deterrence controls escalation and is the best predictor for war**

**Sharp 8** – Assoc. Dep. General Counsel for Int’l Affairs @ DOD & Adjunct Prof. of Law @ Georgetown, Former Dir. Of Research at the Law Library of Congress, Democracy and Deterrence: Foundations for an Enduring World Peace, Air University Press, Maxwell Air Force Base, May, 2008, Dr. Walter Gary Sharp Sr, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA493031&Location=U2&doc=GetTRDoc.pdf

Moore concludes in Solving the War Puzzle that war arises from the interaction of all three Waltzian levels (individual, state or national, and international), whereas some proponents of the democratic peace principle focus only on government structures to explain war and some traditional realists focus only on the international system. Both realists and democratic peace proponents tend to emphasize institutions and systems, whereas Moore reminds us that people—leaders—decide to pursue war: Wars are not simply accidents. Nor, contrary to our ordinary language, are they made by nations. Wars are made by people; more specifically they are decided on by the leaders of nation states—and other nonnational groups in the case of terrorism—who make the decision to commit aggression or otherwise use the military instrument. These leaders make that decision based on the totality of incentives affecting them at the time of the decision. . . . . . . [Incentive theory] tells us that we simply have a **better chance of predicting war**, and fashioning **forms of intervention to control it**, if we focus squarely on the effect of variables from all levels of analysis in **generating incentives affecting the actual decisions** **made by those with the power to decide on war**.42 Incentive theory focuses on the **individual decisions that lead to war** and explains the synergistic relationship between the absence of effective deterrence and the absence of democracy. Together these three factors—the decisions of leaders made without the restraining effects of deterrence and democracy— are the cause of war: War is not strictly caused by an absence of democracy or effective deterrence or both together. Rather **war is caused by the human leadership decision to employ the military instrument**. The absence of democracy, the **absence of effective deterrence**, and most importantly, the synergy of an absence of both are **conditions** or factors **that predispose to war**. An absence of democracy likely predisposes by [its] effect on leadership and leadership incentives, and an absence of effective deterrence likely predisposes by its effect on incentives from factors other than the individual or governmental levels of analysis. To understand the cause of war is **to understand the human decision for war**; that is, major war and democide . . . are the consequence of **individual decisions responding to a totality of incentives**.43

#### Any alternative locks in the war system---an infinite number of non-falsifiable ‘root causes’ mean empirics and incentive theory are the only adequate methods to understand war

Moore 4 – Dir. Center for Security Law @ University of Virginia, 7-time Presidential appointee, & Honorary Editor of the American Journal of International Law, Solving the War Puzzle: Beyond the Democratic Peace, John Norton Moore, pages 41-2.

If major interstate war is predominantly a product of a synergy between a potential nondemocratic aggressor and an absence of effective deterrence, what is the role of the many traditional "causes" of war? Past, and many contemporary, theories of war have focused on the role of specific disputes between nations, ethnic and religious differences, arms races, poverty or social injustice, competition for resources, incidents and accidents, greed, fear, and perceptions of "honor," or many other such factors. Such factors may well **play a role** in **motivating** aggression or in serving **as a means for generating fear** and manipulating public opinion. The reality, however, is that while some of these may have more potential to contribute to war than others, there may well be **an infinite set of motivating factors**, or human wants, **motivating aggression**. It is not the **independent existence of such motivating factors** for war but rather t**he circumstances permitting or encouraging high risk decisions** leading to war that is **the key to more effectively controlling war**. And the same may also be true of democide. The early focus in the Rwanda slaughter on "ethnic conflict," as though Hutus and Tutsis had begun to slaughter each other through spontaneous combustion, distracted our attention from the reality that a nondemocratic Hutu regime had carefully planned and orchestrated a genocide against Rwandan Tutsis as well as its Hutu opponents.I1 Certainly **if we were able to press a button** and **end** poverty, racism, religious intolerance, injustice, and endless disputes, we would want to do so. Indeed, democratic governments must remain committed to policies that will produce a better world by all measures of human progress. The broader achievement of democracy and the rule of law will itself assist in this progress. No one, however, has yet been able to demonstrate the kind of **robust correlation with any of these "traditional" causes of war** as is reflected in the "democratic peace." Further, given the **difficulties in overcoming many of these social problems**, an approach to war **exclusively dependent on their solution** may be to **doom us to war for generations to come**.¶ A useful framework in thinking about the war puzzle is provided in the Kenneth Waltz classic Man, the State, and War,12 first published in 1954 for the Institute of War and Peace Studies, in which he notes that previous thinkers about the causes of war have tended to assign responsibility at one of the three levels of individual psychology, the nature of the state, or the nature of the international system. This tripartite level of analysis has subsequently been widely copied in the study of international relations. We might summarize my analysis in this classical construct by suggesting that the most critical variables are the second and third levels, or "images," of analysis. Government structures, at the second level, seem to play a central role in levels of aggressiveness in high risk behavior leading to major war. In this, the "democratic peace" is an essential insight. The third level of analysis, the international system, or totality of external incentives influencing the decision for war, is also critical when government structures do not restrain such high risk behavior ¶ on their own. Indeed, nondemocratic systems may not only fail to constrain inappropriate aggressive behavior, they may even massively enable it by placing the resources of the state at the disposal of a ruthless regime elite. It is not that the first level of analysis, the individual, is unimportant. I have already argued that it is important in elite perceptions about the permissibility and feasibility of force and resultant necessary levels of deterrence. It is, instead, that the second level of analysis, government structures, may be a powerful proxy for settings bringing to power those who may be disposed to aggressive military adventures and in creating incentive structures predisposing to high risk behavior. We should keep before us, however, the possibility, indeed probability, that a war/peace model focused on democracy and deterrence might be further usefully refined by adding psychological profiles of particular leaders, and systematically applying other findings of cognitive psychology, as we assess the likelihood of aggression and levels of necessary deterrence in context. ¶ A post-Gulf War edition of Gordon Craig and Alexander George's classic, Force and Statecraft,13 presents an important discussion of the inability of the pre-war coercive diplomacy effort to get Saddam Hussein to withdraw from Kuwait without war.14 This discussion, by two of the recognized masters of deterrence theory, reminds us of the many important psychological and other factors operating at the individual level of analysis that may well have been crucial in that failure to get Hussein to withdraw without war. We should also remember that nondemocracies can have differences between leaders as to the necessity or usefulness of force and, as Marcus Aurelius should remind us, not all absolute leaders are Caligulas or Neros. Further, the history of ancient Egypt reminds us that not all Pharaohs were disposed to make war on their neighbors. Despite the importance of individual leaders, however, we should also keep before us that major international war is predominantly and critically an interaction, or synergy, of certain characteristics at levels two and three, specifically an absence of democracy and an absence of¶ effective deterrence.¶ Yet another way to conceptualize the importance of democracy and deterrence in war avoidance is to note that each in its own way internalizes the costs to decision elites of engaging in high risk aggressive behavior. Democracy internalizes these costs in a variety of ways including displeasure of the electorate at having war imposed upon it by its own government. And deterrence either prevents achievement of the objective altogether or imposes punishing costs making the gamble not worth the risk.I5¶ VI¶ Testing the Hypothesis¶ Theory without truth is but costly entertainment.¶ HYPOTHESES, OR PARADIGMS, are useful **if they reflect the real world better than previously held paradigms**. In the complex world of foreign affairs and the war puzzle, perfection is unlikely. **No general construct will fit all cases** even in the restricted category of "major interstate war"; **there are simply too many variables**. We should insist, however, on testing **against the real world** and on **results that suggest enhanced usefulness** over other constructs. In testing the hypothesis, we can test it for consistency with major wars; that is, in looking, for example, at the principal interstate wars in the twentieth century, did they present both a nondemocratic aggressor and an absence of effective deterrence?' And although it is by itself not going to prove causation, we might also want to test the hypothesis against settings of potential wars that did not occur. That is, in nonwar settings, was there an absence of at least one element of the synergy? We might also ask questions about the effect of changes on the international system in either element of the synergy; that is, what, in general, happens when a totalitarian state makes a transition to stable democracy or vice versa? And what, in general, happens when levels of deterrence are dramatically increased or decreased?

**Only deterrence is an empirically verifiable solution to war**

**Moore 4** – Dir. Center for Security Law @ University of Virginia, 7-time Presidential appointee, & Honorary Editor of the American Journal of International Law, Solving the War Puzzle: Beyond the Democratic Peace, John Norton Moore, page 27-31.

As so broadly conceived, there is strong evidence that deterrence, that is, the effect of external factors on the decision to go to war, is **the missing link in the war/peace equation**. In my War/Peace Seminar, I have undertaken to examine the level of deterrence before the principal wars of the twentieth century.10 This examination has led me to believe that in every case the potential aggressor made a rational calculation that the war would be won, and won promptly.11 In fact, the longest period of time calculated for victory through conventional attack seems to be the roughly six reeks predicted by the German General Staff as the time necessary ) prevail on the Western front in World War I under the Schlieffen Plan. Hitler believed in his attack on Poland that Britain and France could not take the occasion to go to war with him. And he believed his 1941 Operation Barbarossa against the Soviet Union that “[w]e have only to kick in the door and the whole rotten structure will come crashing down."12 In contrast, following Hermann Goering's failure to obtain air superiority in the Battle of Britain, Hitler called off the invasion of Britain and shifted strategy to the nighttime bombing of population centers, which became known as the Blitz, in a mistaken effort to compel Britain to sue for peace. Calculations in the North Korean attack on South Korea and Hussein’s attack on Kuwait were that the operations would be completed in a matter of days. Indeed, virtually all principal wars in the twentieth century, at least those involving conventional invasion, were preceded by what I refer to as a "**double deterrence absence**." That is, the potential aggressor believed that they had the military force in place to prevail promptly and that nations that might have the military or diplomatic power to prevent this were not dined to intervene. This analysis has also shown that many of the perceptions we have about the origins of particular wars are flatly wrong. Anyone who seriously believes that World War I was begun by competing alliances drawing tighter should examine the al historical record of British unwillingness to enter a clear military alliance with the French or to so inform the Kaiser! Indeed, this pre-World War I **absence of effective alliance and resultant war** contrasts sharply with the later **robust NATO alliance and absence of World War III.**14¶ **Considerable** other **evidence seems to support this historical analysis as to the importance of deterrence**. Of particular note, Yale Professor Donald Kagan, a preeminent United States historian who has long taught a seminar on war, published in 1995 a superb book On the Origins of War and the Preservation of Peace.15 In this book he conducts a detailed examination of the Peloponnesian War, World War I, Hannibal's War, and World War II, among other case studies. A careful reading of these studies suggests that each war could have been prevented by achievable deterrence and that each occurred in the absence of such deterrence.16 **Game theory** seems to offer yet further support for the proposition that appropriate **deterrence can prevent war**. For example, Robert Axelrod's famous 1980s experiment in an iterated prisoner's dilemma, which is a reasonably close proxy for many conflict settings in international relations, repeatedly showed the effectiveness of a simple tit for tat strategy.17 Such a strategy is at core simply a basic deterrent strategy of influencing behavior through incentives. Similarly, much of the game-theoretic work on crisis bargaining (and danger of asymmetric information) in relation to war and the democratic peace assumes the importance of deterrence through communication of incentives.18 The well-known correlation between war and territorial contiguity seems also to underscore the importance of deterrence and is likely principally a proxy for levels of perceived profit and military achievability of aggression in many such settings.¶ It should further be noted that the democratic peace is not the only significant correlation with respect to war and peace, although it seems to be the most robust. Professors Russett and Oneal, in recently exploring the other elements of the Kantian proposal for "Perpetual Peace," have also shown a strong and statistically significant correlation between economically important bilateral trade between two nations and a reduction in the risk of war between them. Contrary to the arguments of "dependency theorists," such economically important trade seems to reduce the risk of war regardless of the size relationship or asymmetry in the trade balance between the two states. In addition, there is a statistically significant association between economic openness generally and reduction in the risk of war, although this association is not as strong as the effect of an economically important bilateral trade relationship.° Russett and Oneal also show a modest independent correlation between reduction in the risk of war and higher levels of common membership in international organizations.20 And they show that a large imbalance of power between two states significantly lessens the risk of major war between them.21 All of these empirical findings about war also seem to directly reflect incentives; that is, a higher level of trade would, if foregone in war, impose higher costs in the aggregate than without such trade,22 though we know that not all wars terminate trade. Moreover, with respect to trade, a, classic study, Economic Interdependence and War, suggests that the historic record shows that it is not simply aggregate levels of bilateral trade that matters, but expectations as to the level of trade into the future.23 This directly implicates expectations of the war decision maker as does incentive theory, and it importantly adds to the general finding about trade and war that even with existing high levels of bilateral trade, changing expectations from trade sanctions or other factors affecting the flow of trade can directly affect incentives and influence for or against war. A large imbalance of power in a relationship rather obviously impacts deterrence and incentives. Similarly, one might incur higher costs with high levels of common membership in international organizations through foregoing some of the heightened benefits of such participation or otherwise being presented with different options through the actions or effects of such organizations.¶ These external deterrence elements may also be yet another reason why democracies have a lower risk of war with one another. For their freer markets, trade, commerce, and international engagement may place them in a position where their generally higher level of interaction means that aggression will incur substantial opportunity costs. Thus, the "mechanism" of the democratic peace may be an aggregate of factors affecting incentives, both external as well as internal factors. Because of the underlying truth in the relationship between higher levels of trade and lower levels of war, it is not surprising that theorists throughout human history, including Baron de Montesquieu in 1748, Thomas Paine in 1792, John Stuart Mill in 1848, and, most recently, the founders of the European Union, have argued that increasing commerce and interactions among nations would end war. Though by themselves these arguments have been overoptimistic, it may well be that some level of "globalization" may make the costs of war and the gains of peace so high as to powerfully predispose to peace. Indeed, a 1989 book by John Mueller, Retreat From Doomsday,24 postulates the obsolescence of major war between developed nations (at least those nations within the "first and second worlds") as they become increasingly conscious of the rising costs of war and the rising gains of peace.¶ In assessing levels of democracy, there are indexes readily available, for example, the Polity III25 and Freedom House 26 indexes. I am unaware of any comparable index with respect to levels of deterrence that might be used to test the importance of deterrence in war avoidance?' Absent such an accepted index, discussion about the importance of deterrence is subject to the skeptical observation that one simply defines effective deterrence by whether a war did or did not occur. In order to begin to deal with this objection and encourage a more objective methodology for assessing deterrence, I encouraged a project to seek to develop a rough but objective measure of deterrence with a scale from minus ten to plus ten based on a large variety of contextual features that would be given relative weighting in a complex deterrence equation before applying the scaling to different war and nonwar settings.28 On the disincentive side of the scale, the methodology used a weighted calculation of local deterrence, including the chance to prevent a short- and intermediate-term military victory, and economic and political disincentives; extended deterrence with these same elements; and contextual communication and credibility multipliers. On the incentive side of the scale, the methodology also used a weighted calculation of perceived military, economic, and political benefits. The scales were then combined into an overall deterrence score, including, an estimate for any effect of prospect theory where applicable.2 This innovative first effort uniformly showed high deterrence scores in settings where war did not, in fact, occur. Deterring a Soviet first strike in the Cuban Missile Crisis produced a score of +8.5 and preventing a Soviet attack against NATO produced a score of +6. War settings, however, produced scores ranging from -2.29 (Saddam Hussein's decision to invade Kuwait in the Gulf War), -2.18 (North Korea's decision to invade South Korea in the Korean War), -1.85 (Hitler's decision to invade Poland in World War II), -1.54 (North Vietnam's decision to invade South Vietnam following the Paris Accords), -0.65 (Milosevic's decision to defy NATO in Kosovo), +0.5 (the Japanese decision to attack Pearl Harbor), +1.25 (the Austrian decision, egged on by Germany, to attack Serbia, which was the real beginning of World War I), to +1.75 (the German decision to invade Belgium and France in World War I). As a further effort at scaling and as a point of comparison, I undertook to simply provide an impressionistic rating based on my study of each pre-crisis setting. That produced high positive scores of +9 for both deterring a Soviet first strike during the Cuban Missile Crisis and NATO's deterrence of a Warsaw Pact attack and even lower scores than the more objective effort in settings where wars had occurred. Thus, I scored North Vietnam's decision to invade South Vietnam following the Paris Accords and the German decision to invade Poland at the beginning of World War II as -6; the North Korean/Stalin decision to invade South Korea in the Korean War as -5; the Iraqi decision to invade the State of Kuwait as -4; Milosevic's decision to defy NATO in Kosovo and the German decision to invade Belgium and France in World War I as -2; and the Austrian decision to attack Serbia and the Japanese decision to attack Pearl Harbor as -1. Certainly even knowledgeable experts would be likely to differ in their impressionistic scores on such pre-crisis settings, and the effort at a more objective methodology for scoring deterrence leaves much to be desired. Nevertheless, both exercises did seem to suggest that deterrence matters and that high levels of deterrence can prevent future war.¶ Following up on this initial effort to produce a more objective measure of deterrence, two years later I encouraged another project to undertake the same effort, building on what had been learned in the first iteration. The result was a second project that developed a modified scoring system, also incorporating local deterrence, extended deterrence, and communication of intent and credibility multipliers on one side of a scale, and weighing these factors against a potential aggressor's overall subjective incentives for action on the other side of the scale.3° The result, with a potential range of -5.5 to +10, produced no score higher than +2.5 for eighteen major wars studied between 1939 and the 1990 Gulf War.31 Twelve of the eighteen wars produced a score of zero or below, with the 1950-53 Korean War at -3.94, the 1965-75 Vietnam War at -0.25, the 1980-88 Iran-Iraq War at -1.53, and the 1990-91 Gulf War at -3.83. The study concluded that in more than fifty years of conflict there was "no situation in which a regime elite/decision making body subjectively faced substantial disincentives to aggressive military action and yet attacked."32¶ Yet another piece of the puzzle, which may clarify the extent of deterrence necessary in certain settings, may also assist in building a broader hypothesis about war. In fact, it has been incorporated into the just-discussed efforts at scoring deterrence. ¶ That is, newer studies of human behavior from cognitive psychology are increasingly showing that certain perceptions of decision makers can influence the level of risk they may be willing to undertake, or otherwise affect their decisions.33 It now seems likely that a number of such insights about human behavior in decision making may be useful in considering and fashioning deterrence strategies. Perhaps of greatest relevance is the insight of "prospect theory," which posits that individuals evaluate outcomes with respect to deviations from a reference point and that they may be more risk averse in settings posing potential gain than in settings posing potential loss.34 The evidence of this "cognitive bias," whether in gambling, trading, or, as is increasingly being argued, foreign policy decisions generally, is significant. Because of the newness of efforts to apply a laboratory based "prospect theory" to the complex foreign policy process generally, and ¶ particularly ambiguities and uncertainties in framing such complex events, our consideration of it in the war/peace process should certainly be cautious. It does, however, seem to elucidate some of the case studies.¶ In the war/peace setting, "prospect theory" suggests that deterrence may not need to be as strong to prevent aggressive action leading to perceived gain. For example, there is credible evidence that even an informal warning to Kaiser Wilhelm II from British Foreign Secretary Sir Edward Grey, if it had come early in the crisis before events had moved too far, might have averted World War I. And even a modicum of deterrence in Kuwait, as was provided by a small British contingent when Kuwait was earlier threatened by an irredentist Iraqi government in 1961, might have been sufficient to deter Saddam Hussein from his 1990 attack on Kuwait. Similarly, even a clear United States pledge for the defense of South Korea before the attack might have prevented the Korean War. Conversely, following the July 28 Austrian mobilization and declaration of war against Serbia in World War I, the issue for Austria may have begun to be perceived as loss avoidance, thus requiring much higher levels of deterrence to avoid the resulting war. Similarly, the Rambouillet Agreement may have been perceived by Milosevic as risking loss of Kosovo and his continued rule of Serbia and, as a result, may have required higher levels of NA-TO deterrence to have prevented Milosevic's actions in defiance. Certainly NATO's previous hesitant responses in 1995 against Milosevic in the Bosnia phase of the Yugoslav crisis and in 1998-99 in early attempts to deal with Kosovo did not create a high level of deterrence.35 One can only surmise whether the killing in Kosovo could have been avoided had NATO taken a different tack, both structuring the issue less as loss avoidance for Milosevic and considerably enhancing deterrence. Suppose, for example, NATO had emphasized that it had no interest in intervening in Serbia's civil conflict with the KLA but that it would emphatically take action to punish massive "ethnic cleansing" and other humanitarian outrages, as had been practiced in Bosnia. And on the deterrence side, it made clear in advance the severity of any NATO bombardment, the potential for introduction of ground troops if necessary, that in any assault it would pursue a "Leadership Strategy" focused on targets of importance to Milosevic and his principal henchmen (including their hold on power), and that it would immediately, unlike as earlier in Bosnia, seek to generate war crime indictments of all top Serbian leaders implicated in any atrocities. The point here is not to second-guess NATO's actions in Kosovo but to suggest that taking into account potential "cognitive bias," such as "prospect theory," may be useful in fashioning effective deterrence. "Prospect theory" may also have relevance in predicting that it may be easier to deter (that is, lower levels are necessary) an aggression than to undo that aggression. Thus, much higher levels of deterrence were probably required to compel Saddam Hussein to leave Kuwait than to prevent him initially from invading that state. In fact, not even the presence of a powerful Desert Storm military force and a Security Council Resolution directing him to leave caused Hussein to voluntarily withdraw. As this real-world example illustrates, there is considerable experimental evidence in "prospect theory" of an almost instant renormalization of reference point after a gain; that is, relatively quickly after Saddam Hussein took Kuwait, a withdrawal was framed as a loss setting, which he would take high risk to avoid. Indeed, we tend to think of such settings as settings of compellance, requiring higher levels of incentive to achieve compulsion producing an action, rather than deterrence needed for prevention.¶ One should also be careful not to overstate the effect of "prospect theory" or to fail to assess a threat in its complete context. We should remember that a belated pledge of Great Britain to defend Poland before the Nazi attack did not deter Hitler, who believed under the circumstances that the British pledge would not be honored. It is also possible that the greater relative wealth of democracies, which have less to gain in all out war, is yet another internal factor contributing to the "democratic peace."36 In turn, this also supports the extraordinary tenacity and general record of success of democracies fighting in defensive settings as they may also have more to lose.¶ In assessing adequacy of deterrence to prevent war, we might also want to consider whether extreme ideology, strongly at odds with reality, may be a factor requiring higher levels of deterrence for effectiveness. One example may be the extreme ideology of Pol Pot leading him to falsely believe that his Khmer Rouge forces could defeat Vietnam.37 He apparently acted on that belief in a series of border incursions against Vietnam that ultimately produced a losing war for him. Similarly, Osama bin Laden's 9/11 attack against America, hopelessly at odds with the reality of his defeating the Western World and producing for him a strategic disaster, seems to have been prompted by his extreme ideology rooted in a distorted concept of Islam at war with the enlightenment. The continuing suicide bombings against Israel, encouraged by radical rejectionists and leading to less and less for the Palestinians, may be another example. If extreme ideology is a factor to be considered in assessing levels of deterrence, it does not mean that deterrence is doomed to fail in such settings but only that it must be at higher levels (and properly targeted on the relevant decision elites behind the specific attacks) to be effective, as is also true in perceived loss or compellance settings.38 Even if major war in the modern world is predominantly a result of aggression by nondemocratic regimes, it does not mean that all nondemocracies pose a risk of war all, or even some, of the time. Salazar's Portugal did not commit aggression. Nor today do Singapore or Bahrain or countless other nondemocracies pose a threat. That is, today nondemocracy comes close to a necessary condition in generating the high risk behavior leading to major interstate war. But it is, by itself, not a sufficient condition for war. The many reasons for this, of course, include a plethora of internal factors, such as differences in leadership perspectives and values, size of military, and relative degree of the rule of law, as well as levels of external deterrence.39 But where an aggressive nondemocratic regime is present and poses a credible military threat, then it is **the totality of external factors**, **that is,** **deterrence, that become crucial.**

#### War is at its lowest level in history because of US primacy---best statistical studies prove

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

Andrew Mack and his colleagues at the Human Security Report Project are to be congratulated. Not only do they present a study with a striking conclusion, driven by data, free of theoretical or ideological bias, but they also do something quite unfashionable: they bear good news. Social scientists really are not supposed to do that. Our job is, if not to be Malthusians, then at least to point out disturbing trends, looming catastrophes, and the imbecility and mendacity of policy makers. And then it is to say why, if people listen to us, things will get better. We do this as if our careers depended upon it, and perhaps they do; for if all is going to be well, what need then for us?¶ Our colleagues at Simon Fraser University are brave indeed. That may sound like a setup, but it is not. I shall challenge neither the data nor the general conclusion that violent conflict around the world has been decreasing in fits and starts since the Second World War. When it comes to violent conflict among and within countries, **things have been getting better**. (The trends have not been linear—Figure 1.1 actually shows that the frequency of interstate wars peaked in the 1980s—but the 65-year movement is clear.) Instead I shall accept that Mack et al. are correct on the macro-trends, and focus on their explanations they advance for these remarkable trends. With apologies to any readers of this forum who recoil from academic debates, this might get mildly theoretical and even more mildly methodological.¶ Concerning international wars, one version of the “nuclear-peace” theory is not in fact laid to rest by the data. It is certainly true that nuclear-armed states have been involved in many wars. They have even been attacked (think of Israel), which falsifies the simple claim of “assured destruction”—that any nuclear country A will deter any kind of attack by any country B because B fears a retaliatory nuclear strike from A.¶ But the most important “nuclear-peace” claim has been about mutually assured destruction, which obtains between two robustly nuclear-armed states. The claim is that (1) rational states having second-strike capabilities—enough deliverable nuclear weaponry to survive a nuclear first strike by an enemy—will have an overwhelming incentive not to attack one another; and (2) we can safely assume that nuclear-armed states are rational. It follows that states with a second-strike capability will not fight one another.¶ Their colossal atomic arsenals neither kept the United States at peace with North Vietnam during the Cold War nor the Soviet Union at peace with Afghanistan. But the argument remains strong that those arsenals did help keep the United States and Soviet Union at peace with each other. Why non-nuclear states are not deterred from fighting nuclear states is an important and open question. But in a time when calls to ban the Bomb are being heard from more and more quarters, we must be clear about precisely what the broad trends toward peace can and cannot tell us. They may tell us nothing about why we have had no World War III, and little about the wisdom of banning the Bomb now.¶ Regarding the **downward trend in international war**, Professor Mack is friendlier to more palatable theories such as the “**democratic peace**” (democracies do not fight one another, and the proportion of democracies has increased, hence less war); the interdependence or “**commercial peace**” (states with extensive economic ties find it irrational to fight one another, and interdependence has increased, hence less war); and the notion that people around the world are more anti-war than their forebears were. Concerning the downward trend in civil wars, he favors theories of economic growth (where commerce is enriching enough people, violence is less appealing—a logic similar to that of the “commercial peace” thesis that applies among nations) and the end of the Cold War (which end reduced superpower support for rival rebel factions in so many Third-World countries).¶ These are all **plausible mechanisms for peace**. What is more, none of them excludes any other; all could be working toward the same end. That would be somewhat puzzling, however. Is the world just lucky these days? How is it that an array of peace-inducing factors happens to be working coincidentally in our time, when such a magical array was absent in the past? The answer may be that one or more of these mechanisms reinforces some of the others, or perhaps some of them are mutually reinforcing. Some scholars, for example, have been focusing on whether economic growth might support democracy and vice versa, and whether both might support international cooperation, including to end civil wars.¶ We would still need to explain how this charmed circle of causes got started, however. And here let me raise another factor, perhaps even less appealing than the “nuclear peace” thesis, at least outside of the United States. That factor is what international relations scholars call hegemony—specifically **American hegemony**.¶ A theory that many regard as discredited, but that refuses to go away, is called hegemonic stability theory. The theory emerged in the 1970s in the realm of international political economy. It asserts that **for the global economy to remain open**—for countries to keep barriers to trade and investment low—**one powerful country must take the lead**. Depending on the theorist we consult, “taking the lead” entails paying for global public goods (keeping the sea lanes open, providing liquidity to the international economy), coercion (threatening to raise trade barriers or withdraw military protection from countries that cheat on the rules), or both. The theory is skeptical that international cooperation in economic matters can emerge or endure absent a hegemon. The distastefulness of such claims is self-evident: they imply that it is good for everyone the world over if one country has more wealth and power than others. More precisely, they imply that it has been good for the world that the United States has been so predominant.¶ There is no obvious reason why hegemonic stability theory could not apply to other areas of international cooperation, including in security affairs, human rights, international law, peacekeeping (UN or otherwise), and so on. What I want to suggest here—suggest, not test—is that **American hegemony might just be a deep cause of the steady decline of political deaths in the world**.¶ How could that be? After all, the report states that United States is the third most war-prone country since 1945. Many of the deaths depicted in Figure 10.4 were in wars that involved the United States (the Vietnam War being the leading one). Notwithstanding politicians’ claims to the contrary, a candid look at U.S. foreign policy reveals that the country is as ruthlessly self-interested as any other great power in history.¶ The answer is that U.S. hegemony might just be a **deeper cause of the proximate causes** outlined by Professor Mack. Consider economic growth and openness to foreign trade and investment, which (so say some theories) **render violence irrational**. American power and policies may be responsible for these in two related ways. First, at least since the 1940s Washington has **prodded other countries to embrace the market capitalism** that entails economic openness and produces **sustainable economic growth**. The United States promotes capitalism for selfish reasons, of course: its own domestic system depends upon growth, which in turn depends upon the efficiency gains from economic interaction with foreign countries, and the more the better. During the Cold War most of its allies accepted some degree of market-driven growth.¶ Second, the U.S.-led western victory in the Cold War damaged the credibility of alternative paths to development—communism and import-substituting industrialization being the two leading ones—and **left market capitalism the best model**. The end of the Cold War also involved an end to the billions of rubles in Soviet material support for regimes that tried to make these alternative models work. (It also, as Professor Mack notes, **eliminated the superpowers’ incentives to feed civil violence** in the Third World.) What we call **globalization** is **caused in part by the emergence of the United States as the global hegemon**.¶ The same case can be made, with somewhat more difficulty, concerning the **spread of democracy**. Washington has supported democracy only under certain conditions—the chief one being the absence of a popular anti-American movement in the target state—but those conditions have become much more widespread following the collapse of communism. Thus in the 1980s the Reagan administration—the most anti-communist government America ever had—began to dump America’s old dictator friends, starting in the Philippines. Today Islamists tend to be anti-American, and so the Obama administration is skittish about democracy in Egypt and other authoritarian Muslim countries. But general U.S. material and moral support for liberal democracy remains strong.

**Heg decreases structural violence---any alt dooms humanity to deprivation**

Thomas P.M. **Barnett 11**, Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat, worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense, September 12, 2011, “The New Rules: The Rise of the Rest Spells U.S. Strategic Victory,” World Politics Review, online: http://www.worldpoliticsreview.com/articles/9973/the-new-rules-the-rise-of-the-rest-spells-u-s-strategic-victory

First the absurdity: A few of the most over-the-top Bush-Cheney neocons did indeed promote a vision of U.S. primacy by which America shouldn't be afraid to wage war to keep other rising powers at bay. **It was a nutty concept then**, and it **remains a nutty concept today**. But since it feeds a lot of major military weapons system purchases, especially for the China-centric Air Force and Navy, don't expect it to disappear so long as the Pentagon's internal budget fights are growing in intensity. ¶ Meanwhile, the Chinese do their stupid best to fuel this outdated logic by building a force designed to keep America out of East Asia just as their nation's dependency on resources flowing from unstable developing regions skyrockets. With America's fiscal constraints now abundantly clear, the world's primary policing force is pulling back, while that force's implied successor is nowhere close to being able to field a similar power-projection capacity -- and never will be. So with NATO clearly stretched to its limits by the combination of Afghanistan and Libya, a lot of future fires in developing regions will likely be left to burn on their own. We'll just have to wait and see how much foreign commentators delight in that G-Zero dynamic in the years ahead. ¶ That gets us to the original "insult": the U.S. did not lord it over the world in the 1990s. Yes, it did argue for and promote the most rapid spread of globalization possible. But **the "evil" of the Washington Consensus** only yielded the **most rapid growth of a truly global middle class that the world has ever seen**. Yes, we can, in our current economic funk, somehow cast that development as the "loss of U.S. hegemony," in that the American consumer is no longer the demand-center of globalization's universe. But this is without a doubt the most amazing achievement of U.S. foreign policy, surpassing even our role in World War II. ¶ Numerous world powers served as global or regional hegemons before we came along, **and their record on economic development was painfully transparent**: **Elites got richer, and the masses got poorer**. Then America showed up after World War II and engineered an international liberal trade order, one that was at first admittedly limited to the West. But within four decades it went virally global, and now for the first time in history, more than half of our planet's population lives in conditions of modest-to-mounting abundance -- **after millennia of mere sustenance**. ¶ You may choose to interpret this as some sort of cosmic coincidence, but the historical sequence is undeniable: **With its unrivaled power, America made the world a far better place**. ¶ That spreading wave of global abundance has reformatted all sorts of traditional societies that lay in its path. Some, like the Chinese, have adapted to it magnificently in an economic and social sense, with the political adaptation sure to follow eventually. Others, being already democracies, have done far better across the board, like Turkey, Indonesia and India. But there are also numerous traditional societies where that reformatting impulse from below has been met by both harsh repression from above and violent attempts by religious extremists to effect a "counterreformation" that firewalls the "faithful" from an "evil" outside world.¶ Does this violent blowback constitute the great threat of our age? Not really. As I've long argued, this "friction" from globalization's tectonic advance is merely what's left over now that great-power war has gone dormant for 66 years and counting, with interstate wars now so infrequent and so less lethal as to be dwarfed by the civil strife that plagues those developing regions still suffering weak connectivity to the global economy. ¶ Let's remember what the U.S. actually did across the 1990s after the Soviet threat disappeared. It went out of its way to police the world's poorly governed spaces, battling rogue regimes and answering the 9-1-1 call repeatedly when disaster and/or civil strife struck vulnerable societies. **Yes, playing globalization's bodyguard made America public enemy No. 1 in the eyes of its most violent rejectionist movements**, including al-Qaida, but we made the effort because, in our heart of hearts, we knew that this is what blessed powers are supposed to do. ¶ Some, like the Bush-Cheney neocons, were driven by more than that sense of moral responsibility. They saw a chance to remake the world so as to assure U.S. primacy deep into the future. The timing of their dream was cruelly ironic, for it blossomed just as America's decades-in-the-making grand strategy reached its apogee in the peaceful rise of so many great powers at once. Had Sept. 11 not intervened, the neocons would likely have eventually targeted rising China for strategic demonization. Instead, they locked in on Osama bin Laden. The rest, as they say, is history. ¶ The follow-on irony of the War on Terror is that its operational requirements actually revolutionized a major portion of the U.S. military -- specifically the Army, Marines and Special Forces -- in such a way as to redirect their strategic ethos from big wars to small ones. It also forged a new operational bond between the military's irregular elements and that portion of the Central Intelligence Agency that pursues direct action against transnational bad actors. The up-front costs of this transformation were far too high, largely because the Bush White House stubbornly refused to embrace counterinsurgency tactics until after the popular repudiation signaled by the 2006 midterm election. But the end result is clear: **We now have the force we actually need to manage this global era**.¶ But, of course, **that can all be tossed into the dumpster** if we convince ourselves that our "loss" of hegemony was somehow the result of our own misdeed, instead of being our most profound gift to world history. Again, we grabbed the reins of global leadership and patiently engineered not only the **greatest redistribution -- and expansion -- of global wealth ever seen,** but also the **greatest consolidation of global peace ever seen**. ¶ Now, if we can sensibly realign our strategic relationship with the one rising great power, China, whose growing strength upsets us so much, then in combination with the rest of the world's rising great powers we can collectively wield enough global policing power to manage what's yet to come. ¶ As always, **the choice is ours**.

#### The world getting better now because heg is peaceful

Busby 12 Josh, Assistant Professor of Public Affairs and a fellow in the RGK Center for Philanthropy and Community Service as well as a Crook Distinguished Scholar at the Robert S. Strauss Center for International Security and Law, <http://duckofminerva.blogspot.com/2012/01/get-real-chicago-ir-guys-out-in-force.html>

Is Unipolarity Peaceful? As evidence, Monteiro provides metrics of the number of years during which great powers have been at war. For the unipolar era since the end of the Cold War, the United States has been at war 13 of those 22 years or 59% (see his Table 2 below). Now, I've been following some of the discussion by and about Steven Pinker and Joshua Goldstein's [work](http://www.nytimes.com/2011/12/18/opinion/sunday/war-really-is-going-out-of-style.html?pagewanted=all) that suggests the world is becoming more peaceful with interstate wars and intrastate wars becoming more rare. I was struck by the graphic that Pinker used in a Wall Street Journal [piece](http://online.wsj.com/article/SB10001424053111904106704576583203589408180.html) back in September that drew on the Uppsala Conflict Data, which shows a steep decline in the number of deaths per 100,000 people. How do we square this account by Monteiro of a unipolar world that is not peaceful (with the U.S. at war during this period in Iraq twice, Afghanistan, Kosovo) and Pinker's account which suggests declining violence in the contemporary period? Where Pinker is focused on systemic outcomes, Monteiro's measure merely reflect years during which the great powers are at war. Under unipolarity, there is only one great power so the measure is partial and not systemic. However, Monteiro's theory aims to be systemic rather than partial. In critiquing Wohlforth's early work on unipolarity stability, Monteiro notes: Wohlforth’s argument does not exclude all kinds of war. Although power preponderance allows the unipole to manage conflicts globally, this argument is not meant to apply to relations between major and minor powers, or among the latter (17). So presumably, **a more adequate test of the peacefulness or not of unipolarity** (at least for Monteiro) is not the number of years the great power has been at war **but whether the system as a whole is becoming more peaceful under unipolarity compared** to previous eras, including wars between major and minor powers or wars between minor powers and whether the wars that do happen are as violent as the ones that came before. Now, as Ross Douthat pointed [out](http://douthat.blogs.nytimes.com/2011/10/17/steven-pinkers-history-of-violence/), Pinker's argument isn't based on a logic of benign hegemony. It could be that even if the present era is more peaceful, unipolarity has nothing to do with it. Moreover, Pinker may be wrong. Maybe the world isn't all that peaceful. I keep thinking about the places I don't want to go to anymore because they are violent (Mexico, Honduras, El Salvador, Nigeria, Pakistan, etc.) As Tyler Cowen [noted](http://marginalrevolution.com/marginalrevolution/2011/10/steven-pinker-on-violence.html), the measure Pinker uses to suggest violence is a per capita one, which doesn't get at the absolute level of violence perpetrated in an era of a greater world population. **But, if my read of other** [**reports**](http://www.hsrgroup.org/human-security-reports/20092010/graphs-and-tables.aspx) **based on Uppsala data is right, war is becoming more rare and less deadly** (though later [data](http://www.pcr.uu.se/research/ucdp/charts_and_graphs/) suggests lower level armed conflict may be increasing again since the mid-2000s). The apparent violence of the contemporary era may be something of a presentist bias and reflect our own lived experience and the ubiquity of news media .Even if the U.S. has been at war for the better part of unipolarity, the deadliness is declining, even compared with Vietnam, let alone World War II. Does Unipolarity Drive Conflict? So, I kind of took issue with the Monteiro's premise that unipolarity is not peaceful. What about his argument that unipolarity drives conflict? Monteiro suggests that the unipole has three available strategies - defensive dominance, offensive dominance and disengagement - though is less likely to use the third. Like Rosato and Schuessler, Monteiro suggests because other states cannot trust the intentions of other states, namely the unipole, that minor states won't merely bandwagon with the unipole. Some "recalcitrant" minor powers will attempt to see what they can get away with and try to build up their capabilities. As an aside, in Rosato and Schuessler world, unless these are located in strategically important areas (i.e. places where there is oil), then the unipole (the United States) should disengage. In Monteiro's world, disengagement would inexorably lead to instability and draw in the U.S. again (though I'm not sure this necessarily follows), but neither defensive or offensive dominance offer much possibility for peace either since it is U.S. power in and of itself that makes other states insecure, even though they can't balance against it.

### 1AC – Plan

#### The Executive Branch of the United States should acquire electricity from small modular nuclear reactors for military installations in the United States.

### 1AC – Solvency

#### CONTENTION 2: SOLVENCY

#### Plan’s key to ensure availability of SMRs for the military and doesn’t pick winners

Andres and Breetz 11 Richard B, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University and Hanna L, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, February, "Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications", www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf

DOD as First Mover¶ Thus far, this paper has reviewed two of DOD’s most pressing energy vulnerabilities—grid insecurity and fuel convoys—and explored how they could be addressed by small reactors. We acknowledge that there are many uncertainties and risks associated with these reactors. On the other hand, failing to pursue these technologies raises its own set of risks for DOD, which we review in this section: first, small reactors may fail to be commercialized in the United States; second, the designs that get locked in by the private market may not be optimal for DOD’s needs; and third, expertise on small reactors may become concentrated in foreign countries. By taking an early “first mover” role in the small reactor market, DOD could mitigate these risks and secure the long-term availability and appropriateness of these technologies for U.S. military applications.¶ The “Valley of Death.” Given the promise that small reactors hold for military installations and mobility, DOD has a compelling interest in ensuring that they make the leap from paper to production. However, if DOD does not provide an initial demonstration and market, there is a chance that the U.S. small reactor industry may never get off the ground. The leap from the laboratory to the marketplace is so difficult to bridge that it is widely referred to as the “Valley of Death.” Many promising technologies are never commercialized due to a variety of market failures— including technical and financial uncertainties, information asymmetries, capital market imperfections, transaction costs, and environmental and security externalities— that impede financing and early adoption and can lock innovative technologies out of the marketplace. 28 In such cases, the Government can help a worthy technology to bridge the Valley of Death by accepting the first mover costs and demonstrating the technology’s scientific and economic viability.29¶ Historically, nuclear power has been “the most clear-cut example . . . of an important general-purpose technology that in the absence of military and defense related procurement would not have been developed at all.”30 Government involvement is likely to be crucial for innovative, next-generation nuclear technology as well. Despite the widespread revival of interest in nuclear energy, Daniel Ingersoll has argued that radically innovative designs face an uphill battle, as “the high capital cost of nuclear plants and the painful lessons learned during the first nuclear era have created a prevailing fear of first-of-a-kind designs.”31 In addition, Massachusetts Institute of Technology reports on the Future of Nuclear Power called for the Government to provide modest “first mover” assistance to the private sector due to several barriers that have hindered the nuclear renaissance, such as securing high up-front costs of site-banking, gaining NRC certification for new technologies, and demonstrating technical viability.32¶ It is possible, of course, that small reactors will achieve commercialization without DOD assistance. As discussed above, they have garnered increasing attention in the energy community. Several analysts have even argued that small reactors could play a key role in the second nuclear era, given that they may be the only reactors within the means of many U.S. utilities and developing countries.33 However, given the tremendous regulatory hurdles and technical and financial uncertainties, it appears far from certain that the U.S. small reactor industry will take off. If DOD wants to ensure that small reactors are available in the future, then it should pursue a leadership role now.¶ Technological Lock-in. A second risk is that if small reactors do reach the market without DOD assistance, the designs that succeed may not be optimal for DOD’s applications. Due to a variety of positive feedback and increasing returns to adoption (including demonstration effects, technological interdependence, network and learning effects, and economies of scale), the designs that are initially developed can become “locked in.”34 Competing designs—even if they are superior in some respects or better for certain market segments— can face barriers to entry that lock them out of the market. If DOD wants to ensure that its preferred designs are not locked out, then it should take a first mover role on small reactors**.**¶ It is far too early to gauge whether the private market and DOD have aligned interests in reactor designs. On one hand, Matthew Bunn and Martin Malin argue that what the world needs is cheaper, safer, more secure, and more proliferation-resistant nuclear reactors; presumably, many of the same broad qualities would be favored by DOD.35 There are many varied market niches that could be filled by small reactors, because there are many different applications and settings in which they can be used, and it is quite possible that some of those niches will be compatible with DOD’s interests.36¶ On the other hand, DOD may have specific needs (transportability, for instance) that would not be a high priority for any other market segment. Moreover, while DOD has unique technical and organizational capabilities that could enable it to pursue more radically innovative reactor lines, DOE has indicated that it will focus its initial small reactor deployment efforts on LWR designs.37¶ If DOD wants to ensure that its preferred reactors are developed and available in the future, it should take a leadership role now. Taking a first mover role does not necessarily mean that DOD would be “picking a winner” among small reactors, as the market will probably pursue multiple types of small reactors. Nevertheless, DOD leadership would likely have a profound effect on the industry’s timeline and trajectory.

#### SMRs solve nuclear downsides

Ringle 10 John, Professor Emeritus of Nuclear Engineering at Oregon State University, "Reintroduction of reactors in US a major win", November 13, robertmayer.wordpress.com/2010/11/21/reintroduction-of-reactors-in-us-a-major-win/

Small nuclear reactors will probably be the mechanism that ushers in nuclear power’s renaissance in the U.S.¶ Nuclear plants currently supply about 20 percent of the nation’s electricity and more than 70 percent of our carbon-free energy. But large nuclear plants cost $8 billion to $10 billion and utilities are having second thoughts about how to finance these plants.¶ A small modular reactor (SMR) has several advantages over the conventional 1,000-megawatt plant:¶ 1. It ranges in size from 25 to 140 megawatts, hence only costs about a tenth as much as a large plant.¶ 2. It uses a cookie-cutter standardized design to reduce construction costs and can be built in a factory and shipped to the site by truck, railroad or barge.¶ 3. The major parts can be built in U.S. factories, unlike some parts for the larger reactors that must be fabricated overseas.¶ 4. Because of the factory-line production, the SMR could be built in three years with one-third of the workforce of a large plant.¶ 5. More than one SMR could be clustered together to form a larger power plant complex. This provides versatility in operation, particularly in connection with large wind farms. With the variability of wind, one or more SMRs could be run or shut down to provide a constant base load supply of electricity.¶ 6. A cluster of SMRs should be very reliable. One unit could be taken out of service for maintenance or repair without affecting the operation of the other units. And since they are all of a common design, replacement parts could satisfy all units. France has already proved the reliability of standardized plants.¶ At least half a dozen companies are developing SMRs, including NuScale in Oregon. NuScale is American-owned and its 45-megawatt design has some unique features. It is inherently safe. It could be located partially or totally below ground, and with its natural convection cooling system, it does not rely on an elaborate system of pumps and valves to provide safety. There is no scenario in which a loss-of-coolant accident could occur.

#### The role of the ballot’s to determine how to best actualize changes in US nuclear policy --- debates over details cause change

Crist 4 (Eileen, Professor at Virginia Tech in the Department of Science and Technology, “Against the social construction of nature and wilderness”, Environmental Ethics 26;1, p 13-6, http://www.sts.vt.edu/faculty/crist/againstsocialconstruction.pdf)

Yet, constructivist analyses of "nature" favor remaining in the comfort zone of **zestless agnosticism** and **noncommittal meta-discourse**. As David Kidner suggests, this intellectual stance may function as a mechanism against facing the devastation of the biosphere—an undertaking long underway but gathering momentum with the imminent bottlenecking of a triumphant global consumerism and unprecedented population levels. Human-driven extinction—in the ballpark of Wilson's estimated 27,000 species per year—is so unthinkable a fact that choosing to ignore it may well be the psychologically risk-free option.¶ **Nevertheless, this is the** opportune **historical** moment **for** intellectuals in the humanities and social sciences **to join forces with** conservation **scientists** in order **to** help **create the consciousness shift and** policy changes **to stop this irreversible destruction. Given this outlook, how** students in the human sciences **are** trained **to regard scientific knowledge, and what kind of** messages percolate to the public from the academy **about the nature of scientific findings,** matter immensely. The "agnostic stance" of constructivism toward "scientific claims" about the environment—a stance supposedly mandatory for discerning how scientific knowledge is "socially assembled"[32]—is, to borrow a legendary one-liner, **striving to interpret the world at an hour that is pressingly calling us to change it.**

#### Policies matter – effective energy choices depend on technical political literacy

Hodson 10 Derek, professor of education – Ontario Institute for Studies @ University of Toronto, “Science Education as a Call to Action,” Canadian Journal of Science, Mathematics and Technology Education, Vol. 10, Issue 3, p. 197-206

\*\*note: SSI = socioscientific issues

The final (fourth) level of sophistication in this issues-based approach is concerned with students findings ways of putting their values and convictions into action, helping them to prepare for and engage in responsible action, and assisting them in **developing the skills**, attitudes, and values **that will enable them to** take control of their lives, **cooperate with others to bring about change**, and work toward a more just and sustainable world in which power, wealth, and resources are more equitably shared. Socially and environmentally responsible behavior will not necessarily follow from knowledge of key concepts and possession of the “right attitudes.” As Curtin (1991) reminded us, it is important to distinguish between caring about and caring for. It is almost always much easier to proclaim that one cares about an issue than to do something about it. Put simply, our values are worth nothing until we live them. Rhetoric and espoused values will not bring about social justice and will not save the planet. We must change our actions. A politicized ethic of care (caring for) entails active involvement in a local manifestation of a particular problem or issue, exploration of the complex sociopolitical contexts in which the problem/issue is located, and attempts to resolve conflicts of interest. FROM STSE RHETORIC TO SOCIOPOLITICAL ACTION Writing from the perspective of environmental education, Jensen (2002) categorized the **knowledge** that is **likely to promote sociopolitical action** and encourage pro-environmental behavior into four dimensions: (a) **scientific and technological knowledge** that informs the issue or problem; (b) knowledge about the underlying social, political, and economic issues, conditions, and structures and how they contribute to creating social and environmental problems; (c) knowledge about how to bring about changes in society through direct or indirect action; and (d) knowledge about the likely outcome or direction of possible actions and the **desirability of those outcomes.** Although formulated as a model for environmental education, it is reasonable to suppose that Jensen's arguments are applicable to all forms of SSI-oriented action. Little needs to be said about dimensions 1 and 2 in Jensen's framework beyond the discussion earlier in the article. With regard to dimension 3, students need knowledge of actions that are likely to have positive impact and knowledge of how to engage in them. **It is essential** that they gain robust knowledge of the social, legal, and **political system(s)** that prevail in the communities in which they live and develop a clear understanding of how **decisions** are **made within** local, regional, and **national government** and within industry, commerce, and the military. Without knowledge of where and with whom power of decision making is located and awareness of the **mechanisms by which decisions are reached**, **intervention is not possible.** Thus, the curriculum I propose requires a concurrent program designed to achieve a measure of political literacy, including knowledge of how to engage in collective action with individuals who have different competencies, backgrounds, and attitudes but share a common interest in a particular SSI. Dimension 3 also includes knowledge of likely sympathizers and potential allies and strategies for encouraging cooperative action and group interventions. What Jensen did not mention but would seem to be a part of dimension 3 knowledge is the nature of science-oriented knowledge that would enable students to appraise the statements, reports, and arguments of scientists, politicians, and journalists and to present their own supporting or opposing arguments in a coherent, robust, and convincing way (see Hodson [2009b] for a lengthy discussion of this aspect of science education). Jensen's fourth category includes awareness of how (and why) others have sought to bring about change and entails formulation of a vision of the kind of world in which we (and our families and communities) wish to live. It is important for students to explore and develop their ideas, dreams, and aspirations for themselves, their neighbors and families and for the wider communities at local, regional, national, and global levels—a clear overlap with futures studies/education. An essential step in cultivating the critical scientific and technological literacy on which **sociopolitical action depends** is the application of a social and political critique capable of challenging the notion of technological determinism. We can control technology and its environmental and social impact. More significantly, we can control the controllers and redirect technology in such a way that adverse environmental impact is substantially reduced (if not entirely eliminated) and issues of freedom, equality, and justice are kept in the forefront of discussion during the **establishment of policy**.

# 2AC

## ROB

### Hager

#### Policy simulation doesn’t hurt agency---creates changes in bureaucracy

Hager 92 [Carol, J, professor of political science – Bryn Mawr College, “Democratizing Technology: Citizen & State in West German Energy Politics, 1974-1990” *Polity*, Vol. 25, No. 1, p. 45-7]

During this phase, the citizen initiative attempted to overcome its defensive posture and implement an alternative politics. The strategy of legal and technical challenge might delay or even prevent plant construction, but it would not by itself accomplish the broader goal on the legitimation dimension, i.e., democratization. Indeed, it worked against broad participation. The activists had to find a viable means of achieving change. Citizens had proved they could contribute to a substantive policy discussion. Now, some activists turned to the parliamentary arena as a possible forum for an energy dialogue. Until now, parliament had been conspicuously absent as a relevant policy maker, but if parliament could be reshaped and activated, citizens would have a forum in which to address the broad questions of policy-making goals and forms. They would also have an institutional lever with which to pry apart the bureaucracy and utility. None of the established political parties could offer an alternative program. Thus, local activists met to discuss forming their own voting list. These discussions provoked internal dissent. Many citizen initiative members objected to the idea of forming a political party. If the problem lay in the role of parliament itself, another political party would not solve it. On the contrary, parliamentary participation was likely to destroy what political innovations the extraparliamentary movement had made. Others argued that a political party would give the movement an institutional platform from which to introduce some of the grassroots democratic political forms the groups had developed. Founding a party as the parliamentary arm of the citizen movement would allow these groups to play an active, critical role in institutionalized politics, participating in the policy debates while retaining their outside perspective. Despite the disagreements, the Alternative List for Democracy and Environmental Protection Berlin (AL) was formed in 1978 and first won seats in the Land parliament with 7.2 percent of the vote in 1981.43 The founders of the AL were encouraged by the success of newly formed local green parties in Lower Saxony and Hamburg,44 whose evolution had been very similar to that of the West Berlin citizen move-ment. Throughout the FRG, unpopular administrative decisions affect-ing local environments, generally in the form of state-sponsored indus-trial projects, prompted the development of the citizen initiative and ecology movements. The groups in turn focused constant attention on state planning "errors," calling into question not only the decisions themselves, but also the conventional forms of political decision making that produced them.45 Disgruntled citizens increasingly aimed their critique at the established political parties, in particular the federal SPD/ FDP coalition, which seemed unable to cope with the economic, social, and political problems of the 1970s. Fanned by publications such as the Club of Rome's report, "The Limits to Growth," the view spread among activists that the crisis phenomena were not merely a passing phase, but indicated instead "a long-term structural crisis, whose cause lies in the industrial-technocratic growth society itself."46 As they broadened their critique to include the political system as a whole, many grassroots groups found the extraparliamentary arena too restrictive. Like many in the West Berlin group, they reasoned that the necessary change would require a degree of political restructuring that could only be accomplished through their direct participation in parliamentary politics. Green/alternative parties and voting lists sprang up nationwide and began to win seats in local assemblies. The West Berlin Alternative List saw itself not as a party, but as the parliamentary arm of the citizen initiative movement. One member explains: "the starting point for alternative electoral participation was simply the notion of achieving a greater audience for [our] own ideas and thus to work in support of the extraparliamentary movements and initia-tives,"47 including non-environmentally oriented groups. The AL wanted to avoid developing structures and functions autonomous from the citizen initiative movement. Members adhered to a list of principles, such as rotation and the imperative mandate, designed to keep parliamentarians attached to the grassroots. Although their insistence on grassroots democracy often resulted in interminable heated discussions, the participants recognized the importance of experimenting with new forms of decision making, of not succumbing to the same hierarchical forms they were challenging. Some argued that the proper role of citizen initiative groups was not to represent the public in government, but to mobilize other citizens to participate directly in politics themselves; self-determination was the aim of their activity.48 Once in parliament, the AL proposed establishmento f a temporary parliamentaryco mmissiont o studye nergyp olicy,w hichf or the first time would draw all concernedp articipantst ogetheri n a discussiono f both short-termc hoicesa nd long-termg oals of energyp olicy. With help from the SPD faction, which had been forced into the opposition by its defeat in the 1981 elections, two such commissions were created, one in 1982-83 and the other in 1984-85.49T hese commissionsg ave the citizen activists the forum they sought to push for modernizationa nd technicali nnovation in energy policy. Although it had scaled down the proposed new plant, the utility had produced no plan to upgrade its older, more polluting facilities or to install desulfurizationd evices. With proddingf rom the energyc ommission, Land and utility experts began to formulate such a plan, as did the citizen initiative. By exposing administrative failings in a public setting, and by producing a modernization plan itself, the combined citizen initiative and AL forced bureaucratic authorities to push the utility for improvements. They also forced the authorities to consider different technological solutions to West Berlin's energy and environmental problems. In this way, the activists served as technological innovators. In 1983, the first energy commission submitted a list of recommendations to the Land parliament which reflected the influence of the citizen protest movement. It emphasized goals of demand reduction and efficiency, noted the value of expanded citizen participation and urged authorities to "investigate more closely the positive role citizen participation can play in achieving policy goals."50 The second energy commission was created in 1984 to discuss the possibilities for modernization and shutdown of old plants and use of new, environmentally friendlier and cheaper technologies for electricity and heat generation. Its recommendations strengthened those of the first commission.51 Despite the non-binding nature of the commissions' recommendations, the public discussion of energy policy motivated policy makers to take stronger positions in favor of environmental protection. III. Conclusion The West Berlin energy project eventually cleared all planning hurdles, and construction began in the early 1980s. The new plant now conforms to the increasingly stringent environmental protection requirements of the law. The project was delayed, scaled down from 1200 to 600 MW, moved to a neutral location and, unlike other BEWAG plants, equipped with modern desulfurization devices. That the new plant, which opened in winter 1988-89, is the technologically most advanced and environmen-tally sound of BEWAG's plants is due entirely to the long legal battle with the citizen initiative group, during which nearly every aspect of the original plans was changed. In addition, through the efforts of the Alter-native List (AL) in parliament, the Land government and BEWAG formulated a long sought modernization and environmental protection plan for all of the city's plants. The AL prompted the other parliamentary parties to take pollution control seriously. Throughout the FRG, energy politics evolved in a similar fashion. As Habermas claimed, underlying the objections against particular projects was a reaction against the administrative-economic system in general. One author, for example, describes the emergence of two-dimensional protest against nuclear energy: The resistance against a concrete project became understood simul-taneously as resistance against the entire atomic program. Questions of energy planning, of economic growth, of understanding of democracy entered the picture. . . . Besides concern for human health, for security of conditions for human existence and protec-tion of nature arose critique of what was perceived as undemocratic planning, the "shock" of the delayed public announcement of pro-ject plans and the fear of political decision errors that would aggra-vate the problem.52 This passage supports a West Berliner's statement that the citizen initiative began with a project critique and arrived at *Systemkritik*.53 I have labeled these two aspects of the problem the public policy and legitima-tion dimensions. In the course of these conflicts, the legitimation dimen-sion emergd as the more important and in many ways the more prob-lematic. Parliamentary Politics In the 1970s, energy politics began to develop in the direction Offe de-scribed, with bureaucrats and protesters avoiding the parliamentary channels through which they should interact. The citizen groups them-selves, however, have to a degree reversed the slide into irrelevance of parliamentary politics. Grassroots groups overcame their defensive posture enough to begin to formulate an alternative politics, based upon concepts such as decision making through mutual understanding rather than technical criteria or bargaining. This new politics required new modes of interaction which the old corporatist or pluralist forms could not provide. Through the formation of green/alternative parties and voting lists and through new parliamentary commissions such as the two described in the case study, some members of grassroots groups attempted to both operate within the political system and fundamentally change it, to restore the link between bureaucracy and citizenry. Parliamentary politics was partially revived in the eyes of West German grassroots groups as a legitimate realm of citizen participation, an outcome the theory would not predict. It is not clear, however, that strengthening the parliamentary system would be a desirable outcome for everyone. Many remain skeptical that institutions that operate as part of the "system" can offer the kind of substantive participation that grass-roots groups want. The constant tension between institutionalized politics and grassroots action emerged clearly in the recent internal debate between "fundamentalist" and "realist" wings of the Greens. Fundis wanted to keep a firm footing outside the realm of institutionalized politics. They refused to bargain with the more established parties or to join coalition governments. Realos favored participating in institutionalized politics while pressing their grassroots agenda. Only this way, they claimed, would they have a chance to implement at least some parts of their program. This internal debate, which has never been resolved, can be interpreted in different ways. On one hand, the tension limits the appeal of green and alternative parties to the broader public, as the Greens' poor showing in the December 1990 all-German elections attests. The failure to come to agreement on basic issues can be viewed as a hazard of grass-roots democracy. The Greens, like the West Berlin citizen initiative, are opposed in principle to forcing one faction to give way to another. Disunity thus persists within the group. On the other hand, the tension can be understood not as a failure, but as a kind of success: grassroots politics has not been absorbed into the bureaucratized system; it retains its critical dimension, both in relation to the political system and within the groups themselves. The lively debate stimulated by grassroots groups and parties keeps questions of democracy on the public agenda. Technical Debate In West Berlin, the two-dimensionality of the energy issue forced citizen activists to become both participants in and critics of the policy process. In order to defeat the plant, activists engaged in technical debate. They won several decisions in favor of environmental protection, often proving to be more informed than bureaucratic experts themselves. The case study demonstrates that grassroots groups, far from impeding techno-logical advancement, can actually serve as technological innovators. The activists' role as technical experts, while it helped them achieve some success on the policy dimension, had mixed results on the legitimation dimension. On one hand, it helped them to challenge the legitimacy of technocratic policy making. They turned back the Land government's attempts to displace political problems by formulating them in technical terms.54 By demonstrating the fallibility of the technical arguments, activists forced authorities to acknowledge that energy demand was a political variable, whose value at any one point was as much influenced by the choices of policy makers as by independent technical criteria. Submission to the form and language of technical debate, however, weakened activists' attempts to introduce an alternative, goal-oriented form of decision making into the political system. Those wishing to par-ticipate in energy politics on a long-term basis have had to accede to the language of bureaucratic discussion, if not the legitimacy of bureaucratic authorities. They have helped break down bureaucratic authority but have not yet offered a viable long-term alternative to bureaucracy. In the tension between form and language, goals and procedure, the legitima-tion issue persists. At the very least, however, grassroots action challenges critical theory's notion that technical discussion is inimical to democratic politics.55 Citizen groups have raised the possibility of a dialogue that is both technically sophisticated and democratic. In sum, although the legitimation problems which gave rise to grass-roots protest have not been resolved, citizen action has worked to counter the marginalization of parliamentary politics and the technocratic character of policy debate that Offe and Habermas identify. The West Berlin case suggests that the solutions to current legitimation problems may not require total repudiation of those things previously associated with technocracy.56 In Berlin, the citizen initiative and AL continue to search for new, more legitimate forms of organization consistent with their principles. No permanent Land parliamentary body exists to coordinate and con-solidate energy policy making.57 In the 1989 Land elections, the CDU/ FDP coalition was defeated, and the AL formed a governing coalition with the SPD. In late 1990, however, the AL withdrew from the coali-tion. It remains to be seen whether the AL will remain an effective vehi-cle for grassroots concerns, and whether the citizenry itself, now includ-ing the former East Berliners, will remain active enough to give the AL direction as united Berlin faces the formidable challenges of the 1990s. On the policy dimension, grassroots groups achieved some success. On the legitimation dimension, it is difficult to judge the results of grass-roots activism by normal standards of efficacy or success. Activists have certainly not radically restructured politics. They agree that democracy is desirable, but troublesome questions persist about the degree to which those processes that are now bureaucratically organized can and should be restructured, where grassroots democracy is possible and where bureaucracy is necessary in order to get things done. In other words, grassroots groups have tried to remedy the Weberian problem of the marginalization of politics, but it is not yet clear what the boundaries of the political realm should be. It is, however, the act of calling existing boundaries into question that keeps democracy vital. In raising alternative possibilities and encouraging citizens to take an active, critical role in their own governance, the contribution of grassroots environmental groups has been significant. As Melucci states for new social movements in general, these groups mount a "symbolic" challenge by proposing "a different way of perceiving and naming the world."58 Rochon concurs for the case of the West German peace movement, noting that its effect on the public discussion of secur-ity issues has been tremendous.59 The effects of the legitimation issue in the FRG are evident in increased citizen interest in areas formerly left to technical experts. Citizens have formed nationwide associations of environmental and other grassroots groups as well as alternative and green parties at all levels of government. The level of information within the groups is generally quite high, and their participation, especially in local politics, has raised the awareness and engagement of the general populace noticeably.60 Policy concessions and new legal provisions for citizen participation have not quelled grassroots action. The attempts of the established political parties to coopt "green" issues have also met with limited success. Even green parties themselves have not tapped the full potential of public support for these issues. The persistence of legitima-tion concerns, along with the growth of a culture of informed political activism, will ensure that the search continues for a space for a delibera-tive politics in modern technological society.61

#### Their method only fuels the narcissism of academics---proposing concrete political alternatives is necessary

Bryant 12—professor of philosophy at Collin College (Levi, McKenzie Wark: How Do You Occupy an Abstraction?, larvalsubjects.wordpress.com/2012/08/04/mckenzie-wark-how-do-you-occupy-an-abstraction/#more-6320)

In the language of my machine-oriented ontology or onticology, we would say that we only ever encounter local manifestations of hyperobjects, local events or appearances of hyperobjects, and never the hyperobject as such. Hyperobjects as such are purely virtual or withdrawn. They can’t be directly touched. And what’s worse, contrary to Locke’s principle of individuation whereby an individual is individuated by virtue of its location in a particular place and at a particular time, hyperobjects are without a site or place. They are, as Morton says, non-local. This, then, is a central problem, for how do you combat something that is everywhere and nowhere? How do you engage something that is non-local? If an army is over there I can readily target it. If a particular munitions factor is over here, then I can readily target it. But how do we target something that is non-local and that is incorporeal? This is the problem with occupying an abstraction.¶ Second, contemporary capitalism is massively redundant. This, I think, is what Wark is getting at when he speaks of contemporary power as “vectoral”. Under what Wark calls “vector power”, we have configurations of power where attacks at one site have very little impact insofar as flows can simply be re-channeled through another set of nodes in the network. Like a hydra, you cut off one head only to have another head appear in its place. The head can never be cut off once and for all because there is no single head.¶ The crisis of contemporary politics is thus the crisis of the erasure of site. In the age of hyperobjects, we come to dwell in a world where there is no clear site of political antagonism and therefore no real sense of how and where to engage.¶ Here I’m also inclined to say that we need to be clear about system references in our political theorizing and action. We think a lot about the content of our political theorizing and positions, **but** I **don’t** think we **think** a lot **about how our political theories are supposed to actually act in the world**. As a result, much contemporary leftist political theory ends up in a **performative contradiction**. It claims, following Marx, that it’s aim is not to represent the world but to change it, **yet it never escapes the burrows of academic** journals, **conferences,** and presses to actually do so. Like the Rat-Man’s obsessional neurosis where his actions in returning the glasses were actually designed to fail, **there seems to be a built in tendency in** these forms of **theorization to unconsciously organize their own failure**. And here I can’t resist suggesting that this comes as no surprise given that, in Lacanian terms, the left is the position of the hysteric and as such **has “a desire for an unsatisfied desire”.** In such circumstances **the worst thing consists in getting what you want**. We on the left need to traverse our fantasy so as to avoid this sterile and self-defeating repetition; and **this entails shifting from the position of political critique (hysterical protest), to political construction– actually envisioning and building alternatives.¶** So what’s the issue with system-reference? The great autopoietic sociological systems theorist, Niklas Luhmann, makes this point nicely. For Luhmann, there are intra-systemic references and inter-systemic references. Intra-systemic references refer to processes that are strictly for the sake of reproducing or maintaining the system in question. Take the example of a cell. A cell, for-itself, is not for anything beyond itself. The processes that take place within the cell are simply for continuing the existence of the cell across time. While the cell might certainly emit various chemicals and hormones as a result of these processes, from its own intra-systemic perspective, it is not for the sake of affecting these other cells with those hormones. They’re simply by-products. Capitalism or economy is similar. Capitalists talk a good game about benefiting the rest of the world through the technologies they produce, the medicines they create (though usually it’s government and universities that invent these medicines), the jobs they create, etc., but really the sole aim of any corporation is identical to that of a cell: to endure through time or reproduce itself through the production of capital. This production of capital is not for anything and does not refer to anything outside itself. These operations of capital production are intra-systemic. By contrast, inter-systemic operations would refer to something outside the system and its auto-reproduction. They would be for something else.¶ Luhmann argues that every autopoietic system has this sort of intra-systemic dimension. Autopoietic systems are, above all, organized around maintaining themselves or enduring. **This raises serious questions about academic political theory.** Academia is an autopoietic system. As an autopoietic system, it aims to endure, reproduce itself, etc. It must engage in operations or procedures from moment to moment to do so. These operations consist in the production of students that eventually become scholars or professors, the writing of articles, the giving of conferences, the production of books and classes, etc. All of these are operations through which the academic system maintains itself across time. **The horrifying consequence of this is that the reasons we might give for why we do what we do might** (and often) **have little to do with what’s actually taking place in system continuance**. We say that our articles are designed to demolish capital, inequality, sexism, homophobia, climate disaster, etc., but if we look at how this system actually functions we suspect that the references here are only intra-systemic, **that they are only addressing the choir or other academics, that they are only about maintaining that system, and that they never proliferate through the broader world**. Indeed, our very style is often a big fuck you to the rest of the world as it requires expert knowledge to be comprehended, thereby insuring that it can have no impact on broader collectives to produce change. Seen in this light, it becomes clear that **our talk about changing the world is a sort of alibi, a sort of rationalization, for a very different set of operations that are taking place**. Just as the capitalist says he’s trying to benefit the world, the academic tries to say he’s trying to change the world when all he’s really doing is maintaining a particular operationally closed autopoietic system. How to break this closure is a key question for any truly engaged political theory. And part of breaking that closure will entail eating some humble pie. Adam Kotsko wrote a wonderful and hilarious post on the absurdities of some political theorizing and its self-importance today. We’ve failed horribly with university politics and defending the humanities, yet in our holier-than-thou attitudes we call for a direct move to communism. **Perhaps we need to reflect a bit on ourselves** and our strategies and what political theory should be about.¶ Setting all this aside, I think there’s a danger in Wark’s claims about abstraction (though I think he’s asking the right sort of question). The danger in treating hyperobjects like capitalism as being everywhere and nowhere is that our ability to act becomes paralyzed. As a materialist, I’m committed to the thesis that everything is ultimately material and requires some sort of material embodiment. If that’s true, it follows that there are points of purchase on every object, even where that object is a hyperobject. This is why, given the current form that power takes or the age of hyperobjects, I believe that forms of theory such as new materialism, object-oriented ontology, and actor-network theory are more important than ever (clearly the Whiteheadians are out as they see everything as internally related, as an organism, and therefore have no way of theorizing change and political engagement; they’re quasi-Hegelian, justifying even the discord in the world as a part of “god’s” selection and harmonization of intensities).¶ The important thing to remember is that hyperobjects like capitalism are unable to function without a material base. They require highways, shipping routes, trains and railroads, fiber optic cables for communication, and a host of other things besides. Without what Shannon Mattern calls “infrastructure”, it’s impossible for this particular hyperobject exists. Every hyperobject requires its arteries. Information, markets, trade, require the paths along which they travel and capitalism as we know it today would not be possible without its paths. The problem with so much political theory today is that it focuses on the semiosphere in the form of ideologies, discourses, narratives, laws, etc., ignoring the arteries required for the semiosphere to exercise its power. For example, we get OWS standing in front of Wall Street protesting– engaging in a speech act –yet **one wonders if speech is an adequate way of addressing the sort of system we exist in.** Returning to system’s theory, is the system of capital based on individual decisions of bankers and CEO’s, or does the system itself have its own cognition, it’s own mode of action, that they’re ineluctably trapped in? Isn’t there a sort of humanist prejudice embodied in this form of political engagement? It has value in that it might create larger collectives of people to fight these intelligent aliens that live amongst us (markets, corporations, etc), but it doesn’t address these aliens themselves because it doesn’t even acknowledge their existence.¶ What we need is a politics adequate to hyperobjects, and that is above all a politics that targets arteries. OOO, new materialism, and actor-network theory are often criticized for being “apolitical” by people who are fascinated with political declarations, who are obsessed with showing that your papers are in order, that you’ve chosen the right team, and that see critique and protest as the real mode of political engagement. **But it is not clear what difference these theorists are making and how they are escaping intra-systemic self-reference and auto-reproduction**. But the message of these orientations is “to the things themselves!”, “to the assemblages themselves!” “Quit your macho blather about where you stand, and actually map power and how it exercises itself!” And part of this re-orientation of politics, if it exists, consists in rendering deconstruction far more concrete. Deconstruction would no longer show merely the leaks in any system and its diacritical oppositions, it would go to the things themselves. What does that mean? It means that deconstruction would practice onto-cartography or identify the arteries by which capitalism perpetuates itself and find ways to block them. You want to topple the 1% and get their attention? Don’t stand in front of Wall Street and bitch at bankers and brokers, occupy a highway. Hack a satellite and shut down communications. Block a port. Erase data banks, etc. Block the arteries; block the paths that this hyperobject requires to sustain itself. This is the only way you will tilt the hands of power and create bargaining power with government organs of capital and corporations. You have to hit them where they live, in their arteries. Did anyone ever change their diet without being told that they would die? Your critique is an important and indispensable step, but **if you really wish to produce change you need to find ways to create heart attacks and aneurysms. Short of that, your activity is just masturbation.** But this requires coming to discern where the arteries are and doing a little less critique of cultural artifacts and ideologies. Yet choose your targets carefully. The problem with the Seattle protests was that they chose idiotic targets and simply acted on impotent rage. A window is not an artery. It doesn’t organize a flow of communication and capital. It’s the arteries that you need to locate. I guess this post will get Homeland Security after me.

#### Voting against “poor scholarship” changes nothing—only the perm allows for effective change

Wagner 5 (Anne, “Unsettling the academy: working through the challenges of anti-racist pedagogy” Race Ethnicity and Education Vol. 8, No. 3, September 2005, pp. 261–275)

Another way in which the pedagogue may begin to establish the climate of the class involves stressing the importance of both acknowledging fears and anxieties and of speaking from one’s own experiences. A working assumption may be that racism affects everyone and dealing with the impact of racism is a lifelong process, one with which the educator, too, is still engaged (Romney et al., 1992). Hence, as many people are only learning to overcome the racism with which they have been socialized their entire lifetime, scathing critiques and aggressive attacks will not be rewarded by the professor. Too often in academia, students equate such practices with superior scholarship, as they have never truly learned how to engage in meaningful critical dialogue. As Paulo Friere (1970) has written, dialogue is central to the project of education. Only through such an exchange of ideas can we hope to work towards transformative change. However, as noted previously, we can not taker for granted the fact that students will enter the classroom with such skills. Often, attacks are motivated by a desire to demonstrate one’s mastery of antiracism, which is demonstrated by verbally eviscerating another student. In such instances, it becomes an individual pursuit of ‘excellence’, where one may seek to demonstrate their competence by undermining and attacking another. Clearly, such practices hinder the development of a collaborative learning project and may unalterably affect individual student’s willingness to take further risks, causing some to retreat into silence as a protective measure. In fact, numerous researchers have reported that concerns about being labeled ‘racist’ have resulted in a culture of fear, which leaves many students feeling estranged and silenced (Martin, 2000; Schick, 2000). Hence, I suggest that misconceptions regarding academic dialogue and debate need to be explicitly addressed at the outset, to avoid such problematic encounters. Given the contentious nature of the material, it is crucial that we prepare students to succeed in the class. All too often, I have witnessed scenes in classrooms where students are ill-equipped to deal with differing perspectives and the resulting recriminations and emotionally charged confrontations result in permanent rifts, which cause some students to withdraw, either in anger or fear, often in an attempt to protect themselves from what they perceive to be the potential for further attacks. Aggressive critiques are not only unproductive, they also quickly dissolve any sense of community which may have been established. Consequently, explicating expectations for classroom behaviour will also be an important tool for establishing a sense that a communal project is being undertaken. In this way, the process of learning is framed as being of utmost importance, rather than transcending all tensions and contradictions, to arrive at universal truths.

### AT: Method First

#### Prior questions fail and paralyze politics

Owen 2 [David Owen, Reader of Political Theory at the Univ. of Southampton, Millennium Vol 31 No 3 2002 p. 655-7]

Commenting on the ‘philosophical turn’ in IR, Wæver remarks that ‘[a] frenzy for words like “epistemology” and “ontology” often signals this philosophical turn’, although he goes on to comment that these terms are often used loosely.4 However, loosely deployed or not, it is clear that debates concerning ontology and epistemology play a central role in the contemporary IR theory wars. In one respect, this is unsurprising since it is a characteristic feature of the social sciences that periods of disciplinary disorientation involve recourse to reflection on the philosophical commitments of different theoretical approaches, and there is no doubt that such reflection can play a valuable role in making explicit the commitments that characterise (and help individuate) diverse theoretical positions. Yet, such a philosophical turn is not without its dangers and I will briefly mention three before turning to consider a confusion that has, I will suggest, helped to promote the IR theory wars by motivating this philosophical turn. The first danger with the philosophical turn is that it has an inbuilt tendency to prioritise issues of ontology and epistemology over explanatory and/or interpretive power as if the latter two were merely a simple function of the former. But while the explanatory and/or interpretive power of a theoretical account is not wholly independent of its ontological and/or epistemological commitments (otherwise criticism of these features would not be a criticism that had any value), it is by no means clear that it is, in contrast, wholly dependent on these philosophical commitments. Thus, for example, one need not be sympathetic to rational choice theory to recognise that it can provide powerful accounts of certain kinds of problems, such as the tragedy of the commons in which dilemmas of collective action are foregrounded. It may, of course, be the case that the advocates of rational choice theory cannot give a good account of why this type of theory is powerful in accounting for this class of problems (i.e., how it is that the relevant actors come to exhibit features in these circumstances that approximate the assumptions of rational choice theory) and, if this is the case, it is a philosophical weakness—but this does not undermine the point that, for a certain class of problems, rational choice theory may provide the best account available to us. In other words, while the critical judgement of theoretical accounts in terms of their ontological and/or epistemological sophistication is one kind of critical judgement, it is not the only or even necessarily the most important kind. The second danger run by the philosophical turn is that because prioritisation of ontology and epistemology promotes theory-construction from philosophical first principles, it cultivates a theory-driven rather than problem-driven approach to IR. Paraphrasing Ian Shapiro, the point can be put like this: since it is the case that there is always a plurality of possible true descriptions of a given action, event or phenomenon, the challenge is to decide which is the most apt in terms of getting a perspicuous grip on the action, event or phenomenon in question given the purposes of the inquiry; yet, from this standpoint, ‘theory-driven work is part of a reductionist program’ in that it ‘dictates always opting for the description that calls for the explanation that flows from the preferred model or theory’.5 The justification offered for this strategy rests on the mistaken belief that it is necessary for social science because general explanations are required to characterise the classes of phenomena studied in similar terms. However, as Shapiro points out, this is to misunderstand the enterprise of science since ‘whether there are general explanations for classes of phenomena is a question for social-scientific inquiry, not to be prejudged before conducting that inquiry’.6 Moreover, this strategy easily slips into the promotion of the pursuit of generality over that of empirical validity. The third danger is that the preceding two combine to encourage the formation of a particular image of disciplinary debate in IR—what might be called (only slightly tongue in cheek) ‘the Highlander view’—namely, an image of warring theoretical approaches with each, despite occasional temporary tactical alliances, dedicated to the strategic achievement of sovereignty over the disciplinary field. It encourages this view because the turn to, and prioritisation of, ontology and epistemology stimulates the idea that there can only be one theoretical approach which gets things right, namely, the theoretical approach that gets its ontology and epistemology right. This image feeds back into IR exacerbating the first and second dangers, and so a potentially vicious circle arises.

### O’Kane

#### Democracy checks

**O’Kane 97 –** Prof Comparative Political Theory, U Keele (Rosemary, “Modernity, the Holocaust and politics,” Economy and Society 26:1, p 58-9)

Modern bureaucracy is not 'intrinsically capable of genocidal action' (Bauman 1989: 106). Centralized state coercion has no natural move to terror. In the explanation of modern genocides it is chosen policies which play the greatest part, whether in effecting bureaucratic secrecy, organizing forced labour, implementing a system of terror, harnessing science and technology or introducing extermination policies, as means and as ends. As Nazi Germany and Stalin's USSR have shown, furthermore, those chosen policies of genocidal government turned away from and not towards modernity. The choosing of policies, however, is not independent of circumstances. An analysis of the history of each case plays an important part in explaining where and how genocidal governments come to power and analysis of political institutions and structures also helps towards an understanding of the factors which act as obstacles to modern genocide. But it is not just political factors which stand in the way of another Holocaust in modern society. Modern societies have not only pluralist democratic political systems but also economic pluralism where workers are free to change jobs and bargain wages and where independent firms, each with their own independent bureaucracies, exist in competition with state-controlled enterprises. In modern societies this economic pluralism both promotes and is served by the open scientific method. By ignoring competition and the capacity for people to move between organizations whether economic, political, scientific or social, Bauman overlooks crucial but also very 'ordinary and common' attributes of truly modern societies. It is these very ordinary and common attributes of modernity which stand in the way of modern genocides.

## Risk K

### AT: Paradox of Risk/Risk Good

#### Public debate solves fear-mongering—rejecting predictions cedes the political to technocratic planning

Kurasawa 4 – Prof Sociology, York (Fuyuki, Cautionary Tales, Constellations 11.4)

State and market institutions may seek to produce a culture of fear by deliberately stretching interpretations of reality beyond the limits of the plausible so as to exaggerate the prospects of impending catastrophes, or yet again, by intentionally promoting certain prognoses over others for instrumental purposes. Accordingly, regressive dystopias can operate as Trojan horses advancing political agendas or commercial interests that would otherwise be susceptible to public scrutiny and opposition. Instances of this kind of manipulation of the dystopian imaginary are plentiful: the invasion of Iraq in the name of fighting terrorism and an imminent threat of use of ‘weapons of mass destruction’; the severe curtailing of American civil liberties amidst fears of a collapse of ‘homeland security’; the neoliberal dismantling of the welfare state as the only remedy for an ideologically constructed fiscal crisis; the conservative expansion of policing and incarceration due to supposedly spiraling crime waves; and so forth. Alarmism constructs and codes the future in particular ways, producing or reinforcing certain crisis narratives, belief structures, and rhetorical conventions. As much as alarmist ideas beget a culture of fear, the reverse is no less true. If fear-mongering is a misappropriation of preventive foresight, resignation about the future represents a problematic outgrowth of the popular acknowledgment of global perils. Some believe that the world to come is so uncertain and dangerous that we should not attempt to modify the course of history; the future will look after itself for better or worse, regardless of what we do or wish. One version of this argument consists in a complacent optimism perceiving the future as fated to be better than either the past or the present. Frequently accompanying it is a self-deluding denial of what is plausible (‘the world will not be so bad after all’), or a naively Panglossian pragmatism (‘things will work themselves out in spite of everything, because humankind always finds ways to survive’).37 Much more common, however, is the opposite reaction, a fatalistic pessimism reconciled to the idea that the future will be necessarily worse than what preceded it. This is sustained by a tragic chronological framework according to which humanity is doomed to decay, or a cyclical one of the endless repetition of the mistakes of the past. On top of their dubious assessments of what is to come, alarmism and resignation would, if widely accepted, undermine a viable practice of farsightedness. Indeed, both of them encourage public disengagement from deliberation about scenarios for the future, a process that appears to be dangerous, pointless, or unnecessary. The resulting ‘depublicization’ of debate leaves dominant groups and institutions (the state, the market, techno-science) in charge of sorting out the future for the rest of us, thus effectively producing a heteronomous social order. How, then, can we support a democratic process of prevention from below? The answer, I think, lies in cultivating the public capacity for critical judgment and deliberation, so that participants in global civil society subject all claims about potential catastrophes to examination, evaluation, and contestation.

#### Risk Analysis solves VTL

Langford 3 (Ian, Centre for Social and Economic Research on the Global Environment School of Environmental Sciences University of East Anglia and University College London, AN EXISTENTIAL APPROACH TO RISK PERCEPTION)

In contemporary western societies, asking questions such as “Why do we live?” and “What is the meaning of life?” are often seen as symbols of weakness, depression, self indulgence or an inability to simply get on with life. Yet, as Camus stated, these are the most urgent questions of all, and we are all beings seeking meaning, in whatever form (Heidegger, 1966). Life in technologically- oriented Western societies often provides comfort, excitement and stimulus, but fails to provide meaning (Giddens, 1991). On an individual level, the psychiatrist Carl Jung (1966) noted that approximately one-third of all his patients were suffering not from a specific neurosis, but the senselessness and aimlessness of their lives. Viktor Frankl (1969) found that 20 percent of neuroses in clinical practice are ‘noogenic’, i.e. deriving from a lack of meaning in life. Maddi (1967) defined existential neurosis as the chronic inability to believe in the truth, importance, usefulness or interest value of anything one does or can imagine doing. Hobbs (1962) noted that contemporary neuroses are characterized not so much by repression and conversion (lack of insight) but by lack of a sense of purpose and meaning.

Risk can provide meaning. In a world where the direct and immediate threats of disease and dying are low, such as infection and war, but indirect and delayed threats are relatively high, such as cancer and unemployment, focusing on certain aspects of risk can give a purpose in life. Different individuals and social groups define this challenge in different ways, from individualistic striving for success to mass protest movements against environmental degradation.

#### No race to the bottom---our predictions are effective and their approach causes paralysis

Dr. Sebastian L. V. Gorka et al 12, Director of the Homeland Defense Fellows Program at the College of International Security Affairs, National Defense University, teaches Irregular Warfare and US National Security at NDU and Georgetown, et al., Spring 2012, “The Complexity Trap,” Parameters, <http://www.carlisle.army.mil/USAWC/parameters/Articles/2012spring/Gallagher_Geltzer_Gorka.pdf>

We live in a world of unprecedented complexity, or so we are told. President Obama’s words above echo an increasingly common narrative in the American foreign policy and national security establishments: the forces of globalization, rising nonstate actors, irregular conflict, and proliferating destructive technologies have made crafting sound national security strategy more elusive than ever before. 2 If “strategy is the art of creating power” by specifying the relationship among ends, ways, and means, 3 then the existence of unprecedented complexity would seem to make this art not only uniquely difficult today but also downright dangerous, inasmuch as choosing any particular course of action would preclude infinitely adaptive responses in the future. As Secretary of Defense Robert Gates memorably described, the pre-9/11 challenges to American national security were “amateur night compared to the world today.” 4 And as former State Department Director of Policy Planning Anne-Marie Slaughter recently stated, there is a “universal awareness that we are living through a time of rapid and universal change,” one in which the assumptions of the twentieth century make little sense. 5 The “Mr. Y” article that occasioned her comments argued that, in contrast to the “closed system” of the twentieth century that could be controlled by mankind, we now live in an “open system” defined by its supremely complex and protean nature. 6 Unparalleled complexity, it seems, is the hallmark of our strategic age.¶ These invocations of complexity permeate today’s American national security documents and inform Washington’s post-Cold War and -9/11 strategic culture. The latest Quadrennial Defense Review begins its analysis with a description of the “complex and uncertain security landscape in which the pace of change continues to accelerate. Not since the fall of the Soviet Union or the end of World War II has the international terrain been affected by such farreaching and consequential shifts.” 7 In a similar vein, the National Intelligence Council’s Global Trends 2025 argues that the international system is trending towards greater degrees of complexity as power is diffused and actors multiply. 8 The Director of National Intelligence’s Vision 2015 terms our time the “Era of Uncertainty,” one “in which the pace, scope, and complexity of change are increasing.” 9 Disturbingly, the younger generation of foreign policy and national security professionals seems to accept and embrace these statements declaiming a fundamental change in our world and our capacity to cope with it. The orientation for the multi-thousand-member group of Young Professionals in Foreign Policy calls “conquering complexity” the fundamental challenge for the millennial generation. Complexity, it appears, is all the rage. ¶ We challenge these declarations and assumptions—not simply because they are empirically unfounded but, far more importantly, because they negate the very art of strategy and make the realization of the American national interest impossible. We begin by showing the rather unsavory consequences of the current trend toward worshipping at complexity’s altar and thus becoming a member of the “Cult of Complexity.” Next, we question whether the world was ever quite as simple as today’s avowers of complexity suggest, thus revealing the notion of today’s unprecedented complexity to be descriptively false. We then underscore that this idea is dangerous, given the consequences of an addiction to complexity. Finally, we offer an escape from the complexity trap, with an emphasis on the need for prioritization in today’s admittedly distinctive international security environment. Throughout, we hope to underscore that today’s obsession with complexity results in a dangerous denial of the need to strategize.

### Empirics Good

#### Empiricism good --- best model for decisionmaking

Sil 2k—pol sci, U Penn (Rudra, Beyond Boundaries, ed Sil and Doherty, 148-9)

The differences among the ontologies of various positivists at one end, and the different degrees of subjectivism among various interpretive theorists at the other end, both suggest that moving a little further away from each extreme might get us closer to a "middle ground" on the issue of an objective/subjective ontology of social reality. This "middle ground" may be best exemplified in Max Weber's position on the problem of subjectivity. Although there are contending perspectives on where the "real" Weber came down on this question, 13 Weber is clear that his empirical analysis is not intended to support analytic laws or even provide exhaustive causal explanations of all aspects of a social phenomenon. In his famous essay, "'Objectivity' in Social Science and Social Policy," in addition to placing quotation marks around the word ''objectivity," he states that "as far back as we may go into the gray mist of the far-off past, the reality to which the laws apply always remains equally individual, equally undeducible from laws." Weber goes on to note that his method of classification through "ideal-types" are designed not to objectively capture general laws, but only to generate a better understanding of an "infinitely complex" reality through the "analytic accentuation" of certain aspects on the basis of the investigator's own interests.14 In another essay on "Basic Sociological Terms," Weber argues that subjectivity does not rule out the possibility of a systematic investigation into certain aspects of a phenomena because " 'recapturing an experience' is . . . not an absolute precondition for its interpretation."15 It is easy to interpret these statements as indicative that Weber was ambivalent in addressing the problem of subjectivity, and yet the ambivalence itself might be indicative of a pragmatic intermediate position that is no less compelling than the more definitive positions staked out by positivists and relativists. Clearly, Weber is hardly being a radical subjectivist or relativist when he argues that interpretation does not presuppose "recapturing" an experience or when he constructs "ideal types" to categorize social phenomena; at the same time, he is cautious about inferring too much from social patterns or regularities given that these regularities are abstracted from a complex reality by individual social scientists primarily on the basis of what is of interest to them. Taking the lead from this interpretation of Weber's ontology, we can identify an approximate "center" on the problem of objective/subjective reality in social analysis reflected in the following proposition: While social reality is subjectively experienced and socially constructed, it is sufficiently "intersubjective" to permit the investigator opportunities to extract a generalizable "interpretive understanding" of the meanings that individuals attach to actions and subjective experiences in different historical and cultural contexts. Such an "intersubjective" ontology, while hardly unique to Weberians, leaves the door open to a wider variety of social analysis and enables all but the most extreme objectivists and subjectivists to communicate with one another in attempting to better grasp aspects of social reality.

## Paths of Glory

### AT: Consumption/Use Less Energy

#### Sustainability is impossible and causes extinction in the short term---market incentives are key

Barnhizer 6 -- Professor of Law, Cleveland State University. (David, Waking from Sustainability's "Impossible Dream": The Decisionmaking Realities of Business and Government, 18 Geo. Int'l Envtl. L. Rev. 595, Lexis)

Medieval alchemists sought unsuccessfully to discover the process that would enable them to turn base metal into gold--assigning the name "Philosopher's Stone" to what they sought. The quest was doomed to failure. Just as a "sow's ear" cannot become a "silk purse," a base metal cannot become gold. Sustainability is impossible for the same reasons. It asks us to be something we are not, both individually and as a political and economic community. **It is impossible to convert humans into the** wise, **selfless, and** nearly **omniscient creatures** required to build and operate a system that incorporates sustainability. Even if it were ultimately possible (and it is not), **it would take** many **generations** to achieve **and we are running out of time.**¶There is an enormous gap among what we claim we want to do, what we actually want to do, and our ability to achieve our professed goals. **I admit to an absolute distrust of** cheap and easy proclamations of lofty ideals **and commitments to** voluntary or unenforceable **codes of practice**. The only thing that counts is the actor's actual behavior. For most people, that **behavior is shaped by self-interest** determined by the opportunity to benefit or to avoid harm. In the economic arena this means that if a substantial return can be had without a high risk of significant negative consequences, the decision will be made to seek the benefit. It is the reinvention of Hardin's Tragedy of the Commons. n1¶ This essay explores the nature of human decisionmaking and motivation within critical systems. These systems include business and governmental decisionmaking with a focus on environmental and social areas of emerging crisis where the consequence of acting unwisely or failing to act wisely produces large-scale harms for both human and natural systems. The analysis begins by suggesting that nothing humans create is "sustainable." Change is inevitable and [\*597] irresistible whether styled as systemic entropy, Joseph Schumpeter's idea of a regenerative "creative destruction," or Nikolai Kondratieff's "waves" of economic and social transformation. n2¶ Business entities and governmental decisionmakers play critical roles in both causing environmental and social harms and avoiding those consequences. Some have thought that the path to avoiding harm and achieving positive benefits is to develop codes of practice that by their language promise that decisionmakers will behave in ways consistent with the principles that have come to be referred to as "**sustainability**." That belief **is a delusion--an "impossible dream**." Daniel Boorstin once asked: "Have we been doomed to make our dreams into illusions?" n3 He adds: "An illusion . . . is an image we have mistaken for reality. . . . [W]e cannot see it is not fact." n4 Albert Camus warns of the inevitability of failing to achieve unrealistic goals and the need to become more aware of the limited extent of our power to effect fundamental change. He urges that we concentrate on devising **realistic strategies** and behaviors that allow us to be effective in our actions. n5¶ As companies are expected to implement global codes of conduct such as the U.N. Global Compact and the Organisation for Economic Co-operation and Development's (OECD) Guidelines for Multinational Enterprises, n6 and governments [\*598] and multilateral institutions supposedly become more concerned about limiting the environmental and social impacts of business decisionmaking, it may be useful to consider actual behavior related to corporate and governmental responses to codes of practice, treaties, and even national laws. Unfortunately, business, government, and multilateral institutions have poor track records vis-a-vis conformity to such codes of practice and treaties.¶ **Despite good intentions, empty** dreams and **platitudes may be counterproductive**. This essay argues that the ideal of sustainability as introduced in the 1987 report of the Brundtland Commission and institutionalized in the form of Agenda 21 at the 1992 Rio Earth Summit is false and counterproductive. The ideal of sustainability assumes that we are almost god-like, capable of perceiving, integrating, monitoring, organizing, and controlling our world. These assumptions create an "impossible" character to the "dream" of sustainability in business and governmental decisionmaking.¶ Sustainability of the Agenda 21 kind is a utopian vision **that is the enemy of the possible and the good.** The problem is that while on paper we can always sketch elegant solutions that appear to have the ability to achieve a desired utopia, such solutions work "if only" everyone will come together and behave in the way laid out in the "blueprint." n7 Humans should have learned from such grand misperceptions as the French Enlightenment's failure to accurately comprehend the quality and limits of human nature or Marxism's flawed view of altruistic human motivation that **the "if only" is an impossibly utopian reordering of human nature we will never achieve**. n8¶ [\*599] A critical defect in the idea of sustainable development is that it continues the flawed assumptions about human nature and motivation that provided the foundational premises of Marxist collectivism and centralized planning authorities. n9 Such perspectives inject rigidity and bureaucracy into a system that requires monitoring, flexibility, adaptation, and accountability. But, in criticizing the failed Marxist-Leninist form of organization, my argument should not be seen as a defense of supposed free market capitalism. Like Marxism, a true free market capitalism does not really exist.¶ The factors of greed and self interest, limited human capacity, inordinate systemic complexity, and the power of large-scale driving forces beyond our ability to control lead to the unsustainability of human systems. **Human self-interest is an** insurmountable barrier **that can be affected** to a degree **only by effective laws, the promise of significant financial** or career **returns, or fear of consequences.** The only way to change the behavior of business and governmental decisionmakers is through the use of the "carrot" and the "stick." n10 Yet even this approach can only be achieved incrementally with limited positive effects.

#### Consumption and consumerism are inevitable and build ethical democratic solidarity

Cohen 2 (Patricia, Writer for the New York Times, citing James B. Twitchell, Professor of English at the University of Florida, “In Defense Of Our Wicked, Wicked Way”, The New York Times, July 7, http://www.clas.ufl.edu/users/jtwitche/nytimesarticle.pdf)

"I CAN stand here and look at this for hours," said James B. Twitchell as he parked himself in front of the bottled water section in City Market, just past the jars of $30-per-pound teas and behind the eight-foot display of imported olive oils. Mr. Twitchell, a professor of English at the University of Florida in Gainesville, specializes in the Romantic poets, but his real obsession is shopping. Given the choice of reading literary theorists like Foucault or gazing at shelves stacked with artfully shaped bottles of water piled up like Jay Gatsby's beautifully tailored shirts, he would quickly choose the latter. "There is more that I can sustain myself with at the water aisle than in all of modern criticism," he said. In a series of books, the latest of which is "Living It Up: Our Love Affair With Luxury" (Columbia University Press), Mr. Twitchell has detailed the consumption habits of Americans with all the scholarly delight of a field anthropologist who has discovered the secret courting rituals of a remote tribe. He is exquisitely attuned to the subtle gradations of status conferred by the labels on what people wear, eat, drink, drive and freeze ice cubes in. And he is not alone. Whether prompted by the 90's spendathon or the endless fascination not only with shopping, but with reading about shopping, a new title by an academic or journalist on the subject appears practically every week. Burlington, where Mr. Twitchell grew up and where he now spends summers, was singled out by David Brooks in his wickedly funny "Bobos in Paradise" as a model Latte Town, a city that has perfectly reconciled the mercenary instincts of the bourgeoisie with the artistic spirit of the bohemians to create an upscale consumer culture. What distinguishes Mr. Twitchell's study of excessive consumerism, though, is that he applauds it. To him, Evian and Pellegrino, Vermont Pure and Dasani are evidence of what could be called his trickledown theory of luxury: that the defining characteristic of today's society is the average person's embrace of unnecessary consumption, superficial indulgence, wretched excess and endless status-seeking. Oh, earthly paradise! Once defined by exclusiveness, luxury is now available -- whether in the form of limited-edition coffee at Starbucks or Michael Graves tea kettles at Target -- to all. And that, Mr. Twitchell maintains, is a good thing. Sure, he argues in his book, buying essentially useless luxury items "is one-dimensional, shallow, ahistorical, without memory and expendable. **But it is also strangely democratic and unifying. If what you want is peace on earth, a unifying system that transcends religious, cultural and caste differences**, well, whoops!, **here it is**. The Global Village is not the City on the Hill, not quite the Emerald City, and certainly not quite what millennial utopians had in mind, but it is closer to equitable distribution of rank than what other systems have provided." That is, to say the least, a minority report. For centuries, philosophers, artists and clerics railed against luxury. Ecclesiastical courts forbade most people from eating chocolate, drinking coffee or wearing colors like Prussian blue and royal purple -- "luxuria" that signaled living above one's God-ordered place. Thorstein Veblen offered the first modern critique of "conspicuous consumption" in his 1899 treatise "The Theory of the Leisure Class." Post-World War II social critics and economists extended Veblen's critique to the expanding middle class. John Kenneth Galbraith warned in "The Affluent Society" of the binge afflicting the postwar generation. Unwitting consumers, he said, were essentially suckered by admen and salesmen into spending money on things they didn't need. In his 1970 study "The Cultural Contradictions of Capitalism" Daniel Bell argued that "the culture was no longer concerned with how to work and achieve, but with how to spend and enjoy." This trend, he warned, could end up undermining the very work ethic that made capitalism function. That, obviously, did not happen. If anything people worked more so they could spend more. In "The Overspent American," Juliet B. Schor noted that people no longer compared themselves with others in the same income bracket, but with the richer and more famous they saw on television, propelling them to spend more than they could afford. To Mr. Twitchell, the naysayers are scolds and spoilsports. Indoor plumbing, sewing machines, dishwashers, college educations, microwaves, coronary bypasses, birth control and air travel all began as luxury items for the wealthy. Nor are buyers mindlessly duped by canny advertisers into buying items they don't really want, he said. Quite the opposite. They enjoy the sensual feel of an Hermes silk tie, the briny delicacy of Petrossian caviar or simply the sensation of indulging themselves. These things may not bring happiness, but neither does their absence from the lives of people too poor to afford them. It may seem an odd moment to champion luxury. The spectacular boom of the 90's now looks as if it was partly built on spectacular sleight of hand, with Enron, Global Crossing, Adelphia and WorldCom all recently admitting that billions in reported profits were nonexistent. The moment seems ripe for a chastened culture to repent its indulgences. Reassessing the get-and-spend ethic -- not defending consumerism -- might well be the defining current of the next few years. The problem with Mr. Twitchell's view, said Robert H. Frank, author of "Luxury Fever," is that our sense of what we need to live comfortably keeps spiraling upward. It is not that luxury spending isn't good for particular individuals, but that it is bad for society overall. "It's like when everybody stands up for a better view, you don't see better than before," Mr. Frank said from his home in Ithaca. There's a lot of waste in luxury spending. Instead of building safer roads or providing better health care, we are spending that money on bigger diamonds and faster cars. Mr. Twitchell is unpersuaded, however. Walking down Church Street, Burlington's busy pedestrian mall, he pointed out the transformation that the consumer culture has wrought in his hometown. Lean and tanned, with cropped gray hair and rounded tortoise-shell glasses, Mr. Twitchell looks a bit like Dennis the Menace's father after Dennis has grown up, moved across the country and given his old man a few years to recover. "Church Street once serviced needs, now it services desires," Mr. Twitchell said. The optician's shop is gone, and so is Sears and JCPenney. He pointed out the Ann Taylor store, where the Masonic temple used to be. A chic French children's store sits in the old bank. "The key to modern luxe is that most of us can have a bit of it on the plate," Mr. Twitchell said. "I can't own a Lexus, but I can rent one. I can't go to Bermuda for a winter, but I can have a time share for a weekend. I don't own a yacht but I'm taking a Princess cruise." The process of democratization is mirrored in Mr. Twitchell's family history. His great-grandfatherAndrew A. Buell made his fortune building wooden boxes from Adirondack lumber. Driving up Lodge Road to "the hill," where Mr. Buell built a red stone Romanesque mansion with a copper-topped tower, Mr. Twitchell passed the Burlington Country Club, which his grandfather Marshall Coleman Twitchell helped found. The family's sprawling former home is now a women's dormitory, and the surrounding 66-acre estate serves as the University of Vermont's Redstone campus. A couple of blocks from the hilltop, both in location and status, is the relatively modest white wooden house that Mr. Twitchell, thes son of Marshall Coleman Twitchell Jr., an ophthalmologist, and his sisters grew up in. At that time, said Mr. Twitchell, now 59, one's social place was determined by birth, or "what I call the lucky sperm culture." Today, birth-ordained status has been supplanted by store-bought status. Mr. Twitchell has no regrets about this lost world. "Though I was a beneficiary of it, I'm glad it's over," he said. "There is something refreshing about the material world that downtown Burlington opened up." Compared to the traditional ways of marking status -- race, parentage, accent, private schools -- one's purchases are a preferable way of telling who's up and who's down, he said. On that point, Mr. Twitchell is not alone. Gary Cross, a historian at Penn State University, said that **consumer culture in one sense is "democracy's highest achievement, giving meaning and dignity to people when workplace participation, ethnic solidarity and even representative democracy have failed."** Still, as Mr. Cross argued in 2000 in "An All-Consuming Century: Why Commercialism Won in Modern America," "most of us, no matter our politics, are repulsed by the absolute identity of society with the market and individual choice with shopping." True enough, Mr. Twitchell readily conceded. But he maintains the critics are missing the essential characteristic of luxury spending. "Luxury has very little to do with money or things," he said. "Luxury is a story we tell about things," and it's ultimately the story we are after. That is, our purchases are imbued with elaborate narratives about the life we want to live. It is advertisers and manufacturers who give objects meaning by constructing the stories about them, Mr. Twitchell said, and that meaning is as much a source of desire as the object itself. Think of the elaborate fantasies spun by marketers like Ralph Lauren and Martha Stewart. It goes for whatever you're buying, whether it's Jimmy Choo, Birkenstock or Payless shoes. When Mr. Twitchell, a dedicated factory outlet shopper, flashes his member's card at Sam's Club, "the allure is not just that I'm saving money," he said, "but that I'm smarter and savvier, that I'm duping the duper." Or consider an experiment he performed on his colleagues. He told some English professors that he was going to spend $6,000 to buy an 1850 copy of Wordsworth's "Prelude." Brilliant idea, everyone said. A few days later, Mr. Twitchell told the same colleagues that he had changed his mind and was going to use the $6,000 to buy a used BMW. "I could have said that I was investing in a collection of Beanie Babies comics or a diamond pinkie ring for the shocked response that I got," he wrote. Critics of consumption will say they are making a moral argument, Mr. Twitchell said, but "often what is condemned as luxury is really just a matter of taste." To Mr. Twitchell, as long as human beings crave sensation, they will desire material goods and luxurious ones at that, Wall Street scandals notwithstanding. "If this year it's Enron and WorldCom, then another year it was Long-Term Capital Management," he said. **Recessions may come and go, but** consumption is eternal**. The ad slogan is right: Diamonds are forever.**

#### Their link is inevitable and not offensive

Datschefski 4 (Edwin – BioThinking International, “Consumption is Good ? !”, January, http://www.biothinking.com/consume.pdf)

It seems that it's natural to use energy, and the more the better. Ecologists like Lotka (1922) and Odum and Pinkerton (1955) suggested that the **biological systems that survive are those that develop the most power inflow and u se it to best meet their needs for survival**. Schneider and Kay (1994) proposed that a better description of these "power laws" would be that biological systems develop in a manner as to "increase their degradation rate, and that biological growth, ecosystem development and evolution represent the development of new dissipative pathways." As ecosystems develop or mature they tend to increase their total dissipation, and develop more complex structures with greater diversity, more cycling, more energy flow and more hierarchical levels. So ecological theory shows us that a complex adaptive system **like the current industrial system will** inherently evolve to maximise throughput of energy **and materials**. I'm not disputing the benefits of efficiency, or the limits to growth. But there does seem to be a lot of (in my view) **futile effort directed at encouraging people to consume l ess**. People are natural-born shoppers. I defy anyone reading this to claim that they have deprived themselves of that hifi, boat, shoes, camera, etc. that they really fancied. **You also** can't solve environmental problems **by simply using less.** There is a fundamental package of food and goods that a household requires, and while it's possible to make the footprint of that package smaller, we're still looking at about 7 tonnes of stuff per household per year, which is about 140 tonnes including embodied energy and mass. You can avoid this shooting up to 10 or 15 tonnes of stuff by renting and buying durable products and so on, but even the thriftiest household will still have a basic consumption requirement. The focus for improvement must therefore be on **changing product and process design so that materials flow is more systemic**. All products are ultimately disposable. We just need all of them to be designed to go back and become food for another system. So don't feel guilty about buying the products you have to get. Buy with caution and respect for the materials used. And divert the energy of your concerns into action -- tell the manufacturer of your new camera / car / bed etc. about how they can make it better. Most manufacturers think they are doing perfectly OK if they are complying with the law and have no -one demonstrating outside their head office. Going 100% cyclic solar and safe simply isn't on the agenda yet. So what if every member of every environment group (that's about 5 to 50% of the population, depending what country you live in) asked the manufacturers of the myriad of products that they buy, from doorhandles to lipstick, to become 100% cyclic, solar and safe?

#### The alternative is coal—kills thousands every year

Zelman 11 Joanna, The Huffington Post, "Power Plant Air Pollution Kills 13,000 People Per Year, Coal-Fired Are Most Hazardous: ALA Report", 3/15, www.huffingtonpost.com/2011/03/14/power-plant-air-pollution-coal-kills\_n\_833385.html

The American Lung Association (ALA) recently released a new report on the dramatic health hazards surrounding coal-fired power plants.¶ The report, “Toxic Air: The Case For Cleaning Up Coal-Fired Power Plants,” reveals the dangers of air pollution emitted by coal plants.¶ One of the starkest findings in the report claims, “Particle pollution from power plants is estimated to kill approximately 13,000 people a year.”¶ So what's the biggest culprit?¶ “Coal-fired power plants that sell electricity to the grid produce more hazardous air pollution in the U.S. than any other industrial pollution sources.” According to the report details, over 386,000 tons of air pollutants are emitted from over 400 plants in the U.S. per year. Interestingly, while most of the power plants are located in the Midwest and Southeast, the entire nation is threatened by their toxic emissions.¶ An ALA graph shows that while pollutants such as acid gases stay in the local area, metals such as lead and arsenic travel beyond state lines, and fine particulate matter has a global impact. In other words, while for some workers the pollution may be a tradeoff for employment at a plant, other regions don’t reap the same benefits, but still pay for the costs to their health.¶ The report connected specific pollutants with their health effects. According to the ALA, 76% of U.S. acid gas emissions, which are known to irritate breathing passages, come from coal-fired power plants. Out of all industrial sources, these plants are also the biggest emitter of airborne mercury, which can become part of the human food chain through fish and wildlife -- high mercury levels are linked to brain damage, birth defects, and damage to the nervous system. Overall, air pollutants from coal plants can cause heart attacks, strokes, lung cancer, birth defects, and premature death.¶ The American Lung Association isn’t the only group to connect coal plants with death and illness. A recent study released in the Annals of the New York Academy of Sciences found that, due in large part to health problems, coal costs the U.S. $500 billion per year. Specifically, the study found that the health costs of cancer, lung disease, and respiratory illnesses connected to pollutant emissions totaled over $185 billion per year.

### Util

#### Ethical policymaking requires calculation of our impacts

Nikolas Gvosdev 5 (Nikolas, Exec Editor of The National Interest, The Value(s) of Realism, SAIS Review 25.1, Muse)
As the name implies, realists focus on promoting policies that are achievable and sustainable. In turn, the morality of a foreign policy action is judged by its results, not by the intentions of its framers. A foreign policymaker must weigh the consequences of any course of action and assess the resources at hand to carry out the proposed task. As Lippmann warned, Without the controlling principle that the nation must maintain its objectives and its power in equilibrium, its purposes within its means and its means equal to its purposes, its commitments related to its resources and its resources adequate to its commitments, it is impossible to think at all about foreign affairs.8 Commenting on this maxim, Owen Harries, founding editor of The National Interest, noted, "This is a truth of which Americans—more apt to focus on ends rather than means when it comes to dealing with the rest of the world—need always to be reminded."9 In fact, Morgenthau noted that "there can be no political morality without prudence."10 This virtue of prudence—which Morgenthau identified as the cornerstone of realism—should not be confused with expediency. Rather, it takes as its starting point that it is more moral to fulfill one's commitments than to make "empty" promises, and to seek solutions that minimize harm and produce sustainable results. Morgenthau concluded: [End Page 18] Political realism does not require, nor does it condone, indifference to political ideals and moral principles, but it requires indeed a sharp distinction between the desirable and the possible, between what is desirable everywhere and at all times and what is possible under the concrete circumstances of time and place.11 This is why, prior to the outbreak of fighting in the former Yugoslavia, U.S. and European realists urged that Bosnia be decentralized and partitioned into ethnically based cantons as a way to head off a destructive civil war. Realists felt this would be the best course of action, especially after the country's first free and fair elections had brought nationalist candidates to power at the expense of those calling for inter-ethnic cooperation. They had concluded—correctly, as it turned out—that the United States and Western Europe would be unwilling to invest the blood and treasure that would be required to craft a unitary Bosnian state and give it the wherewithal to function. Indeed, at a diplomatic conference in Lisbon in March 1992, the various factions in Bosnia had, reluctantly, endorsed the broad outlines of such a settlement. For the purveyors of moralpolitik, this was unacceptable. After all, for this plan to work, populations on the "wrong side" of the line would have to be transferred and resettled. Such a plan struck directly at the heart of the concept of multi-ethnicity—that different ethnic and religious groups could find a common political identity and work in common institutions. When the United States signaled it would not accept such a settlement, the fragile consensus collapsed. The United States, of course, cannot be held responsible for the war; this lies squarely on the shoulders of Bosnia's political leaders. Yet Washington fell victim to what Jonathan Clarke called "faux Wilsonianism," the belief that "high-flown words matter more than rational calculation" in formulating effective policy, which led U.S. policymakers to dispense with the equation of "balancing commitments and resources."12 Indeed, as he notes, the Clinton administration had criticized peace plans calling for decentralized partition in Bosnia "with lofty rhetoric without proposing a practical alternative." The subsequent war led to the deaths of tens of thousands and left more than a million people homeless. After three years of war, the Dayton Accords—hailed as a triumph of American diplomacy—created a complicated arrangement by which the federal union of two ethnic units, the Muslim-Croat Federation, was itself federated to a Bosnian Serb republic. Today, Bosnia requires thousands of foreign troops to patrol its internal borders and billions of dollars in foreign aid to keep its government and economy functioning. Was the aim of U.S. policymakers, academics and journalists—creating a multi-ethnic democracy in Bosnia—not worth pursuing? No, not at all, and this is not what the argument suggests. But aspirations were not matched with capabilities. As a result of holding out for the "most moral" outcome and encouraging the Muslim-led government in Sarajevo to pursue maximalist aims rather than finding a workable compromise that could have avoided bloodshed and produced more stable conditions, the peoples of Bosnia suffered greatly. In the end, the final settlement was very close [End Page 19] to the one that realists had initially proposed—and the one that had also been roundly condemned on moral grounds.

## Energy Justice K

### \*AT: Commodification

#### Commodification arguments are wrong---policy solutions are the only way to prevent extinction

Wagner 11 Gernot, economist at EDF, where he works in the office of economic policy and analysis, “But Will the Planet Notice? How Smart Economics Can Save the World.” Hill and Wang Press, p. 11-12

The fundamental forces guiding the behavior of billions are much larger than any one of us. It's about changing our system, creating a new business as usual. And to do that we need to think about what makes our system run. In the end, it comes down to markets, and the rules of the game that govern what we chase and how we chase it. Scientists can tell us how bad it will get. Activists can make us pay attention to the ensuing instabilities and make politicians take note. When the task comes to formulating policy, only economists can help guide us out of this morass and save the planet. In an earlier time with simpler problems, environmentalists took direct action against the market's brutal forces by erecting roadblocks or chaining themselves to trees. That works if the opposing force is a lumberjack with a chain saw. It might even work for an entire industry when the task is to ban a particular chemical or scrub a pollutant out of smokestacks. But that model breaks down when the opposing force is ourselves: each and every one of us demanding that the globalized market provide us with cheaper and better food, clothes, and vacations. There is no blocking the full, collective desires of the billions who are now part of the market economy and the billions more who want to—and ought to—be part of it. The only solution is to guide all-powerful market forces in the right direction and create incentives for each of us to make choices that work for all of us. The guideposts we have today for market forces evolved helter- skelter from a historical process that gave almost no weight to the survival of the planet, largely because the survival of the planet was not at stake. Now it is. Since we can't live without market forces, we need to guide them to help us keep the human adventure going in workable ways, rather than continue on the present path right off the edge of a cliff.

### \*AT: Nuclear Power K

#### The aff’s approach to nuclear power is good --- we account for the history of nuclear power and are key to understand nukespeak as their Cully link evidence references

Ted Nordhaus 11, chairman – Breakthrough Instiute, and Michael Shellenberger, president – Breakthrough Institute, MA cultural anthropology – University of California, Santa Cruz, 2-25, <http://thebreakthrough.org/archive/the_long_death_of_environmenta>)

Tenth, we are going to have to get over our suspicion of technology, especially nuclear power. There is **no credible path** to reducing global carbon emissions without an enormous expansion of nuclear power. It is the only low carbon technology we have today with the demonstrated capability to generate large quantities of centrally generated electrtic power. It is the low carbon of technology of choice for much of the rest of the world. Even uber-green nations, like Germany and Sweden, have reversed plans to phase out nuclear power as they have begun to reconcile their energy needs with their climate commitments. Eleventh, we will need to embrace again the role of the state as a direct provider of public goods. The modern environmental movement, borne of the new left rejection of social authority of all sorts, has embraced the notion of state regulation and even creation of private markets while largely rejecting the generative role of the state. In the modern environmental imagination, government promotion of technology - whether nuclear power, the green revolution, synfuels, or ethanol - almost always ends badly. Never mind that virtually the entire history of American industrialization and technological innovation is the story of government investments in the development and commercialization of new technologies. Think of a transformative technology over the last century - computers, the Internet, pharmaceutical drugs, jet turbines, cellular telephones, nuclear power - and what you will find is government investing in those technologies at a scale that private firms simply cannot replicate. Twelveth, big is beautiful. The rising economies of the developing world will continue to develop whether we want them to or not. The solution to the ecological crises wrought by modernity, technology, and progress will be more modernity, technology, and progress. The solutions to the ecological challenges faced by a planet of 6 billion going on 9 billion will not be decentralized energy technologies like solar panels, small scale organic agriculture, and a drawing of unenforceable boundaries around what remains of our ecological inheritance, be it the rainforests of the Amazon or the chemical composition of the atmosphere. Rather, these solutions will be: large central station power technologies that can meet the energy needs of billions of people increasingly living in the dense mega-cities of the global south without emitting carbon dioxide, further intensification of industrial scale agriculture to meet the nutritional needs of a population that is not only growing but eating higher up the food chain, and a whole suite of new agricultural, desalinization and other technologies for gardening planet Earth that might allow us not only to pull back from forests and other threatened ecosystems but also to create new ones. The New Ecological Politics The great ecological challenges that our generation faces demands an ecological politics that is **generative, not restrictive.** An ecological politics capable of addressing global warming will require us to reexamine virtually every prominent strand of post-war green ideology. From Paul Erlich's warnings of a population bomb to The Club of Rome's "Limits to Growth," contemporary ecological politics have consistently embraced green Malthusianism despite the fact that the Malthusian premise has persistently failed for the better part of three centuries. Indeed, the green revolution was exponentially increasing agricultural yields at the very moment that Erlich was predicting mass starvation and the serial predictions of peak oil and various others resource collapses that have followed have continue to fail. This does not mean that Malthusian outcomes are impossible, but neither are they inevitable. **We do have a choice** in the matter, but it is not the choice that greens have long imagined. The choice that humanity faces is not whether to constrain our growth, development, and aspirations or die. It is whether we will continue to innovate and accelerate technological progress in order to thrive. Human technology and ingenuity have repeatedly confounded Malthusian predictions yet green ideology continues to cast a suspect eye towards the very technologies that have allowed us to avoid resource and ecological catastrophes. But such solutions will require environmentalists to abandon the "small is beautiful" ethic that has also characterized environmental thought since the 1960's. We, the most secure, affluent, and thoroughly modern human beings to have ever lived upon the planet, must abandon both the dark, zero-sum Malthusian visions and the idealized and nostalgic fantasies for a simpler, more bucolic past in which humans lived in harmony with Nature.

### Aff =/= Nuclear Optimism

#### We’re not nuclear optimism---it’s supported based on science and checked by pessimists

Adams 10 Rod, Technological Realism Should Replace Optimism, Pro-nuclear advocate with small nuclear plant operating and design experience. Former submarine Engineer Officer, <http://atomicinsights.com/2010/05/technological-realism-should-replace-optimism.html>

As a “served engineer” on a nuclear powered submarine, I learned a long time ago that things go wrong, even with the very best technology. The recognition of inevitable “problems” should not deter technical development and should not make people afraid to develop new products and services, but it should add a healthy dose of humility backed up by continuous efforts to prepare for the worst. My experiences have taught me to be uncomfortable with any proclamation of inevitable progress. I have worked on IT projects, been a full participant in the digital revolution, operated a custom plastics manufacturing company, and watched the nuclear industry work to regain respectability after some serious missteps in its early development history. Progress is hard work and there are often failures that reset the development cycle just as it seems ready to take off. Too many technology observers and pundits point to Moore’s Law as some kind of a general rule for technical developments. Moore’s Law is a very particular pronouncement – in 1965, Gordon Moore recognized that there was a recognizable path forward that would allow manufacturers to double the number of transistors that could be inexpensively placed on a chip every year for the next ten years and he recognized that he could apply that law to the 15-20 years of chip development that had already happened. He modified his prediction in 1975 to increase the doubling time to two years instead of one. He predicted that the implementation of that path would allow an increasing quantity of processing power, assuming that it would be possible to keep all of the transistors firing at the same rate as before. Moore’s Law does not apply to software development, to steel making, to underwater sensors, to remote manipulators, to wind energy collection systems, or to the rate of IP data transmission using satellite networks. It is not even infinitely applicable to semiconductor based processors – there are physical limits to the size of transistors and connecting wires that will eventually provide an asymptote that levels out the growth of processing power. I have never had much “faith” in technology. I like technology. I use lots of technology; my children have occasionally called me “Inspector Gadget” because of all of the tools (my wife and children sometimes call them “toys”) I have accumulated over the years. However, I understand the limits of the technology that I use. I read the manuals, heed the warnings, plan for failure, and worry about the potential consequences of inappropriately using technical devices. I know that no technology can overcome physical barriers; nothing I or anyone else can do will provide power from the wind when it is not blowing and nothing that I or anyone else can invent will enable chemical combustion to provide reliable heat energy without both a source of oxygen and a place to dump the waste products. Nothing that I or anyone else can invent will enable oil extraction from a dry well. I also know that not everything that breaks can be fixed, even if there is an unlimited amount of time and money. Some breaks and fissures can never be welded shut or forced to heal. This is where I believe that humble engineers and technicians who are not driven by sales numbers have a huge role to play. Their (our) natural pessimism can help to reduce the consequences of always listening to the optimists, the people who say “damn the torpedoes”, “failure is not an option”, or “whatever it takes”. Failure is always possible. Before stretching limits it is important to recognize the consequences of the failure to determine if they are acceptable. If the reasonably predictable “worst possible event” results in consequences that cannot be accepted, the prudent course of action is to avoid the action in the first place. I place deepwater drilling for oil and gas into that category. It is pretty obvious that the possible consequences are unacceptable and that technological development has not yet found a way to mitigate those consequences. I am not sure what the limits of “deepwater” should be, but it is apparent that 5,000 feet is beyond the limit. I do not place operating nuclear energy production facilities in that category. However, there are very definitely some kinds of nuclear plants – like very large graphite-moderated, water-cooled reactors operated by people who override safety systems and ignore warning indications – that have proven that they can cause consequences that are not acceptable. The real value comes in determining what the reasonably predictable consequences might be and what failure modes are reasonable to assume. For people who have no firm foundation in real world mechanics, chemistry and physics, it is possible to spin all kinds of scary scenarios that depend on a series of impossible events. (Note: Just because I believe that there is always something that can go wrong, I do not believe that all things are possible.) My prescription for progress is not “faith” in engineers or technologists. It is for people to approach challenges with knowledge, a questioning attitude, humility and a willingness to expend the resources necessary to operate safely. A thirst for maximizing short term profits or an attitude of blind optimism are both incompatible with performing difficult tasks in potentially dangerous environments.

### AT: Structural Violence

#### The squo is structurally improving

Goklany 9**—**Worked with federal and state governments, think tanks, and the private sector for over 35 years. Worked with IPCC before its inception as an author, delegate and reviewer. Negotiated UN Framework Convention on Climate Change. Managed the emissions trading program for the EPA. Julian Simon Fellow at the Property and Environment Research Center, visiting fellow at AEI, winner of the Julian Simon Prize and Award. PhD, MS, electrical engineering, MSU. B.Tech in electrical engineering, Indian Institute of Tech. (Indur, “Have increases in population, affluence and technology worsened human and environmental well-being?” 2009, http://www.ejsd.org/docs/HAVE\_INCREASES\_IN\_POPULATION\_AFFLUENCE\_AND\_TECHNOLOGY\_WORSENED\_HUMAN\_AND\_ENVIRONMENTAL\_WELL-BEING.pdf)

Although global population is no longer growing exponentially, it has quadrupled since 1900. Concurrently, affluence (or GDP per capita) has sextupled, global economic product (a measure of aggregate consumption) has increased 23-fold and carbon dioxide has increased over 15-fold (Maddison 2003; GGDC 2008; World Bank 2008a; Marland et al. 2007).4 But contrary to Neo- Malthusian fears, average **human well-being,** measured by any objective indicator, **has never been higher**. Food supplies, Malthus’ original concern, are up worldwide. Global food supplies per capita increased from 2,254 Cals/day in 1961 to 2,810 in 2003 (FAOSTAT 2008). This helped reduce hunger and malnutrition worldwide. The proportion of the population in the developing world, suffering from chronic hunger declined from 37 percent to 17 percent between 1969–71 and 2001–2003 despite an 87 percent population increase (Goklany 2007a; FAO 2006). The reduction in hunger and malnutrition, along with improvements in basic hygiene, improved access to safer water and sanitation, broad adoption of vaccinations, antibiotics, pasteurization and other public health measures, helped reduce mortality and increase life expectancies. These improvements first became evident in today’s developed countries in the mid- to late-1800s and started to spread in earnest to developing countries from the 1950s. The infant mortality rate in developing countries was 180 per 1,000 live births in the early 1950s; today it is 57. Consequently, global life expectancy, perhaps the single most important measure of human well-being, increased from 31 years in 1900 to 47 years in the early 1950s to 67 years today (Goklany 2007a). Globally, average **annual per capita incomes tripled** since 1950. The proportion of the world’s population outside of high-income OECD countries living in absolute poverty (average consumption of less than $1 per day in 1985 International dollars adjusted for purchasing power parity), fell from 84 percent in 1820 to 40 percent in 1981 to 20 percent in 2007 (Goklany 2007a; WRI 2008; World Bank 2007). Equally important, the world is more literate and better educated. Child labor in low income countries declined from 30 to 18 percent between 1960 and 2003. In most countries, people are freer politically, economically and socially to pursue their goals as they see fit. More people choose their own rulers, and have freedom of expression. They are more likely to live under rule of law, and less likely to be arbitrarily deprived of life, limb and property. Social and professional mobility has never been greater. It is easier to transcend the bonds of caste, place, gender, and other accidents of birth in the lottery of life. People work fewer hours, and have more money and better health to enjoy their leisure time (Goklany 2007a). Figure 3 summarizes the U.S. experience over the 20th century with respect to growth of population, affluence, material, fossil fuel energy and chemical consumption, and life expectancy. It indicates that population has multiplied 3.7-fold; income, 6.9-fold; carbon dioxide emissions, 8.5-fold; material use, 26.5-fold; and organic chemical use, 101-fold. Yet its life expectancy increased from 47 years to 77 years and infant mortality (not shown) declined from over 100 per 1,000 live births to 7 per 1,000. It is also important to note that not only are people living longer, they are healthier. The disability rate for seniors declined 28 percent between 1982 and 2004/2005 and, despite better diagnostic tools, major diseases (e.g., cancer, and heart and respiratory diseases) occur 8–11 years later now than a century ago (Fogel 2003; Manton et al. 2006). If similar figures could be constructed for other countries, most would indicate qualitatively similar trends, especially after 1950, except Sub-Saharan Africa and the erstwhile members of the Soviet Union. In the latter two cases, life expectancy, which had increased following World War II, declined after the late 1980s to the early 2000s, possibly due poor economic performance compounded, especially in Sub-Saharan Africa, by AIDS, resurgence of malaria, and tuberculosis due mainly to poor governance (breakdown of public health services) and other manmade causes (Goklany 2007a, pp.66–69, pp.178–181, and references therein). However, there are signs of a turnaround, perhaps related to increased economic growth since the early 2000s, although this could, of course, be a temporary blip (Goklany 2007a; World Bank 2008a). Notably, in most areas of the world, the healthadjusted life expectancy (HALE), that is, life expectancy adjusted downward for the severity and length of time spent by the average individual in a less-than-healthy condition, is greater now than the unadjusted life expectancy was 30 years ago. HALE for the China and India in 2002, for instance, were 64.1 and 53.5 years, which exceeded their unadjusted life expectancy of 63.2 and 50.7 years in 1970–1975 (WRI 2008). Figure 4, based on cross country data, indicates that contrary to Neo-Malthusian fears, both life expectancy and infant mortality improve with the level of affluence (economic development) and time, a surrogate for technological change (Goklany 2007a). Other indicators of human well-being that improve over time and as affluence rises are: access to safe water and sanitation (see below), literacy, level of education, food supplies per capita, and the prevalence of malnutrition (Goklany 2007a, 2007b).

### AT: Short-Term Catastrophe Planning Bad

#### The aff isn’t forecasting, it’s risk management---the inherent unpredictability of social events is all the more reason for creating optimal resiliency through scenario planning

Cochrane 11 John H. Cochrane is a Professor of finance at the University of Chicago Booth School of Business and a contributor to Business Class "IN DEFENSE OF THE HEDGEHOGS" July 15 www.cato-unbound.org/2011/07/15/john-h-cochrane/in-defense-of-the-hedgehogs/

Risk Management Rather than Forecast-and-Plan

**The answer is to change the question**, to focus on risk management, as Gardner and Tetlock suggest. **There is a set of events that could happen tomorrow**—Chicago could have an earthquake, there could be a run on Greek debt, the Administration could decide “Heavens, Dodd–Frank and Obamacare were huge mistakes, let’s fix them” (Okay, not the last one.) Attached to each event, there is some probability that it could happen.

Now “forecasting” as Gardner and Tetlock characterize it, is an attempt to figure out which event really will happen, whether the coin will land on heads or tails, and then make a plan based on that knowledge. It’s a fool’s game.

Once we recognize that uncertainty will always remain, **risk management rather than forecasting is much wiser**. Just the step of naming the events that could happen is useful. **Then, ask yourself, “if this event happens, let’s make sure we have a contingency plan so we’re not really screwed**.” Suppose you’re counting on diesel generators to keep cooling water flowing through a reactor. What if someone forgets to fill the tank?

The good use of “forecasting**” is to** get a better handle on probabilities, so we focus our risk management resources on the most important events. But **we must still pay attention to events**, **and buy insurance against them**, based as much on the painfulness of the event as on its probability. (Note to economics techies: what matters is the risk-neutral probability, probability weighted by marginal utility.)

So **it’s not really the forecast that’s wrong, it’s what people do with it.** If we all understood the essential unpredictability of the world, especially of rare and very costly events, if we got rid of the habit of mind that asks for a forecast and then makes “plans” as if that were the only state of the world that could occur; if we instead focused on laying out all the bad things that could happen and made sure we had insurance or contingency plans, **both personal and public policies might be a lot better**.

### Alt Fails – Wright

#### The alt’s all-or-nothing choice fails --- small reforms like the plan are key to institutional change and getting others to sign on to the alt

Erik Olin Wright 7, Vilas Distinguished Professor of Sociology at the University of Wisconsin, “Guidelines for Envisioning Real Utopias”, Soundings, April, www.ssc.wisc.edu/~wright/Published%20writing/Guidelines-soundings.pdf

5. Waystations The final guideline for discussions of envisioning real utopias concerns the importance of waystations. The central problem of envisioning real utopias concerns the viability of institutional alternatives that embody emancipatory values**,** but the practical achievability of such institutional designs often depends upon the existence of smaller steps, intermediate institutional innovations that move us in the right direction but only partially embody these values**.** Institutional proposals which have an all-or-nothing quality to them are both less likely to be adopted in the first place, and may pose more difficult transition-cost problems if implemented**.** The catastrophic experience of Russia in the “shock therapy” approach to market reform is historical testimony to this problem. Waystations are a difficult theoretical and practical problem because there are many instances in which partial reforms may have very different consequences than full- bodied changes. Consider the example of unconditional basic income. Suppose that a very limited, below-subsistence basic income was instituted: not enough to survive on, but a grant of income unconditionally given to everyone. One possibility is that this kind of basic income would act mainly as a subsidy to employers who pay very low wages, since now they could attract more workers even if they offered below poverty level earnings. There may be good reasons to institute such wage subsidies, but they would not generate the positive effects of a UBI, and therefore might not function as a stepping stone. What we ideally want**, therefore,** are intermediate reforms that have two main properties: **first,** they concretely demonstrate the virtues of the fuller program of transformation, so they contribute to the ideological battle of convincing people that the alternative is credible and desirable; **and second,** they enhance the capacity for action of people, increasing their ability to push further in the future. Waystations that increase popular participation and bring people together in problem-solving deliberations for collective purposes are particularly salient in this regard**.** This is what in the 1970s was called “nonreformist reforms”**:** reforms that are possible within existing institutions and that pragmatically solve real problems while at the same time empowering people in ways which enlarge their scope of action in the future.

# 1AR

## Paths of Glory

### Coal Strong

#### Coal strong in squo

Zacks Equity Research 12 (April 23, 2012, "Coal Industry Stock Review - April 2012," www.zacks.com/stock/news/73557/coal-industry-stock-review-april-2012)

Coal Dominates U.S. Power Generation: Coal as a major source of fuel for power generation dominates the Utility industry. Coal is used to generate about half of the electricity consumed in the U.S. and is also the largest domestically-produced source of energy. Electricity generation absorbs about 93% of total U.S. coal consumption. The reason is simple: coal is by far the least expensive and most abundant fossil fuel in the country.

**Coal will continue to dominate as the major source of electricity production.** Taking into consideration the long-term prospect of coal, one of its key producers Arch Coal Inc. (ACI - Analyst Report) expanded its reserves in the Powder River Basin (“PRB”) through a successful bidding of a coal lease. The coal produced from South Hilight coal reserves are of high quality. This high quality, ultra-low-sulfur-dioxide-content coal is in huge global demand due to stringent government regulations on emission (pollution) standards.

In contrast, petroleum and nuclear power as sources of power generation have been losing market share displaced by the strong growth of renewable sources of generation and natural gas-fired generation. Petroleum is losing out to coal because it is becoming increasingly expensive. After the Japan earthquake/tsunami incident in 2011, nuclear power’s contribution to the total energy generation has declined from the prior year.

## Risk K

#### Studies prove – apocalypticism motivates more activism than apathy

**Veldman 12** – Ph.D. candidate in religion at the University of Florida

(Robin Globus, “Narrating the Environmental Apocalypse: How Imagining the End Facilitates Moral Reasoning Among Environmental Activists”, Ethics & the Environment, Volume 17, Number 1, Spring 2012, pp. 1-23, dml)

As we saw in the introduction, critics often argue that apocalyptic rhetoric induces feelings of hopelessness or fatalism. While it certainly does for some people, in this section I will present evidence that apocalypticism also often goes hand in hand with activism. Some of the strongest evidence of a connection between environmental apocalypticism and activism comes from a national survey that examined whether Americans perceived climate change to be dangerous. As part of his analysis, Anthony Leiserowitz identified several “interpretive communities,” which had consistent demographic characteristics but varied in their levels of risk perception. The group who perceived the risk to be the greatest, which he labeled “alarmists,” described climate change using apocalyptic language, such as “Bad…bad…bad…like after nuclear war…no vegetation,” “Heat waves, it’s gonna kill the world,” and “Death of the planet” (2005, 1440). Given such language, this would seem to be a reasonable way to operationalize environmental apocalypticism. If such apocalypticism encouraged fatalism, we would expect alarmists to be less likely to have engaged in environmental behavior compared to groups with moderate or low levels of concern. To the contrary, however, Leiserowitz found that alarmists “were significantly more likely to have taken personal action to reduce greenhouse gas emissions” (ibid.) than respondents who perceived climate change to pose less of a threat. Interestingly, while one might expect such radical views to appeal only to a tiny minority, Leiserowitz found that a respectable eleven percent of Americans fell into this group (ibid). Further supporting Leiserowitz’s findings, in a separate national survey conducted in 2008, Maibach, Roser-Renouf, and Leiserowitz found that a group they labeled “the Alarmed” (again, due to their high levels of concern about climate change) “are the segment most engaged in the issue of global warming. They are very convinced it is happening, humancaused, and a serious and urgent threat. The Alarmed are already making changes in their own lives and support an aggressive national response” (2009, 3, emphasis added). This group was far more likely than people with lower levels of concern over climate change to have engaged in consumer activism (by rewarding companies that support action to reduce global warming with their business, for example) or to have contacted elected officials to express their concern. Additionally, the authors found that “[w]hen asked which reason for action was most important to them personally, the Alarmed were most likely to select preventing the destruction of most life on the planet (31%)” (2009, 31)—a finding suggesting that for many in this group it is specifically the desire to avert catastrophe, rather than some other motivation, that encourages pro-environmental behavior. Taken together, these and other studies (cf. Semenza et al. 2008 and DerKarabetia, Stephenson, and Poggi 1996) provide important evidence that many of those who think environmental problems pose a severe threat practice some form of activism, rather than giving way to fatalistic resignation.

#### The alternative is knee jerk—threat predictions inev, default to specificity

**Fitzsimmons, 07** (Michael, Washington DC defense analyst, “The Problem of Uncertainty in Strategic Planning”, Survival, Winter 06-07, online)

But handling even this weaker form of uncertainty is still quite challeng- ing. If not sufficiently bounded, a high degree of variability in planning factors can exact a significant price on planning. The complexity presented by great variability strains the cognitive abilities of even the most sophisticated decision- makers.15 And even a robust decision-making process sensitive to cognitive limitations necessarily sacrifices depth of analysis for breadth as variability and complexity grows. It should follow, then, that in planning under conditions of risk, variability in strategic calculation should be carefully tailored to available analytic and decision processes. Why is this important? What harm can an imbalance between complexity and cognitive or analytic capacity in strategic planning bring? Stated simply, where analysis is silent or inadequate, **the personal beliefs of decision-makers** **fill the void**. As political scientist Richard Betts found in a study of strategic surprise, in ‘an environment that lacks clarity, abounds with conflicting data, and allows no time for rigorous assessment of sources and validity, ambiguity allows intuition or wishfulness to drive interpretation ... The greater the ambiguity, the greater the impact of preconceptions.’16 The decision-making environment that Betts describes here is one of political-military crisis, not long-term strategic planning. But a strategist who sees uncertainty as the central fact of his environ- ment brings upon himself some of the pathologies of crisis decision-making. He invites ambiguity, takes conflicting data for granted and **substitutes a priori scepticism about the validity of prediction** for time pressure as a rationale for discounting the importance of analytic rigour. It is important not to exaggerate the extent to which data and ‘rigorous assessment’ can illuminate strategic choices. Ambiguity is a fact of life, and scepticism of analysis is necessary. Accordingly, the intuition and judgement of decision-makers will always be vital to strategy, and attempting to subordinate those factors to some formulaic, deterministic decision-making model would be both undesirable and unrealistic. All the same, there is danger in the opposite extreme as well. Without careful analysis of what is relatively likely and what is relatively unlikely, what will be the possible bases for strategic choices? A decision-maker with no faith in prediction is left with little more than a set of worst-case scenarios and his existing beliefs about the world to confront the choices before him. Those beliefs may be more or less well founded, but if they are not made explicit and subject to analysis and debate regarding their application to particular strategic contexts, they remain only beliefs and premises, rather than rational judgements. Even at their best, such decisions are likely to be poorly understood by the organisations charged with their implementation. At their worst, such decisions may be poorly understood by the decision-makers themselves.

## Ethical Justice

### Tech Optimism Good

#### Tech optimism based on empirical research is good---prefer specific experts

Krier 85 James E., Professor of Law at the University of Michigan, “The Un-Easy Case for Technological Optimism,” Michigan Law Review, Vol. 84, No. 3; December 1985, pp. 405-429

A technological optimist is not simply a person with unqualified enthusiasm about technological promise. Saint-Simon (1760-1825) was an enthusiast, but he was not a technological optimist as the term is currently used. Saint-Simon, rather, was a utopian who happened to attach his vision to technocratic expertise.4 He was the forefather of Technocracy, an active utopian movement in the 1930s and one not entirely dead even today.5 Technological optimists are not utopians, but something less - let us say quasi-utopians, after a recent usage (applied to himself) of Robert Dahl's.6 Unlike any self-respecting pure utopian, quasi-utopians (and technological optimists) seek not perfection but tolerable imperfection, tolerable because it is better than anything else they consider attainable though not nearly as good as lots of alternatives that can be imagined. But technological optimists are also something more than mere believers, or faddists, or techniks.7 Their views are rigorously formulated, grounded in an apparent reality, based on knowledge and experience, and artfully defended. There are no crazies among the best of the optimists; they are conservative, respected experts who command enormous authority. They have a very specific position namely, "that exponential technological growth will allow us to expand resources ahead of exponentially increasing demands."8 This is the precise meaning of technological optimism as a term of art.

### Death Outweighs

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

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

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

### Nuclear Incentive Policy Good

#### Incentives-based environmental action in the context of nuclear power is good---key to policy effectiveness

Economist 5 (The Economist, April 21, “Rescuing environmentalism”, http://www.economist.com/node/3888006)

“THE environmental movement's foundational concepts, its method for framing legislative proposals, and its very institutions are outmoded. Today environmentalism is just another special interest.” Those damning words come not from any industry lobby or right-wing think-tank. They are drawn from “The Death of Environmentalism”, an influential essay published recently by two greens with impeccable credentials. They claim that **environmental groups are politically adrift and dreadfully out of touch.**

**They are right**. In America, greens have suffered a string of defeats on high-profile issues. They are losing the battle to prevent oil drilling in Alaska's wild lands, and have failed to spark the public's imagination over global warming. Even the stridently ungreen George Bush has failed to galvanise the environmental movement. The solution, argue many elders of the sect, is to step back from day-to-day politics and policies and “energise” ordinary punters with talk of global-warming calamities and a radical “vision of the future commensurate with the magnitude of the crisis”.

Europe's green groups, while politically stronger, are also starting to lose their way intellectually. Consider, for example, their invocation of the woolly “precautionary principle” to demonise any complex technology (next-generation nuclear plants, say, or genetically modified crops) that they do not like the look of. **A more sensible green analysis of** nuclear power **would weigh its** (very high) economic **costs and** (fairly **low**) **safety risks against the important benefit of generating electricity with no greenhouse-gas emissions.**

Small victories and bigger defeats

The coming into force of the UN's Kyoto protocol on climate change might seem a victory for Europe's greens, but it actually masks a larger failure. The most promising aspect of the treaty—its innovative use of market-based instruments such as carbon-emissions trading—was resisted tooth and nail by Europe's greens. With courageous exceptions, American green groups also remain deeply suspicious of market forces.

**If environmental groups continue to reject pragmatic solutions and instead drift toward Utopian** (or dystopian) **visions of the future,** they will lose **the battle of ideas**. And that would be a pity, for the world would benefit from having a thoughtful green movement. It would also be ironic, because far-reaching advances are already under way in the management of the world's natural resources—changes that add up to a different kind of green revolution. This could yet save the greens (as well as doing the planet a world of good).

“Mandate, regulate, litigate.” That has been the green mantra. And it explains the world's top-down, command-and-control approach to environmental policymaking. Slowly, this is changing. Yesterday's failed hopes, today's heavy costs and tomorrow's demanding ambitions have been driving public policy quietly towards market-based approaches. One example lies in the assignment of property rights over “commons”, such as fisheries, that are abused because they belong at once to everyone and no one. Where tradable fishing quotas have been issued, the result has been a drop in over-fishing. Emissions trading is also taking off. America led the way with its sulphur-dioxide trading scheme, and today the EU is pioneering carbon-dioxide trading with the (albeit still controversial) goal of slowing down climate change.

These, however, are obvious targets. What is really intriguing are efforts to value previously ignored “ecological services”, both basic ones such as water filtration and flood prevention, and luxuries such as preserving wildlife. At the same time, advances in environmental science are making those valuation studies more accurate. Market mechanisms can then be employed to achieve these goals at the lowest cost. Today, countries from Panama to Papua New Guinea are investigating ways to price nature in this way (see article).

Rachel Carson meets Adam Smith

If this new green revolution is to succeed, however, three things must happen. The most important is that prices must be set correctly. The best way to do this is through liquid markets, as in the case of emissions trading. Here, politics merely sets the goal. How that goal is achieved is up to the traders.

A proper price, however, requires proper information. So the second goal must be to provide it. The tendency to regard the environment as a “free good” must be tempered with an understanding of what it does for humanity and how. Thanks to the recent Millennium Ecosystem Assessment and the World Bank's annual “Little Green Data Book” (released this week), that is happening. More work is needed, but thanks to technologies such as satellite observation, computing and the internet, green accounting is getting cheaper and easier.

Which leads naturally to **the third goal, the embrace of cost-benefit analysis**. At this, greens roll their eyes, complaining that it reduces nature to dollars and cents. In one sense, they are right. Some things in nature are irreplaceable—literally priceless**. Even so, it is essential to consider trade-offs when analysing almost all green problems**. The marginal cost of removing the last 5% of a given pollutant is often far higher than removing the first 5% or even 50%: **for public policy to ignore such facts would be inexcusable.**

If governments invest seriously in green data acquisition and co-ordination, they will no longer be flying blind. And **by advocating data-based, analytically rigorous policies rather than pious appeals to “save the planet”, the green movement could overcome** the **scepticism** of the ordinary voter. It might even move from the fringes of politics to the middle ground where most voters reside.

Whether the big environmental groups join or not, the next green revolution is already under way. Rachel Carson, the crusading journalist who inspired greens in the 1950s and 60s, is joining hands with Adam Smith, the hero of free-marketeers. The world may yet leapfrog from the dark ages of clumsy, costly, command-and-control regulations to an enlightened age of **informed, innovative, incentive-based greenery**.