### T- OCO

#### OCOs are defined as not defensive

By ZACHARY FRYER-BIGGS “US Begins To Define Military Cyber Ops” Jun. 17, 2013 - 05:38PM | <http://www.defensenews.com/article/20130617/DEFREG02/306170027/US-Begins-Define-Military-Cyber-Ops>

The document, “Presidential Policy Directive 20,” was signed in October, and several details about its contents were reported by the Washington Post the following month. But the full scope of the directive, which includes both specific definitions of cyberspace and distinctions between offensive and defensive cyber actions, didn’t become clear until the text of the document was published by the Guardian as part of its ongoing series disclosing details leaked by Snowden. Trying to provide those definitions had held up progress in normalizing cyber as an operational space for the military since the last major cyber presidential directive was signed in 2004. That directive, also classified, pushed decisions on cyber operations to the White House but did not begin to grapple with the larger difficulties involved in including cyber in broader policy and doctrine. “The directive means that the military is trying to get a handle on how you use it, how it’s applied; they’re trying to make it another source of fire; they’re developing doctrine and rules,” said James Lewis, a cybersecurity expert at the Center for Strategic and International Studies. The document, confirmed by sources as authentic and set to be declassified in 2037, begins by tackling one of the running debates surrounding cyber policy: What is cyberspace? As the directive defines it, cyberspace is “the interdependent network of information technology infrastructures that includes the Internet, telecommunications networks, computers, information or communications systems, networks and embedded processors and controllers.” Those last two items ostensibly mean that any electronic device, even modern dishwashers that posses smart technology, can be considered part of cyberspace. But beyond outlining the domain, the directive distinguishes between offensive and defensive cyber actions, or “cyber effects” that include destroying an enemy’s computer system. Defensive Cyber Effects Operations (DCEO) aren’t defined by the type of cyber action that’s taken, but instead are described based on intent. Actions designed to protect the US from imminent threats, ongoing attacks or malicious activity against US national interests are deemed defensive. Offensive operations aren’t positively defined. Instead, they are described as any cyber operation that produces effects that aren’t defensive.

#### OCO doesn’t include espionage or exploitation—equivalent to Comptuer Network Attacks

Gregory **Rattray and** Jason **Healey 10** Rattray--senior fellow with the Cyber Statecraft Initiative of the Brent Scowcroft Center on International Security, partner in Delta Risk, Healey-- director of the Cyber Statecraft Initiative of the Atlantic Council, “Proceedings of a Workshop on Deterring Cyberattacks: Informing Strategies and Developing Options for U.S. Policy ( 2010 ) / Categorizing and Understanding Offensive Cyber Capabilities and Their Use” p. 77

For the purpose\* of this paper, offensive operations are those analogous to Computer Network Attacks (CNA). as defined by the Department of Defense and do not include acts of cyber espionage, or Computer Network Exploitation.' Though both types of operations may use similar technical techniques to access an adversary’s networks, cyber exploitation is generally more akin to espionage than offensive operations. This paper'\* focus is therefore on Computer Network Attacks, whether operations between political acton; operating across state boundaries or bv non-state actors for political purposes

#### Vote neg-

#### Limits- allowing defensive ops justifies espionage, cyber defense, improving the grid, airgapping- set the standard early to protect neg ground

#### Precision- abandoning the word “offensive” renders “offensive cyber ops” meaningless- precision key to predictable division of ground and topic coherence

#### Ground- they steal disads and counterplans to “offensive”

### CP Text

**The United States federal judiciary should substantially increase restrictions on the war powers authority of the president of the United States to use drones by ruling that drone strikes constitute armed attacks under the Laws of Armed Conflict.**

### Grab bag CP: 1NC

#### The executive branch of the United States should:

#### - remove barriers that discourage information sharing between public-private entities

#### - create a cyber-liability system

#### - establish a non-profit organization that would evaluate and accredit technology companies’ supply chain security

#### - allow more internal self-defense measures by private entities

#### - encourage more professional base-level training and early STEM education

#### - promote international cyber security outreach efforts

#### as advocated per our Bucci et al evidence

**The president of the United States should not alter, disrupt, or destroy computer systems or networks or the information or programs on them, justified publically because they violated the law of armed conflict**

#### That solves and avoids flex, circumvention, politics

Bucci et al 13 ( Steven P. Bucci, Ph.D. Director, Douglas and Sarah Allison Center for Foreign Policy Studies , Paul Rosenzweig Visiting Fellow at the Heritage Foundation, David Inserra Research Assistant, National Security and Cyber Security, The Heritage Foundation, "A Congressional Guide: Seven Steps to U.S. Security, Prosperity, and Freedom in Cyberspace", http://www.heritage.org/research/reports/2013/04/a-congressional-guide-seven-steps-to-us-security-prosperity-and-freedom-in-cyberspace, 4-1-13)

A Cybersecurity Policy that Works

Congress should pursue **a cybersecurity policy that avoids a cumbersome and expensive regulatory approach** and includes the seven key elements detailed there that **will produce truly dynamic cybersecurity defenses. Such an approach should**:

 **Enable cyber information sharing by removing ambiguities, providing strong protections to sharers, and establishing a public-private partnership to facilitate sharing**. Entities that share cybersecurity information need certain protections. These protections include exempting all shared information from FOIA requests and regulatory use, and providing information sharers with strong liability protection. Effective information sharing requires the government to share fully and in a timely manner with the private sector through a public-private partnership established for this purpose.

 **Promote the development of a viable cybersecurity liability and insurance system. Liability for irresponsible cybersecurity actions should be established through common law development.** This process may need some initial incentives from the government, but, ultimately, such a system returns cybersecurity liability to those who are largely responsible for cybersecurity losses. The natural establishment of a cyber insurance community will then assist in the administration of risk assessments and foster improved security methodologies.

 **Encourage the creation of cyber-supply-chain security ratings**. Such ratings should be **granted by a nonprofit organization that will assess the surety of an organization’s supply chain**, similar to how Underwriters Limited assesses the safety of various commercial products. By promoting such ratings, consumers will be able to make risk-based decisions and support better security by tying it to their profit motive.

 **Clarify boundaries and standards for cyber self-defense. The terms of an entity’s right to self-defense must be set within reasonable limits**. Such terms would **allow entities** with the correct capabilities **to take active measures to protect themselves without usurping the responsibility or authority of the federal government**.

 Advocate more private-sector awareness, education, and training for the general population. Such an effort will ensure that the American public becomes an asset, not a liability, in the struggle. Making the public more aware, without hype or feel-good security measures, is a start. Ongoing cyber education for the general workforce must also be promoted through standardized yet dynamic education programs, most likely originating in the private sector. This must be a major priority, not a minor ancillary effort.

 **Alter technical education and clearance practices to encourage the development of a cyber workforce. A well-trained cyber workforce is critical to the task facing America**. **The U.S. should promote STEM education and adjust visa, security clearance, and certification practices to attract, train, and retain the very best personnel for America’s key public-sector and private-sector entities**. This requires issuing more security clearances as appropriate and emphasizing cyber certification and credentialing programs. Achieving the workforce needed requires the U.S. to more effectively leverage its cybersecurity personnel, whether that is integrating military personnel into cyber efforts, or tapping highly skilled hackers who would normally not be eligible to work for businesses or government agencies.

 **Lead international cyber engagement. The U.S. should lead international efforts to “name and shame” nations that use the cyber realm for malicious purposes, either against other nations or their own people. Additionally, the U.S. must respond to aggressive cyber campaigns by other nations by causing those nations to feel diplomatic and economic pain to deter cyber aggression**. The U.S. response should include ceasing naive cooperation, curtailing visas for guilty parties, and subjecting those with stolen information and intellectual property to criminal charges and other legal action. Furthermore, many bad cyber actors also maintain some form of control over the Internet in their country. The U.S. should explore ways to weaken these nations’ grip on the Internet in order to weaken their control of the populace. All of these efforts should be tied to the completion of a coherent national conversation concerning the entire array of cyberspace issues.

Cybersecurity is one of the most critical issues the U.S. faces today. The threats are real and the need is pressing. **Despite the best intentions of those involved with previous cyber legislative efforts, a regulatory basis simply will not work. It will not improve security and may actually lower it by providing a false level of comfort and tying the private sector down with outdated regulations. Cyberspace’s dynamic nature must be acknowledged and addressed by policies that are equally dynamic**.

#### aff kills crisis response- by locking in a culture of restrictions on the executive-- causes terror, prolif, rogue agression

John Yoo 8/30/13, Emanuel S. Heller Professor of Law @ UC-Berkeley Law, visiting scholar @ the American Enterprise Institute, former Fulbright Distinguished Chair in Law @ the University of Trento, served as a deputy assistant attorney general in the Office of Legal Council at the U.S. Department of Justice between 2001 and 2003, received his J.D. from Yale and his undergraduate degree from Harvard, “Like it or not, Constitution allows Obama to strike Syria without Congressional approval,” Fox News, <http://www.foxnews.com/opinion/2013/08/30/constitution-allows-obama-to-strike-syria-without-congressional-approval/> ableist edited

The most important of the president’s powers are commander-in-chief and chief executive.¶ As Alexander Hamilton wrote in Federalist 74, “The direction of war implies the direction of the common strength, and the power of directing and employing the common strength forms a usual and essential part in the definition of the executive authority.”¶ Presidents should conduct war, he wrote, because they could act with “decision, activity, secrecy, and dispatch.” In perhaps his most famous words, Hamilton wrote: “Energy in the executive is a leading character in the definition of good government. . . It is essential to the protection of the community against foreign attacks.”¶ The Framers realized the obvious. Foreign affairs are unpredictable and involve the highest of stakes, making them unsuitable to regulation by pre-existing legislation. Instead, they can demand swift, decisive action, sometimes under pressured or even emergency circumstances, that are best carried out by a branch of government that does not suffer from multiple vetoes or is delayed by disagreements. ¶ Congress is too large and unwieldy to take the swift and decisive action required in wartime. ¶ Our Framers replaced the Articles of Confederation, which had failed in the management of foreign relations because it had no single executive, with the Constitution’s single president for precisely this reason. Even when it has access to the same intelligence as the executive branch, Congress’s loose, decentralized structure would paralyze [freeze] American policy while foreign threats grow. ¶ Congress has no political incentive to mount and see through its own wartime policy. Members of Congress, who are interested in keeping their seats at the next election, do not want to take stands on controversial issues where the future is uncertain. They will avoid like the plague any vote that will anger large segments of the electorate. They prefer that the president take the political risks and be held accountable for failure.¶ Congress's track record when it has opposed presidential leadership has not been a happy one.¶ Perhaps the most telling example was the Senate's rejection of the Treaty of Versailles at the end of World War I. Congress's isolationist urge kept the United States out of Europe at a time when democracies fell and fascism grew in their place. Even as Europe and Asia plunged into war, Congress passed Neutrality Acts designed to keep the United States out of the conflict.¶ President Franklin Roosevelt violated those laws to help the Allies and draw the nation into war against the Axis. While pro-Congress critics worry about a president's foreign adventurism, the real threat to our national security may come from inaction and isolationism.¶ Many point to the Vietnam War as an example of the faults of the “imperial presidency.” Vietnam, however, could not have continued without the consistent support of Congress in raising a large military and paying for hostilities. And Vietnam ushered in a period of congressional dominance that witnessed American setbacks in the Cold War, and the passage of the ineffectual War Powers Resolution. Congress passed the Resolution in 1973 over President Nixon's veto, and no president, Republican or Democrat, George W. Bush or Obama, has ever accepted the constitutionality of its 60-day limit on the use of troops abroad. No federal court has ever upheld the resolution. Even Congress has never enforced it.¶ Despite the record of practice and the Constitution’s institutional design, critics nevertheless argue for a radical remaking of the American way of war. They typically base their claim on Article I, Section 8, of the Constitution, which gives Congress the power to “declare War.” But these observers read the eighteenth-century constitutional text through a modern lens by interpreting “declare War” to mean “start war.” ¶ When the Constitution was written, however, a declaration of war served diplomatic notice about a change in legal relations between nations. It had little to do with launching hostilities. In the century before the Constitution, for example, Great Britain – where the Framers got the idea of the declare-war power – fought numerous major conflicts but declared war only once beforehand.¶ Our Constitution sets out specific procedures for passing laws, appointing officers, and making treaties. There are none for waging war, because the Framers expected the president and Congress to struggle over war through the national political process.¶ In fact, other parts of the Constitution, properly read, support this reading. Article I, Section 10, for example, declares that the states shall not “engage” in war “without the consent of Congress” unless “actually invaded, or in such imminent Danger as will not admit of delay.” ¶ This provision creates exactly the limits desired by anti-war critics, complete with an exception for self-defense. If the Framers had wanted to require congressional permission before the president could wage war, they simply could have repeated this provision and applied it to the executive.¶ Presidents, of course, do not have complete freedom to take the nation to war. Congress has ample powers to control presidential policy, if it wants to. ¶ Only Congress can raise the military, which gives it the power to block, delay, or modify war plans.¶ Before 1945, for example, the United States had such a small peacetime military that presidents who started a war would have to go hat in hand to Congress to build an army to fight it. ¶ Since World War II, it has been Congress that has authorized and funded our large standing military, one primarily designed to conduct offensive, not defensive, operations (as we learned all too tragically on 9/11) and to swiftly project power worldwide. ¶ If Congress wanted to discourage presidential initiative in war, it could build a smaller, less offensive-minded military.¶ Congress’s check on the presidency lies not just in the long-term raising of the military. It can also block any immediate armed conflict through the power of the purse.¶ If Congress feels it has been misled in authorizing war, or it disagrees with the president's decisions, all it need do is cut off funds, either all at once or gradually.¶ It can reduce the size of the military, shrink or eliminate units, or freeze supplies. Using the power of the purse does not even require affirmative congressional action.¶ Congress can just sit on its hands and refuse to pass a law funding the latest presidential adventure, and the war will end quickly. ¶ Even the Kosovo war, which lasted little more than two months and involved no ground troops, required special funding legislation.¶ The Framers expected Congress's power of the purse to serve as the primary check on presidential war. During the 1788 Virginia ratifying convention, Patrick Henry attacked the Constitution for failing to limit executive militarism. James Madison responded: “The sword is in the hands of the British king; the purse is in the hands of the Parliament. It is so in America, as far as any analogy can exist.” Congress ended America’s involvement in Vietnam by cutting off all funds for the war.¶ Our Constitution has succeeded because it favors swift presidential action in war, later checked by Congress’s funding power. If a president continues to wage war without congressional authorization, as in Libya, Kosovo, or Korea, it is only because Congress has chosen not to exercise its easy check.¶ We should not confuse a desire to escape political responsibility for a defect in the Constitution. A radical change in the system for making war might appease critics of presidential power. But it could also seriously threaten American national security.¶ In order to forestall another 9/11 attack, or to take advantage of a window of opportunity to strike terrorists or rogue nations, the executive branch needs flexibility.¶ It is not hard to think of situations where congressional consent cannot be obtained in time to act. Time for congressional deliberation, which leads only to passivity and isolation and not smarter decisions, will come at the price of speed and secrecy.¶ The Constitution creates a presidency that can respond forcefully to prevent serious threats to our national security.¶ Presidents can take the initiative and Congress can use its funding power to check them. Instead of demanding a legalistic process to begin war, the Framers left war to politics.¶ As we confront the new challenges of terrorism, rogue nations and WMD proliferation, now is not the time to introduce sweeping, untested changes in the way we make war.

### Security K: 1NC

#### Cyber-insecurity injects an adversarial frame into the debate—fear of an invisible cyber threat militarizes the cyber domain

Cavelty, October 22, 2012 (Myriam Dunn, The Militarisation of Cyber Security as a Source of Global Tension, <http://isn.ch/Digital-Library/Articles/Special-Feature/Detail/?lng=en&id=153888&tabid=1453349960&contextid774=153888&contextid775=153887> )

Over the last few years, cyber security has been catapulted from the confined realm of technical experts into the political limelight. The discovery of the industry- sabotaging Stuxnet computer worm, numerous tales of (Chinese) cyber espionage, the growing sophistication of cyber criminals, and the well-publicised activities of hacker collectives have combined to give the impression that cyber attacks are becoming more frequent, more organised, more costly, and altogether more dangerous. As a result, a growing number of countries consider cyber security to be one of the top security issues of the future. This is just the latest ‘surge’ of attention in the three- to four-decade-long history of cyber issues. The importance attached to cyber security in politics grew steadily in response to a continual parade of incidents such as computer viruses, data theft, and other penetrations of networked computer systems, which, combined with heightening media attention, created the feeling that the level of cyber insecurity was on the rise. As a result, the debate spread in two directions: up- wards, from the expert level to executive decision-makers and politicians; and horizontally, advancing from mainly being an issue of relevance to the US to the top of the threat list of more and more countries. The debate on ‘cyber security’ originated in the US in the 1970s, built momentum in the late 1980s, and spread to other countries in the late 1990s.Early on, US policy-makers politicised the issue. They presented cyber security as a matter that requires the attention of state actors because it cannot be solved by market forces. As concern increased, they securitised the issue: They represented it as a challenge requiring the urgent attention of the national security apparatus. In 2010, against the background of the Stuxnet incident, the tone and intensity of the debate changed even further: The latest trend is to frame cyber security as a strategic-military issue and to focus on countermeasures such as cyber offence and defence, or cyber deterrence. Though this trend can easily be understood when considering the political (and psychological) effects of Stuxnet, it nonetheless invokes images of a sup- posed adversary even though there is no identifiable enemy, is too strongly focused on national security measures instead of economic and business solutions, and wrongly suggests that states can establish control over cyberspace. Not only does this create an unnecessary atmosphere of insecurity and tension in the international system, it is also based on a severe misperception of the nature and level of cyber risk and on the feasibility of different protection measures. While it is undisputed that the cyber dimension will play a substantial role in future conflicts of all grades and shades, threat-representations must remain well informed and well balanced at all times in order to rule out policy reactions with excessively high costs and uncertain benefits.

#### Role of the ballot is to either accept or reject the affs securitization—prior to action

**Saltera 8** (Securitization and desecuritization: a dramaturgical analysis of the Canadian Air Transport Security Authority Mark B Saltera School of Politics, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5. E-mail: msalter@uottawa.ca, , 2008

This model of settings for securitizing moves fits cleanly with Paris School interventions on the trope of risk (Aradau and van Munster 2007; Aradau et al. 2008). However, it is precisely because security plays differently to each audience, is used differently by different speakers, and changes in its meaning that we need to expand our analysis of how securitizing moves are accepted or rejected. Bigo (2006: 7) uses the notion of 'field' to demonstrate how 'these professions do not share the same logics of experience or practice and do not converge neatly into a single function under the rubric of security. Rather, they are both heterogeneous and in competition with each other'. This article offers a way into that field analysis of securitization, that is not reduced to linguistic analysis, through a dramaturgical analysis of setting: within each securitizing move, we must consider who may speak, what may be spoken, and what is heard. Top of page Securitization Securitization theory has been an incredibly fruitful approach for the study of security. Having disaggregated 'state security' into several sectors (military, political, societal, economic, and ecological), Buzan argues that 'the question of when a threat becomes a national security issue depends not just on what type of threat it is, and how much the recipient state perceives it, but also on the intensity with which the threat operates' (1991: 133–4). This was expanded by Buzan, Waever, and de Wilde in the formal model of securitization: 'the intersubjective establishment of an existential threat to have substantial political effects...to break free of procedures or rules he or she would otherwise be bound by...' (1998: 25). The attempt at securitization is called a 'securitizing move', which must be 'accepted' or rejected by the target audience. The authors argue that the conditions for success are (1) the internal grammatical form of the act, (2) 'the social conditions regarding the position of authority for the securitizing actor — that is, the relationship between the speaker and the audience and thereby the likelihood of the audience accepting the claims made in a securitizing attempt, and (3) features of the alleged threats that either facilitate or impede securitization' (1998: 33). There is room within the original cast of the theory to expand the notion of facilitating conditions or impediments for securitizing moves — but little direction as to what those might be. In this reading, the second factor — these social conditions — is under-determined and must be explored further. In the debate between the CS, so named in a response by McSweeney (1996, 1998), subsequent replies (Buzan and Waever, 1997), and a provocative intervention by Williams (2003), a number of critiques of the model of securitization were raised. The CS was faulted by McSweeney for appearing to give an ontological pre-existence to the 'speaker' and 'audience' that is at odds with a more processual or constructivist perspective of identity (1996: 83). Williams argued that different kinds of speech might constitute an act, and made an important theoretical connection to Schmittian politics of sovereign exceptionality. Williams wrote that the CS process of securitization — notably that securitization implies depoliticization — can be found in other theories of sovereign authority, and that securitizing moves are an attempt by the sovereign to decide the exception and thus remove the sector from democratic debate (2003). Buzan, presented a spectrum of how issues might be weighted: 'nonpoliticized... through politicized... or securitized' (1998: 23). Within this account, the CS appears to represent securitization as a threshold — particularly within a democratic society. Either a threat is represented and then accepted as a security issue, or it remains contested within the realm of normal, deliberative politics. Successful securitization is at root a political process, but the actual politics of the acceptance are left radically under-determined by this model. The authors argue that 'the issue is securitized only if and when the audience accepts it as such... (it must) gain enough resonance for a platform to be made from which it is possible to legitimize emergency measures...' (1998: 25). It is precisely the dynamics of this acceptance, this resonance, this politics of consent that must be unpacked further. The Copenhagen School, certainly open their model to consideration of the 'external, contextual, and social roles and authorized speakers' of the speech act 'and, not least, under what conditions (i.e. is the securitization successful)' (1998: 32). But, within their model, there is no frame for how securitizations are successful or fail. A subsidiary point that is worth noting: these external and internal conditions for securitization appear to work in reverse for the process of desecuritization (Wæver 1995). The speaker proposes that there is not a threat, or at least not a threat that is existential, and that the problem can be comprehended or managed within the rubric of normal politics. There are a number of assumptions within articles about securitization theory about the differential ease or difficulty of securitization and desecuritization. These unexplored assumptions arise because there is no theory for the actual process of the success or failure for a securitizing or desecuritizing move. The statist model of securitization does not match the complexity of contemporary social dynamics of security. First, other non-state actors must be included in the model, as demonstrated by Bigo (2006) and others. Security is not contained solely within the traditional boundaries of the state and the authority to make securitizing moves not limited to state actors. Second, two temporal dimensions must be added to considerations of securitization and desecuritization: the duration of the securitization and the entropy of the public imagination. Some issues, such as the war on drugs, rose and faded in the public imagination, largely independent from the 'actual' or empirical degree of threat (Campbell 1993; Aradau 2001). Third, securitization is not an instantaneous or irrevocable act. Rather securitization reflects the complex constitution of social and political communities and may be successful and unsuccessful to different degrees in different settings within the same issue area and across issues. Floyd demonstrates convincingly that desecuritization is entirely 'issue-dependent rather than static' (2007: 349). Nor is securitization an act that removes an issue from deliberative politics forever. Rather, studies of securitization need to account for the movement of issues into and out of the security sector over time. An issue that has faded from the public view may rest within the security frame or enjoy a kind of 'entropy' where the public, elite, technocratic, or scientific communities assume that exceptional security measures have lapsed in the face of a threat that no longer seems pressing or relevant. Hysteria over the presence of communists and homosexuals within government departments no longer seems a national security threat, in the way that McCarthy and others described. For example, a securitization act may be successful with a scientific or technocratic community, and yet fail in the elite and popular realm, such as the debate over global warming during the 1980s and 1990s. A process of desecuritization may occur within popular politics, while elites and professionals remain unconvinced, such as transportation safety. Doty examines how the Minutemen along the US–Mexico border consider themselves to be acting in a 'decisionist' mode, even though they are not sovereign actors (2007: 129–31). A particular group has successfully securitized illegal migration at the border for a segment of the population, while simultaneously human rights groups — by placing water in the desert and advocating for amnesty — act as if the issue is politicized. John McCain (Arizona Senator and Republican Presidential nominee) proposed legislation (with Democratic Senator Edward Kennedy, for whom 'all politics are local') that would provide a 'path to citizenship' and border security — only to withdraw it in the face of public criticism. In this case, the issue was the subject of intense 'normal' political debate, and the securitizing move was incomplete and heterogeneous across the political landscape. The model provided by the CS gives us no way to measure the success or failure of a securitizing move. In this article, I gauge the success or failure of a securitizing move by ranking the degree to which policies, legislation, and opinion accords with the prescriptions of the speech act: 1. To what degree is the issue-area discussed as part of a wider political debate? 2. Is the description of the threat as existential accepted or rejected? 3. Is the solution accepted or rejected? 4. Are new or emergency powers accorded to the securitizing agent? Unfortunately we are unable to provide accessible alternative text for this. If you require assistance to access this image, please contact help@nature.com or the author This scale of success–failure is particularly useful in assessing the persistence of a security issue within different audiences. A more nuanced notion of success and failure also gives us a purchase on whether an issue remains securitized over time so that we may develop a theory of the public imagination in the future. Two recent contributions to securitization theory stand out for my analysis.1 Balzacq and Stritzel share my excitement about the potential of the CS, and my worry about the under-developed social aspect of securitization. Stritzel leads the theoretical debate, and provides a strong grounding for this present article. He argues 'too much weight is put on the semantic side of the speech act articulation at the expense of its social and linguistic relatedness and sequentiality' (2007: 358). He critiques the under-theorization of the speaker–audience relations, stating that 'in empirical studies one cannot always figure out clearly which audience is when and why most relevant, what implications it has if there are several audiences, and when exactly an audience is "persuaded"' (2007: 363). Stritzel proposes an embedded analysis of securitization: '(1) the performative force of the articulated threat texts, (2) their embeddedness in existing discourses, and (3) the positional power of actors who influence the process of defining meaning' (2007: 370). By this, he argues, the discourse of securitization must be understood as situated within a relationship between speaker–audience and within a context that predates the actual securitizing act. What makes a securitizing move successful is, for Stritzel, the extent to which the actor has the power to make the threat and the discursive weight of that threat (has it been well established, or is this a new threat?). Stritzel's general model of embedded securitization is productive, but does not explain the success or failure of securitizing moves with any greater clarity than the CS. It is a useful framework that can guide empirical work, but it does not allow us to generate any hypotheses about the politics of securitization and, in particular, about securitizing moves that fail to garner acceptance or resonance. Adding the range of success/failure, as detailed above, helps Stritzel's embedded analysis disaggregate 'persuasion' into multiple steps of audience acceptance. Balzacq also offers a model of the social aspect of securitization that includes 'the context, the psycho-cultural disposition of the audience, and the power that both the speaker and the listener bring to the interaction' (2005: 172). In posing the question of strategic or pragmatic practice, Balzacq argues that 'the positive outcome of securitization, whether it be strong or weak, lies with the securitizing actor's choice of determining appropriate times within which the recognition, including the integration of "imprinting" object — a threat — by the masses is facilitated' (2005: 182). His examples demonstrate that these choices are constrained by history, memory, and discursive tropes. What a dramaturgical analysis adds is the notion that — just as there are different national and psycho-cultural contexts — so too are there different sociological, political, bureaucratic, and organizational contexts within a populace. A popular audience will 'accept' securitization of threats differently to an elite or scientific audience. Global warming as an environmental securitization, for example, has had creeping success — but on radically different grounds with scientists, bureaucrats, elite politicians, and the populace (both within states and between states). It is unclear to me if 'securitizing agents always strive to convince as broad an audience as possible' (2005: 185), particularly within the context of security professionals (Balzacq 2008). In the case study below, the securitization of Canadian civil aviation security was pitched to narrow, specific audiences — and there was little effort to securitize the issues for the general public. At a base level, popular politics (at least in democratic societies) operates differently than scientific politics; technocratic politics from elite politics. In short, in addition to the 'régime of truth, [a society's] "general politics" of truth' (Foucault 1980: 131), there are also specific politics of truth. Foucault hints at these specific regimes of truth in discussing the relationship between the specific intellectual and 'direct and localised relation[s] to scientific knowledge and institutions' (1980: 128). I return to these notions of direct and localized relations in the case study. This is why a dramaturgical approach to the actual evolution of particular securitizing moves is so productive; the language and political games at stake in each setting are radically different. Balzacq has gone on to argue that 'securitization sometimes occurs and produces social and political consequences without the explicit assent of an audience' (2008: 76). He uses the new governance literature to propose a new investigation into policy tools that are 'instruments of securitization' (2008: 79). Both Balzacq's work and this article are attempting to remedy the same flaw in the CS's methodology: an overreliance on speech acts to the neglect of the social. A dramaturgical analysis of setting, however, provides the audience that Balzacq displaces. It is crucial to our analysis that the audience is determinative of the form of securitizing move. Even if those audiences are internal or organizational, as Goffman explains: 'no audience, no performance' (1974: 125). He argues, "if one individual attempts to direct the activity of others by means of example, enlightenment, persuasion, exchange, manipulation, authority, threat, punishment, or coercion, it will be necessary, regardless his power position, to convey effectively what he wants done, what he is prepared to do to get it done and what he will do if it is not done. Power of any kind must be clothed in effective means of displaying it, and will have different effects depending upon how it is dramatized. (1959: 241, emphasis added)" Viewing securitizing moves as a kind of performance, we can see the importance of 'front' and 'backstage': that the same securitizing speech acts may be framed differently within the professional team and in front of an audience. Among themselves, (security) agents may speak in one way, but use other ways to conform to the expectations of a popular audience — and there are some that are always totally excluded from the securitizing process (1959: 145). The audience is not always the public. There is a network of bureaucrats, consultants, parliamentarians, or officials that must be convinced that securitization is appropriate, efficient, useful, or effective. Balzacq identifies a series of backstage securitizing moves that have public effects, though are never securitized publicly. Rather than disappear the audience, a more flexible notion of the setting of securitization allows for micro-sociologies of the particular securitizing moves. Top of page Dramaturgical Analysis Dramaturgical analysis uses the vocabulary of the theatre to understand social settings, roles, and performances of identity. Sociologist Goffman also introduced the notion of the 'framing' of identities and issues, to which much critical scholarship is indebted (1974).2 Much post-structuralist work relies on notions of performance, and critical work in international relations often assumes that key political divisions such as inside/outside, order/anarchy, self/other must be continually performed and reinforced to have effect. In this research programme, I am interested less in the national application of Butler's notion of the performativity of gendered and other identities (1990), Campbell's (1993) notion of foreign policy as an articulation of danger that acts as an identity function, Sylvester's analysis of 'dramaturgies of violence' (2003a) or 'development' (2003b), important and provocative though they may be. Instead, this dramaturgical theory argues that the setting of a securitizing move is determined by the actors and their roles, the rules of the discourse permissible within that space, and the expectations of the audience. When we push this theatrical metaphor, we can classify the different types of securitizing moves that all share similar conventions, narratives, characters, and tropes. The use of specialized language, procedural forms, and common conventions all suggest a common setting.3 For example, terms, precedents, or issues whose specialized meanings both speaker and audience share.4 Buzan et al. themselves use dramatic language: 'the staging of existential issues in politics to lift them above politics...an issue is dramatized and presented as an issue of supreme priority...' (1998: 26). Huysmans alludes to the 'security drama' and leads to this focus on 'the processes of security' (1995: 66). Rather than classify securitizing moves as comedies, tragedies, and histories, we can classify them according to the setting: popular, elite, technocratic, and scientific settings. Each of these settings structures the speaker–audience relationship of knowledge and authority, the weight of social context, and the success of the securitizing move. The setting of a securitizing act includes the stage on which it is made, the genre in which it is made, the audience to which it is pitched, and the reception of the audience. What is particularly useful about Goffman's dramaturgical analysis is precisely the mutual constitution of self and audience. The characters in the drama must use information to convince the audience of a particular story: 'the over-communication of some facts and the under-communication of others... a basic problem for many performances, then, is that of information control' (1959: 141). The setting of a performance, then, communicates the ground-rules for who may speak, what may be said, and what is heard. For example, when Shakespeare was originally staged, groundlings, who paid little admission and sat in the stalls below the stage, might speak to and throw food at the actors — something probably frowned upon at Stratford-upon-Avon today. British pantomime has a particularly interactive audience–actor relationship (oh no it doesn't, oh yes it does), as does the Rocky Horror Picture Show, both of which rely on the audience knowing the call-and-answer structure of the drama. This is to say that in addition to an awareness of the language, tropes, metaphor, plots, and devices that are embedded in the process of securitization, dramaturgical analysis also directs our attention to the constitution of the actor–audience in a particular discursive relationship. Also, Goffman argues that the presentation of the self changes from different social settings, and that an understanding of the setting can illuminate the exigencies of different performances. For him, the character and audience join together in a 'working consensus' to create 'the belief that ([he performer] is related to [the audience] in a more ideal way than is always the case' (1959: 48). Any social scene, such as the setting of securitizing moves, involves the presentation of a self, the setting for that narrative, and audience reception. Speech-act models of securitizing miss the crucial aspect of the 'setting' of the narrative. In particular, the setting of a political speech act includes the stage upon which the securitization is attempted (national, organizational, bureaucratic, or scientific) and also the past narrative history of failed and successful securitizations by lauded or derided characters (Merelman 1969: 225).5 Securitizing moves in popular, elite, technocratic, and scientific settings are markedly different — they operate according to different constitutions of actor and audience. A securitizing move is not the same in all contexts, because it is not simply made up of the internal grammatical elements. Krebs and Jackson analyse the importance of public rhetoric, while bracketing the questions of motivation (2007: 41). Whether the intention of the speaker is entirely calculative or emotive, the rules of the setting remain the same (Goffman 1959: 66). A securitizing move made for political gain or from fear adheres to the same logic, but the effect of the message may be different. This focus on the reflexive relationship between speaker and audience is particularly important for theories of securitization. Securitizing moves follow an internal grammar that is determined not simply by internal rules (i.e. the invocation of an emergency or exception to normal politics), but also to a common, social grammar (i.e. the universe of tropes, images, metaphors, histories that can be invoked). Securitizing moves occur within the universe of the audience imagination. It is not simply a power relationship — but a knowledge-authority game. A popular securitizing move may be prompted by an informal authority such as a civil society group (like the Minutemen along the US–Mexico border); but, civil society groups may be ineffective in scientific settings (Minutemen and similar groups do not participate in academic or professional arguments about border security). A scientist will use different authority to convince her colleagues than her bureaucratic counterparts. For example, the case for the presence of weapons of mass destruction in the lead-up to the most recent American invasion of Iraq illustrates how ambiguity was leeched from the technocratic discourse as it was marshalled in the popular sphere. Uncertainty was purged as the reports were summarized, as technocrats aimed to convince the political elite, and in turn as the elite aimed to convince the general populace. In short, the 'acceptance' of the audience and the 'resonance' of an existential threat is different within different spheres. I argue that we can distinguish these distinct settings by the grand narratives by which truth is authorized, the characters who are empowered to speak, and the relationships between characters and audience. Within the security sphere, different narratives are deployed for security threats in different sectors; different characters may attempt a securitizing speech act; and the relationship between the audience and the performer structure how those speech acts are made and received. This model of different settings for securitization stems from research into the widening of public security in post-9/11 politics. There is a consensus among critical scholars that the amount of social life that is governed by 'security' claims has increased since 9/11 — but not all securitizing moves have been successful. In studying the evolution of civil aviation security, it was clear that the rules of the speech act were different in different settings: who could speak, who could hear, and what could be said all varied radically — even on the same issue within the same sector. Using the case of the CATSA below, I argue that there are four key settings for these securitizing moves. This is not to say that, in other contexts, more settings are not possible, but rather that the four settings are the fewest number of categories that allow for significant differentiation within this case. The changing nature of perceptions of the aviation sector over the past 40 years demonstrates the importance of time and entropy within securitization studies. The gradual and increasing securitization of international aviation has been a long process, one in which terrorist groups rather than government elites have been the organizational and discursive entrepreneurs. The travelling public has a short memory, politicians aim at the next election cycle, and bureaucrats are risk averse. Securitization has occurred at once or necessarily as a result of one speech act that is accepted or rejected but often through the imposition of new regulations or international standards. The setting of securitization is clearly crucial. The success of a securitization act is dependent not exclusively on the formal syntax or on the informal social context, but also on the particular history, dominant narrative, constitutive characters, and the structure of the setting itself. A popular appeal to national security is often effective in popular and elite politics, but may be less convincing in a scientific realm. The restrictions of mandate and bureaucratic thinking will predominate in technocratic politics in (at least potentially) different ways to the decision making of elites bent on maintaining power or gaining reelection. The setting also determines the characters that may attempt a securitizing speech act. Imams and ministers have an authority to name cultural and moral threats to society within the setting of popular politics, but there is a different stage presence about scientific truths. For example, American librarians had a surprise entry onto the popular scene due to their perceived scientific interest in privacy and free speech, which trumped elite policy demands in the realm of popular politics during the debate surrounding the total information awareness proposal (Abdolian and Takooshian 2003; Monahan 2006). The disproportionate effect of librarians in this public debate cannot be explained simply by power differentials as in Stritzel or Balzacq. Different actors possess different authorizations to speak in different political settings. In the following case, the same securitizing move (to expand aviation security and airport passenger security) was made by different actors, to different audiences, with different claims to authority, in different languages, with different effects. This was evident over time as the securitizing move was accepted or rejected by the target audience. Top of page Securitization and CATSA CATSA provides an excellent case for dramaturgical analysis.6 There is a clear and accepted securitizing move in response to the attacks of 9/11: the creation of CATSA. Because the 9/11 attacks were directly connected to failures in airport security, specifically passenger screening, the securitization of civil aviation was relatively straightforward: the external threat of terrorists using planes as weapons of mass destruction had a deep resonance across the populace, political elite, technocrat, and scientific audiences.7 In particular, the real-time broadcast of the second plane hitting the World Trade center, and the repetition of those images, gave aviation security a dominant position in the public imagination of homeland security. Previous to 9/11, in Canada (and the United States) aviation passenger screening was done by airlines according to national standards set by the transportation authority. Airport security was not a realm of emergency or crisis, and could be handled by non-state entities (like airlines or airport authorities). It was depoliticized, expressed in terms of cost and regulations and technical standards. To nationalize airport security — make it part of the governmental structure, through CATSA — represented an expansion of governmental powers that was due to a perceived emergency and existential threat.8 The securitizing move was successful, even easy. However, this does not tell us enough about the process of securitization. During 2004–2007, there were several other securitizing and desecuritizing moves. There are clear popular, elite, technocratic, and scientific communities that engaged in these (de)securitization processes. Popular sentiment can be evaluated through public media, particularly in 2006. Furthermore, in 2004, CATSA engaged the scientific community in an examination of its security strategy, the proceedings of which were then published in 2006. Elite, technocratic, and scientific settings are evidenced through a 5-year governmental review of the CATSA Act in 2005–2007 and an Auditor-General Special Examination of CATSA in 2006. In these reviews, experts, bureaucrats, and policy-makers evaluated the security function of CATSA. In particular, the CATSA Act Review, conducted by Transport Canada with a wide range of public consultations, provides a thick slice of public, scientific, technocratic, and elite opinion after 5 years of operation. During these two critical reviews, the CATSA executive attempted to convince the elite of the need for an expansion of their mandate. In other words, a further securitization of airport security was called for. This was rejected by the technocrats, experts, and the elite. The CATSA case thus provides us with a clear sector that is successfully securitized, popular and expert challenges to that securitization, and a rejection of an expansive securitizing move. There is thus a prima facie case for a successful securitization move in the area of aviation security in Canada. Before 9/11, passenger screening was done by airports and airlines according to standards set by Transport Canada. Despite Vancouver-based attacks on Air India in 1985, there had been a general trend towards the depoliticization of airport security. It was a subject accessible to public debate, but not politically salient (referenced in political campaigns or in parliamentary debates). Transport Canada was the owner/operator of the majority of airports, and consequently was responsible for passenger screening. Airport policing, which had been the responsibility of the federal police force (RCMP), was conducted by regional forces. Following the 9/11 attacks, Finance Minister Paul Martin submitted a budget that included the creation of the CATSA. The CATSA Act received royal assent on 27 March, 2002, as a new crown corporation responsible for 'effective, efficient and consistent screening of persons accessing aircraft or restricted areas through screening points, the screening of the property in their possession or control, and the screening of the belongings or baggage they give to the air carrier for transport' (CATSA Act Review 2006: 13).9 On 31 December 2002, CATSA undertook responsibility for all passenger screening. The creation of CATSA and its initial responsibilities was supported by the Minister of Transport and Finance Minister Paul Martin, who shortly thereafter became the Prime Minister and issued Canada's first National Security Strategy. There was a clear case for securitization: the threat of terrorism particularly to civil aviation was acute, the previous system of privatized or deregulated screening might lead to inconsistencies among Canadian airports which fundamentally threatened the integrity of the system, and, finally, running counter to the trend towards deregulation in civil aviation, the government had a security role. This opinion was exemplified in the National Security Strategy (Canada. Office of the Auditor General 2006: 36). In the following sections, this article parses the four settings of securitizing moves in the civil aviation security sector during 2004–2007. The traditional CS explanation would go this way: the Canadian state made a securitizing move to define the terror threat to civil aviation as an existential threat that required extraordinary action; this move was accepted by the public, and CATSA was formed in 2001–2002 with new powers and authorities (in evidence through the changes to the Aeronautics Act). The Canadian state has not attempted any significant securitizing moves since the formation of CATSA. However, a close reading of the evolution of CATSA, and, in particular, the reviews in 2005–2006, demonstrates a much more complex picture of securitizing moves and counter-moves. Within the elite setting, political and bureaucratic actors actively debated the roles and responsibilities of CATSA and attempted to increase or decrease the powers and authorities of the organization. Within the popular scene, CATSA became the subject of a number of journalistic and public government reports by a Senate committee that questioned the nature of the threat to aviation security and the appropriate policy responses. Within the scientific setting, academics and experts attempted to desecuritize the work of CATSA through a critical appraisal of the risk management approach. Within a technocratic setting, the ability of CATSA to provide and measure security was radically questioned by the Auditor-General, leading to a desecuritizing move. Running throughout all of these settings, there is a common thread: the CATSA executive wanted to increase its mandate, including more counter-terror operations in its operational purview. This particular securitizing move followed the same pattern: existential threat and new powers needed. However, this same securitizing move was made in different ways in different settings. Elite The CATSA Act Review provides a productive snapshot of the securitizing moves in play between 2005 and 2006. The Minister of Transport, later Transport, Infrastructure and Communities, appointed an expert advisory panel in November 2005 to report on CATSA after 5 years of operation, which was tabled in Parliament on 12 December 2006.10 The Advisory Panel had a wide remit to 'examine the provisions and operations of the CATSA Act to ensure that the legislation provides a sound and adequate statutory basis for CATSA's aviation security mandate, provide advice on future aviation security requirements and other developments that may impact on CATSA's future operations...on other important issues that come to [the Panel's] attention' (CATSA Act Review 2006: 15). In the preparation of their report, the panel conducted a number of public consultations and received submissions from over 40 agencies, institutions, airports, organizations, and individuals. CATSA itself also prepared a number of position papers. This is a complex situation for the study of securitization: the three experts on the advisory panel are the primary authors of the report; they are guided and supported by a bureaucracy from Transport Canada; the final audience is the Minister of Transport. Because the audience of this legislative review was the Minister of Transport, Communities and Infrastructure (and other political decision-makers), I analyze this process as part of the elite process. The Auditor-General's Special Examination, though it occurred in a similar timeframe and with consequences for CATSA's Board, was conducted with reference to the Office of the Auditor-General which has a defined mandate. Thus, I examine the Special Examination below as part of the technocratic audience. It was clear that the mandate of CATSA was in contention. There was a potential within the social space for a securitizing move. The Panel notes: 'it is apparent to the Panel and to many stakeholders that clarification is needed concerning the operation mandate of CATSA and Transport Canada... CATSA thinks it should determine the "hows" [of security functions], while Transport Canada insists they are to be determined within the [Security Screening Order]' (CATSA Act Review 2006: 146). CATSA argued in their submissions that Transport Canada's Security Screening Order was extremely detailed in its prescription, and made security screening inflexible. CATSA made a clear securitizing move: a threat, which was existential, that required extraordinary action — in this case the expansion of its mandate and the transformation of an aviation screening corporation into a counter-terrorism agency (CATSA 2006a: 4). In particular, it was argued before the Advisory Panel that the CATSA Act, Canadian Aviation Security Regulations, and the security screening order, gave CATSA an extremely clear, but restricted mandate in its passenger screening. CATSA screeners were responsible for and authorized to detect and to interdict prohibited items only, or to validate the identity of some non-passengers entering into secure air-side operations. In other words, CATSA could not use any profiling, risk-management, or policing methods in their security screening. CATSA argued that its ability to use these tools — such as behavioural profiling or risk management — would make the civil aviation security system much more secure. CATSA sought increased access to intelligence, a greater flexibility in screening-point staffing, and screening procedures. These moves were rejected by the expert panel and the Minister in the CATSA Act Review.11 In 'Our vision for aviation security', submitted to the Review, CATSA makes its case for an expanded mandate. CATSA can provide 'a national approach and consistency', 'public security', 'accountability', 'access to intelligence', and 'international networks' (CATSA 2006b: 5–6). The desire for national consistency among Canadian airports was one of the chief reasons for the creation of CATSA. The form of the organization balances accountability across a Board of Directors, the Minister for Transport, Infrastructure and Communities, and the Treasury Board (which approve, among other aspects, CATSA's budget and corporate plans). However, these other three priorities (public security, access to intelligence, and international networks) represent an expansion of its mandate. Airports, in their submissions to the CATSA Act Review, argue that screening can be handled efficiently and effectively by their own private security staff — essentially a desecuritizing move (Aéroports de Montréal 2006; Canadian Airports Council 2006). They argue that security screening is not an existential threat and does not require additional powers or authorities. Aéroports de Montreal concludes: 'ADM strongly opposes any expansion of CATSA's mandate to encompass, for example, access control or policing functions, since this could be a further infringement of airports' control over their operations. Furthermore, the Minister should not be able to grant CATSA new responsibilities without consulting the airports' (2006: 3). The Canadian Airports Council writes: 'With the exception possibly of cargo security, airports are not in favour of an expanded mandate for CATSA, and airports should be consulted thoroughly before any expansion to CATSA's mandate takes place. Some airports have expressed an interest in taking over or sharing some of CATSA's functions at airports' (2006: 1). Against the argument that airports might be able to provide security screening, CATSA argues 'public security is the #1 priority — CATSA's legislated mandate is air transport security — period. We are not in the business of operating parking, leasing space to businesses, airport cleaning and maintenance, or other areas of interest to airport authorities. Public security is compromised when screening operations are "cross-collateralized" with other airport operations' (5). Within this complex discursive environment, securitization/desecuritization is not simply a binary (on/off) condition but more processual. An examination of the submissions to the Advisory Panel illustrates who 'counts' as a stakeholder for the process, who counts as expert, whose voice is heard. While CATSA, the Advisory Panel, and the Review Secretariat clearly had primary speaking roles (with stakeholders in supporting roles) in this particular securitization drama, the important audience was the Minister. This is a failed securitizing move: CATSA attempted to expand their mandate, to widen their security footprint, to convince the political elite that, due to the terror threat, more powers should accrue to the security service. CATSA publications emphasize the threat of terror, memorialize past attacks, and have instituted a training programme on terror for senior staff (David 2006). The attempt by CATSA to expand their mandate and securitize other areas of airport security was rejected by both the expert panel and the political elite. Both elite and experts were convinced of the threat, but none were convinced that special or expanded powers were needed. The Minister argued specifically that 'Responsibility for aviation security will continue to rest with the Minister of Transport, Infrastructure and Communities... CATSA's activities will be focused on its core aviation security-screening role: the effective and efficient screening of persons who access aircraft or restricted areas through screening points, the property in their possession or control, and the belongings or baggage that they give to an air carrier for transport' (Cannon 2007). Experts and elites argued that the public–private system, structured by rules from Transport Canada, could secure the system. In other words, the existential threat was accepted by the audiences, but not an expansion of powers. Consequently, the securitizing move was not accepted by the key audiences, the Advisory Panel and the Minister. Popular Within popular politics, the securitization of airport screening was easy to accomplish, particularly in countries that had 'focusing events' such as 9/11 (Birkland 1997, 2004). As Lyon observes, 'apart from short-term responses to some notorious hijackings over the past 30 years, airport security was never a topic that engaged the public imagination in Canada (or elsewhere for that matter)' (2006: 398). In 1985, the attack on Air India flight originated in Canada. Investigations determined that it was a result of weak baggage screening and the lack of reconciliation between passengers and luggage. However, passenger screening was not seen as such an important issue — the majority of hijacking or terror attacks occurred in the United States, particularly with reference to Cuba, or in Europe and the Middle East.12 In January 2003, the Standing Senate Committee on National Security and Defence tabled a report in Parliament titled The Myth of Security at Canada's Airports that called for a reinstatement of the RCMP presence and a wide-ranging overhaul of the system. Despite frequent interviews in the popular press by its author, this report did not resonate with the public, the policy, or the political audiences: it represents another failed securitizing move.13 However, the success of the securitization of aviation security can be seen in the popular reaction to two cases of investigative journalism. First, a journalist from the French-language paper Journal de Montréal infiltrated the secure, air-side areas at Trudeau airport in Montreal on a number of occasions through different access points. The journalist entered a catering company's facilities (Cara Foods) and gained access to restricted areas through a disused hanger. The reporter 'found a place to slip under the airport's perimeter fence, but there's no need to get your knees dirty: he also just walked in, repeatedly, as if he belonged. In prohibited zones he gained easy access to the outside of aircraft, to carts full of meals about to be loaded onto planes, and to a truck used to provide water to aircraft' (Gazette 2006). Though none of the checkpoints he passed were staffed by CATSA employees, or indeed the actual regulatory responsibility of CATSA, it was CATSA that was held publicly responsible. While CATSA has responsibility for key elements of aviation security, such as passenger and non-passenger screening at identified checkpoints, it is not responsible for overall perimeter security or security of air-side services. An editorial opined: 'Transport Minister Lawrence Cannon and CATSA chief Maurice Baril have got some explaining to do. Security can't be perfect, but it should surely be better than this'. Minister Cannon summoned Maurice Baril (who was CATSA's Chairman of the Board of Directors, who subsequently resigned) and CATSA President and CEO Jacques Duchesneau to Ottawa 'for further discussions' (Cannon 2006). In Canada, the responsibility for airport security, and the maintenance of air-side security, is shared among a number of different players in the airport and coordinated by Transport Canada through the Aviation Security Regulations. Thus, CATSA is responsible only for its six stated tasks, mandated in the CATSA Act. However, the popular response was that CATSA should be responsible for all of airport security — that all aspects of airport security were the responsibility of the government, because of the existential threat, because of the need for emergency powers. The (inappropriate) critique of CATSA — for, in essence, having a restricted mandate — is a clear demonstration that the public expected that CATSA would be responsible for all airport security (perhaps because of its much larger American counterpart the Transportation Security Administration or a 'misleading' corporate identity). For securitization theory, this implies that the audience, in this case the popular audience, may not simply accept securitization but also initiate an expansion of government powers. The second popular case that demonstrates how the wider public may not simply support, but widen securitization, is the 'revelation' by a Canadian television news programme that CATSA itself had security problems. CBC's investigative journalism programme, The Fifth Estate, broadcast 'Fasten Your Seatbelt' on 5 November 2005 (CBC 2005). A whistle-blower argued that 'customer service' was prioritized over security in passenger screening, and then a security expert, Steve Elson, demonstrated how to circumvent screening points (CBC 2006). The 'security expert' was described as being a former TSA inspector who currently consults on security matters (validating his expertise in both government and liberal economic terms). Once again, a complex web of regulations and responsibilities was simplified (and misconstrued). The whistle-blower was a CATSA employee, and the programme highlighted the role of CATSA in passenger screening and the random nature of non-passenger screening. Within the programme, there was little discussion of the role of the actual regulator and ministry responsible for aviation security: Transport Canada. However, in an unaired portion of the interview with Senator Colin Kenny, one of the authors of The Myth of Security at Canada's Airports said, 'The problem is with Transport Canada. They set the regulations, CATSA simply follows them' (CBC n.d.). CATSA has specifically mentioned their attention to public pressure (Auditor-General 2006), and continuously measures passenger satisfaction rates. Within the popular realm, journalists and government representatives had the roles as experts to 'speak authoritatively'. In these cases, CATSA representatives — who were experts on the legislated mandate of CATSA — were unable to convince the populace through press releases, interviews, etc. that CATSA was not responsible for the security breeches. The socio-political context of Canada also determined 'what might be said'. In particular, the extremely complex interplay of authorities and responsibilities at the airport was radically simplified: CATSA was represented as being solely responsible for aviation security. Any failures of airport security, by themselves or their subcontractors, were laid at the feet of CATSA — as demonstrated by the Minister of Transport calling the President of CATSA back to Ottawa immediately after the Montreal incidents. The success of the securitization of aviation security within this realm is clear in the public criticism of CATSA for not using enough emergency measures to contain this existential threat. The travelling public, which is frequently surveyed by CATSA about its customer service, plays a large role in CATSA's internal discussions, but a smaller role in its discussions with external agencies. These conclusions demonstrate why more nuance is needed in current models of securitization. More is going on than a simple politics of blame or bureaucratic infighting, although plainly some of those dynamics are in play. Rather, CATSA was being responsibilized for all of aviation security in Canada, despite its limited mandate. The popular pressure, I argue, is a representation of the 'facilitating conditions' in the popular imagination: the public was open to securitizing moves by the government. There is also the restriction of 'what might be said': in short, an over-simplification of complex regulatory systems and a misrepresentation of the level of attainable security. No system is completely secure — a fact that is often and easily acknowledged among experts in aviation security. But, this was not portrayed in the popular scene. Investigative journalists, in this case, had the position to speak authoritatively in a way that a Senator and other security experts did not. The public could only express their satisfaction with CATSA's screening as a customer service to CATSA, or in the popular media as a policing and counter-terrorism agency. The failure of the expansion of the security mandate of CATSA in the elite realm and the simultaneous popular critique of CATSA's mandate indicate that the setting matters. Scientific In addition to a set of technical debates, CATSA is also engaged with the scientific community on how to effectively and efficiently screen passengers. I want to focus on the primary adoption of the risk management model, since this has been examined in the Auditor-General's Special Examination and CATSA Act Review process. CATSA was responsible for the purchase and implementation of a wide-scale technological upgrade to explosive detection systems, to meet Canadian and international standards. It has also won awards for its technological innovation for the RAIC programme that uses biometric identification.14 There is also a robust debate in expert circles regarding the use of private firms for security screening, whether airport security can be left to the private sector or should be provided by the government (Frederickson and Laporte 2002; Hainmüller and Lemnitzer 2003; Seidenstat 2004).15 CATSA is mandated to secure key elements of the civil aviation infrastructure through passenger screening. CATSA, however, provides screening according to the 'Security Screening Order', under the Aeronautics Act and the Canadian Aviation Security Regulations. As a crown corporation, CATSA is also bound by government policy to implement a 'risk management strategy', the key elements of which are the evaluation of potential impact and frequency of exposures to different risks. It then formulates a strategy that accepts, avoids, transfers, or mitigates that risk. Within this framework, 'It is government policy to identify, and reduce or eliminate risks to its property, interests and employees, to minimize and contain the costs and consequences in the event of harmful or damaging incidents arising from those risks, and to provide for adequate and timely compensation, restoration and recovery' (Canada. Treasury Board of Canada 2001). CATSA actively engaged the academic and expert communities in formulating its risk management strategy (Brodeur 2006),16 and its proposed Security Management Systems approach (Salter 2007). The CATSA executive asked for training in risk management and, in 2005, the International Centre for Comparative Criminology organized two seminars (in Paris and in Montréal) on risk management. The academic experts at these workshops represented the fields of surveillance studies, criminology, sociology, public health, environmental studies, and risk management itself. The core issues for the experts were the following: 'uncertainty theoretically supersedes risk and rule-based and risk-based models are not mutually exclusive in the promotion of security. Not only can they be reconciled in practice, but they must' (Brodeur 2006: 324). This poses two problems for CATSA, which later became evident in the CATSA Act Review and the Auditor-General's Special Examination: uncertainty within the public security fields makes measurement impossible; following security regulations alone would be insufficient to demonstrate risk management. Among the social scientists represented at the Montréal seminar, there was a consensus that the tactic of risk management, used often in environmental planning and other scientific realms, cannot be easily transferred to the social realm (Zedner 2006: 424). Ericson, an internationally renowned criminologist who pioneered the critical study of risk management, argued, 'risk management systems can restrict freedom, invade privacy, discriminate, and exclude populations. Such self-defeating costs and the uncertainties they entail can be minimized only by infusing risk management systems with value questions about human rights, well-being, prosperity, and solidarity' (2006: 346). These experts questioned not only the empirical reliability of risk management (Manning 2006: 457), but also the ideological function of screening by risk (O'Malley 2006: 420). These experts agreed that the move to a risk-based model of airport screening would require more specific intelligence and the widening of CATSA's mandate. But, they also stressed that because of the radical incalculability of the threat of terror, risk-based security screening had to be combined with rules-based screening. Since risk management could not prevent terror, and may cause potential problems, the problem of airport security had to be made explicitly political. Within these seminars, the setting was academic: experts were selected because of their scholarly credentials and the discourse was in an academic mode.17 At root, the experts attempted a desecuritizing move: since uncertainty trumps risk, the lack of metrics makes measurement (and thus management of risk) impossible. Thus, the security screening process must be political. Since a risk-based approach cannot guarantee security, and the risk- and rule-based systems were in some conflict, CATSA (and by implication Transport Canada, the regulator) must deal with these uncertainties and risks, sensitive to the politics of the situation. Screening procedures could not be an emergency, existential threat that required extraordinary powers or policies. Because security was unobtainable, the process had to remain steadfastly political. Though there was a consensus among the scientific field, this desecuritizing move failed — none of the other audiences were convinced, as demonstrated below in the review of the technocratic setting. Technocratic While the CATSA Act Review had the political elite as its audience, the Auditor-General's Special Examination had only the Office of the Auditor-General as its audience. It was also presented to the CATSA Board of Directors, with clear implications for the Minister — but the authors of the report were a team of auditors not politicians. A Special Examination of CATSA was undertaken by the Auditor-General of Canada during November 2005–June 2006 (a similar time period to the CATSA Act Review process). The Auditor-General appraised the extent to which CATSA was fulfilling and measuring its mandate, as well as other financial and management standards.18 It is beyond the mandate of the Auditor-General's Special Examination to analyse the mandate of the organization (Canada. Office of the Auditor General 2006: 9). CATSA tried to use the Special Examination as another venue to expand its mandate, which, as I argue above, is a securitizing move — accruing more governmental power to manage an existential threat. Just as CATSA attempted this with respect to the elite audience of the CATSA Act Review, they also attempted this in the technocratic setting. As the report concludes: 'CATSA does not wish to be constrained by its limited mandate. CATSA would like to have more control over the way screening operations are conducted, the allocation of screening staff, and the selection of screening equipment; and it would like direct access to intelligence information' (3). The case for the expansion of CATSA's mandate is made in terms of security, emergency, and extraordinary powers: it satisfies the internal criteria for a securitizing move. Here is the key moment: 'CATSA's view is that counterterrorism is a key aspect of its work. This is evident in CATSA documents. Transport Canada has stated that CATSA's current mandated responsibilities do not specifically include counter-terrorism' (14). The CATSA Act Review Advisory Panel also notes this troubled relationship: 'there appears to be a high level of frustration and mistrust between Transport Canada and CATSA at the national level' (CATSA Act Review 2006: 137). The Auditor-General's report is relatively neutral in this bureaucratic in-fighting but that neutrality stands as a rejection of the securitizing move. In short, the securitizing move fails because it does not accept 'security' as a legitimate justification for reevaluating the mandate of CATSA: 'This Special Examination did not question CATSA's mandate; rather it assessed CATSA's systems and practices within its mandate and the regulations that govern the aviation security system' (9). Despite the best efforts of CATSA to make the mandate part of the audit, in order to use the report as a tool in their securitizing move, the Auditor-General did not accept the move. Within the Auditor-General's review, who may speak and what may be said is radically different. CATSA officials prepared reports for the Auditor-General's team who also consulted with an expert team.19 The terms of reference for the report, however, were specific to the crown corporation model and its relevant legislation regarding financial administration. Essentially, security was not the object of study: however, risk management was under scrutiny. Thus, while similar messages were made by CATSA and Transport Canada, they were expressed in different, more managerial language. The audience for this report was primarily the Board of Directors, and indirectly the responsible Minister, Treasury Board Secretariat, and the Parliament of Canada to which the Auditor-General reports. However, the review results were also marshalled in the CATSA Act Review process, in order to bolster the case for a refusal of the securitizing move to increase CATSA's mandate. Thus, the same securitizing/desecuritizing moves are played out, but in a totally different register within different sectors. Settings for Canadian Aviation Security This dramaturgical analysis of CATSA during the crucial 2005–2006 period has demonstrated the need for an analytical disaggregation of the actor–audience model in securitization theory. Within different settings (popular, elite, scientific, and technocratic), different actors were empowered to speak, and different audiences constituted — the rules of those discursive relationships were also impacted by setting. Stakeholders from the CATSA Act Review had no voice in the experts' academic workshop; reports on the measurement of security for the Advisory Panel were not used in the Auditor-General's Special Examination. These different settings also defined the content of securitizing moves: though there was a common desire to expand CATSA's security mandate, it was done with different arguments in the expert workshop, the Special Examination, and the CATSA Act Review. Finally, the CATSA case demonstrates the need to parse the success/failure of securitizing moves in a more nuanced way. CATSA's securitizing move was premised on the acceptance of an existential threat (which is commonly believed), the description of a crisis or emergency (accepted by some and rejected by others), and the accrual of new executive power (which was completely rejected). Top of page Conclusion The CS model of securitization is provocative and productive of many political and research agendas. Making the model more sensitive to who may speak, who can hear, and what can be said within particular settings allows us to evaluate the politics of successful moves to securitize or desecuritize an issue. This kind of analysis necessarily involves an examination of a particular setting over time, a factor often downplayed in CS analysis. Sector studies in public safety, security studies, migration, trafficking, minority rights, and disease can all benefit from a clearer consideration of audience–speaker co-constitution of authority and knowledge, the weight of social context, and the degree of success of particular moves. Desecuritization is seen a priori as more politically preferable than securitization (Wæver 1999: 335). Deliberative politics are by definition more democratic than exceptional politics. This has led to the important debate led by Aradau (2001, 2004, 2006), Alker (2006), Taureck (2006), Behnke (2006), Huysmans (2006), and Floyd (2007) on the ethical relationship of emancipation and politicization to securitization. This follows from a productive discussion on the role of security experts (Eriksson 1999; Goldmann 1999; Wæver 1999; Williams 1999). While this article does not engage this debate extensively, we would argue that, tactically, analysts and experts must understand the political dynamics of successful securitization and desecuritization processes if they wish to intervene. In this, I once again take the lead from Foucault who says that his own analysis has sprung from his personal experiences and a kind of a malaise with objective, abstract, Archimedian theory. In building from his insider knowledge of and outsider status within institutions (such as the clinic, human sexuality, or the penal system), Foucault conducts a 'history of the present' — to ask not 'what does the prison mean' but 'how does the prison mean?' With particular experience in different realms of security studies, it seems that securitization theory might contribute to this kind of history of the present. This is to say that the process of successful securitization and desecuritization operates differently within different settings. If, as security experts, it is part of our role to intervene in the securitization/desecuritization process, then we must gain a tactical knowledge of the conditions for success and failure. There is an assumption in this debate about securitization/desecuritization that experts are significant or important voices. It is true that 'in writing or speaking security, the analyst him/herself executes a speech act, this speech act is successful if the problem raised becomes recognized as a security problem in the academy and/or in the wider policy making discourse' (Floyd 2007: 336).

**OFF**

**Plan causes fights with the President that kill court legitimacy and cause circumvention**

**Pushaw 4**—Professor of law @ Pepperdine University [Robert J. Pushaw, Jr., “Defending Deference: A Response to Professors Epstein and Wells,” Missouri Law Review, Vol. 69, 2004] **gender pronoun modified**

**Civil libertarians have urged the Court to exercise** the same sort of **judicial review over war powers** as it does in purely domestic cases—i.e., independently interpreting and applying the law of the Constitution, despite the contrary view of the political branches and regardless of the political repercussions.54 This proposed solution ignores the **institutional differences**, **embedded in the Constitution**, that **have always led federal judges to review warmaking under special standards**. Most obviously, **the President can act with a speed, decisiveness, and access to info**rmation (often highly confidential) **that cannot be matched** by Congress, which must garner a majority of hundreds of legislators representing multiple interests.55 Moreover, **the judiciary by design acts far more slowly** than either political branch. A court must wait for parties to initiate a suit, oversee the litigation process, and render a deliberative judgment that applies the law to the pertinent facts.56 Hence, **by the time federal judges** (particularly those on the Supreme Court) **decide a case, the action taken by the executive is several years old**. Sometimes, **this delay is long enough that the crisis has passed and the Court’s detached perspective has been restored**.57 **At other times**, however, **the war rages, the President’s action is set in stone, and** he **will ignore any judicial orders that he conform his conduct to constitutional norms**.58 **In such critical situations, issuing a judgment simply weakens the Court** as an institution, **as** **Chief Justice Taney learned the hard way**.59 Professor Wells understands the foregoing institutional differences and thus does not naively demand that the Court exercise regular judicial review to safeguard individual constitutional rights, come hell or high water. Nonetheless, she remains troubled by cases in which the Court’s examination of executive action is so cursory as to amount to an abdication of its responsibilities—and a stamp of constitutional approval for the President’s actions.60 Therefore, she proposes a compromise: requiring the President to establish a reasonable basis for the measures he has taken in response to a genuine risk to national security.61 In this way, federal judges would ensure accountability not by substituting their judgments for those of executive officials (as hap-pens with normal judicial review), but rather by forcing them to adequately justify their decisions.62 This proposal intelligently blends a concern for individual rights with pragmatism. **Civil libertarians often overlook the basic point that constitutional rights are not absolute, but rather may be infringed if the government has a compelling reason for doing so** and employs the least restrictive means to achieve that interest.63 Obviously, **national security is a compelling governmental interest**.64 Professor Wells’s crucial insight is that courts should not allow the President simply to assert that “national security” necessitated his actions; rather, he must concretely demonstrate that his policies were a reasonable and narrowly tailored response to a particular risk that had been assessed accurately.65 Although this approach is plausible in theory, I am not sure it would work well in practice. Presumably, **the President almost always will be able to set forth plausible justifications for his actions, often based on a wide array of factors**—**including highly sensitive intel**ligence **that he does not wish to dis-close**.66 Moreover, **if the President’s response seems unduly harsh, he will likely cite the wisdom of erring on the side of caution**. If the Court disagrees, it will have to find that those proffered reasons are pretextual and that the President overreacted emotionally instead of rationally evaluating and responding to the true risks involved. But are judges competent to make such determinations? And even if they are, would they be willing to impugn the President’s integrity and judgment? If so, what effect might such a judicial decision have on America’s foreign relations? These questions are worth pondering before concluding that “hard look” review would be an improvement over the Court’s established approach. Moreover, **such** searching **scrutiny will be useless in situations where the President has made a wartime decision that** ~~he~~ **[they] will not change**, **even if judicially ordered to do so**. For instance, **assume that the Court in Korematsu** had applied “hard look” review and **found that** President **Roosevelt had wildly exaggerated** the sabotage and espionage **risks** posed by Japanese-Americans and had imprisoned them based on unfounded fears and prejudice (as appears to have been the case). **If the Court accordingly** had **struck down** **FDR’s order** to relocate them, **he would** likely **have disobeyed it.** Professor Wells could reply that this result would have been better than what happened, which was that the Court engaged in “pretend” review and stained its reputation by upholding the constitutionality of the President’s odious and unwarranted racial discrimination. I would agree. But I submit that **the solution in such** unique **situations** (i.e., **where a politically strong President has made a final decision and will defy any contrary court judgment**) **is not judicial review in any form**—**ordinary, deferential, or hard look**. Rather, **the Court should simply declare the matter to be a political question and dismiss the case**. Although such Bickelian manipulation of the political question doctrine might be legally unprincipled and morally craven, 67 at least it would avoid giving the President political cover by blessing his unconstitutional conduct and instead would force him to shoulder full responsibility. Pg. 968-970

**Legitimacy key to rule of law and compliance with decisions**

**Schapiro** 8-5-’**13**, Robert A. Schapiro, dean and Asa Griggs Candler professor of law at Emory University School of Law., Op-ed contributor, Christian Science Monitor, Objection! Americans' opinion of Supreme Court can't keep dropping, Lexis, jj

**Public confidence in the judiciary provides a critical foundation for** a society committed to the **rule of law. As America's unelected justices confront controversial questions,** the **legitimacy** of their decisions **depends on public support for the institution**. **The court must rely on other government officials, including elected leaders and law enforcement officers, to implement its rulings**. **Examples around the world suggest that obedience to judicial decisions may well depend on the level of respect that the courts enjoy.**

**rule of law solves war, terror, failed states, econ, effective power projection**

**Feldman ‘8** [Noah Feldman, a contributing writer for the magazine, is a law professor at Harvard University and an adjunct senior fellow at the Council on Foreign Relations, “When Judges Make Foreign Policy”, NEW YORK TIMES, 9—25—08, www.nytimes.com/2008/09/28/magazine/28law-t.html]

Looking at today’s problem through the lens of our great constitutional experiment, it emerges that there is no single, enduring answer to which way the Constitution should be oriented, inward or outward. The truth is that we have had an inward- and outward-looking Constitution by turns, depending on the needs of the country and of the world. Neither the text of the Constitution, nor the history of its interpretation, nor the deep values embedded in it justify one answer rather than the other. In the face of such ambiguity, the right question is not simply in what direction does our Constitution look, but where do we need the Constitution to look right now? Answering this requires the Supreme Court to think in terms not only of principle but also of policy: to weigh national and international interests; and to exercise fine judgment about how our Constitution functions and is perceived at home and abroad. The conservative and **liberal approaches to legitimacy and the rule of law need to be supplemented with a healthy dose of real-world pragmatism**. In effect, the fact that the Constitution affects our relations with the world requires the justices to have a foreign policy of their own. On the surface, it seems as if such inevitably political judgments are not the proper province of the court. If assessments of the state of the world are called for, shouldn’t the court defer to the decisions of the elected president and Congress? Aren’t judgments about the direction of our country the exclusive preserve of the political branches? Indeed, the Supreme Court does need to be limited to its proper role. But when it comes to our engagement with the world, that role involves taking a stand, not stepping aside. The reason for this is straightforward: the court is in charge of interpreting the Constitution, and the Constitution plays a major role in shaping our engagement with the rest of the world. The court therefore has no choice about whether to involve itself in the question of which direction the Constitution will face; it is now unavoidably involved. Even choosing to defer to the other branches of government amounts to a substantive stand on the question. That said, when the court exercises its own independent political judgment, it still does so in a distinctively legal way.For one thing, the court can act only through deciding the cases that happen to come before it, and the court is limited to using the facts and circumstances of those cases to shape a broader constitutional vision. The court also speaks in the idiom of law — which is to say, of regular rules that apply to everyone across the board. It cannot declare, for instance, that only this or that detainee has rights. It must hold that the same rights extend to every detainee who is similarly situated. This, too, is an effective constraint on the way the court exercises its policy judgment. Indeed, it is this very regularity that gives its decisions legitimacy as the product of judicial logic and reasoning. Why We Need More Law, More Than Ever So what do we need the Constitution to do for us now? The answer, I think, is that the Constitution must be read to help us remember that while the war on terror continues, we are also still in the midst of a period of rapid globalization. An enduring lesson of the Bush years is the extreme difficulty and cost of doing things by ourselves. **We need to build and rebuild alliances — and law has** historically **been** one of **our best tool**s for doing so. In our present precarious situation, **it would be a** terrible **mistake to abandon our** historic **position of leadership in the g**lobal **spread of** the **rule of law. Our leadership matters for** reasons both universal and national. Seen from the perspective of the world, **the fragmentation of power** after the cold war **creates new dangers** of disorder that need to be mitigated by the sense of regularity and predictability **that only the rule of law can provide. Terrorists need to be deterred. Failed states need to be brought under the umbrella of international organizations so they can govern themselves. And economic interdependence demands coordination, so that the collapse of one does not become the collapse of all**. From a national perspective, our interest is less in the inherent value of advancing individual rights than in claiming that our allies are obligated to help us by virtue of legal commitments they have made. The Bush administration’s lawyers often insisted that lawwas a tool of the weak, and that therefore as a strong nation we had no need to engage it. But this notion of “lawfare” as a threat to the United States is based on a misunderstanding of the very essence of how law operates. **Law** comes into being and is sustained not because the weak demand it but because it is a tool of the powerful — as it has been for the United States since World War II at least. The reason those with power prefer law to brute force is that it **regularizes and legitimates the exercise of authority. It is easier and cheaper to get the compliance of weaker** people or **states by promising them rules** and a fair hearing **than by threatening them constantly with force.** After all, if those wielding power really objected to the rule of law, they could abolish it, the way dictators and juntas have often done the world over.

**case- adv1**

**No US retaliation**

**Friedman and Preble** 6/2/**11** (Benjamin H. Friedman is a research fellow in defense and homeland security studies, and Christopher Preble is director of foreign policy studies, at the Cato Institute., A Military Response to Cyberattacks Is Preposterous, <http://www.cato.org/pub_display.php?pub_id=13159>)

**According to the Wall Street Journal, the Pentagon's first cyber security strategy will say that cyberattacks can be acts of war meriting retaliatory military attack.** The policy threatens to repeat the overreaction and needless conflict that plagued American foreign policy in the past decade. It builds on national hysteria about threats to cybersecurity, the latest bogeyman to justify our bloated national security state. A wiser approach would put the threat in context to calm public fears and avoid threats that diminish future flexibility. A key challenge in responding to "cyberattacks" is defining that term. Reporters sometimes use it to describe hackers stealing credit card numbers or intellectual property. Website vandalism and denial-of-service attacks, where attackers flood websites with requests to overburden and disable them, are often included. Electronic espionage, including the theft of intellectual property or state secrets, also qualifies. More obvious kinds of cyberattack include attacks on military communication systems and hacking that sabotages infrastructure like electricity grids, water systems, or online banking. **The idea of responding militarily to most of these threats is preposterous.We thwart hackers with better passwords, IT professionals and policing, not aircraft carriers. We do not threaten to bomb countries caught spying on us in traditional ways and should not do so just because the prefix "cyber" applies**. The real obstacle to making sensible cybersecurity policy is hysteria, which drowns out common sense. **The Pentagon will reportedly avoid this definitional difficulty with a policy of "equivalence," where only cyberattacks creating destruction on par with traditional military attacks qualify as acts of war. The trouble is that some acts of war, like naval blockades, damage only commerce. The same goes for all reported cyberattacks. Launching a war to retaliate for a non-lethal attack seems disproportionate, especially where it is unclear whether the attacker served the government**. Taken literally, the new policy might have us risking nuclear exchange with Russia because it failed to stop teenagers in Moscow Internet cafés from attacking Citibank.com.

**Russia and China can’t cyberattack the US – they only use it to crack down on their own populations**

**Rid 12** (Thomas Rid, reader in war studies at King's College London, is author of "Cyber War Will Not Take Place" and co-author of "Cyber-Weapons.", March/April 2012, “Think Again: Cyberwar”, http://www.foreignpolicy.com/articles/2012/02/27/cyberwar?page=full)

"The West Is Falling Behind Russia and China." Yes, but not how you think. **Russia and China are busy sharpening their cyberweapons and are already well steeped in using them**. The Russian military clandestinely crippled Estonia's economy in 2007 and Georgia's government and banks in 2008. The People's Liberation Army's numerous Chinese cyberwarriors have long inserted "logic bombs" and "trapdoors" into America's critical infrastructure, lying dormant and ready to wreak havoc on the country's grid and bourse in case of a crisis. Both countries have access to technology, cash, and talent -- and have more room for malicious maneuvers than law-abiding Western democracies poised to fight cyberwar with one hand tied behind their backs. **Or so the alarmists tell us**. **Reality looks quite different. Stuxnet,** **by far the most sophisticated cyberattack on record,** **was most likely a U.S.-Israeli operation**. **Yes, Russia and China have demonstrated significant skills in cyberespionage, but the fierceness of Eastern cyberwarriors and their coded weaponry is almost certainly overrated.** **When it comes to military-grade offensive attacks, America and Israel seem to be well ahead of the curve**. Ironically, it's a different kind of cybersecurity that Russia and China may be more worried about. Why is it that those countries, along with such beacons of liberal democracy as Uzbekistan, have suggested that the United Nations establish an "international code of conduct" for cybersecurity? Cyberespionage was elegantly ignored in the suggested wording for the convention, as virtual break-ins at the Pentagon and Google remain a favorite official and corporate pastime of both countries. But what Western democracies see as constitutionally protected free speech in cyberspace, Moscow and Beijing regard as a new threat to their ability to control their citizens. **Cybersecurity has a broader meaning in non-democracies: For them, the worst-case scenario is not collapsing power plants, but collapsing political power**.b **The social media-fueled Arab Spring has provided dictators with a case study in the need to patrol cyberspace not only for subversive code, but also for subversive ideas.** The fall of Egypt's Hosni Mubarak and Libya's Muammar al-Qaddafi surely sent shivers down the spines of officials in Russia and China. No wonder the two countries asked for a code of conduct that helps combat activities that use communications technologies -- "including networks" (read: social networks) -- to undermine "political, economic and social stability." So **Russia and China are ahead of the United States, but mostly in defining cybersecurity as the fight against subversive behavior**. **This is the true cyberwar they are fighting**.

**US cyber norms don't translate to China**

**Healey 13**

Jason Healey is the director of the Cyber Statecraft Initiative at the Atlantic Council of the United States, Foreign Policy, April 16, 2013, "China Is a Cyber Victim, Too", http://www.foreignpolicy.com/articles/2013/04/16/china\_is\_a\_cyberwar\_victim\_too?page=full

Yet **U.S. cyber-operations are** **extremely different from their Chinese equivalents and cannot be compared** in the way the Chinese suggest. **When the U.S. military or intelligence community conducts cyber-operations, they are quiet, coordinated, exceptionally well targeted, and under** the **strict control** of senior officers and government executives. Lawyers review every stage. **Even Stuxnet**, though it was a breathtakingly sophisticated and brazen attack, was so tightly controlled that, **when it escaped its target network**, it **caused no disruption. The White House keeps a close hold on cyber-operations through** senior executives, generals, and political appointees throughout the **bureaucracy**.

**Chinese espionage, by comparison**, **is under no such control**. As in other areas of Chinese society, **the P**eople's **L**iberation **A**rmy and state-owned enterprises **are subject to little oversight and** **feel little need to coordinate their actions**. Recently, one colleague that works for a specialized incident-response firm reported finding **as many as seven different Chinese espionage groups operat**ing **in the same network, all sending information back to different masters**. **Few, if any, senior party officials care to rein in activities helping domestic companies** (and probably lining their own pockets) **by stealing foreign intellectual property**.

**New diplomatic efforts will solve space**

**Rosen 13**

Armin Rosen, an Atlantic Media fellow, The Atlantic, January 16, 2013, "Give Peace a Chance—in Space", http://www.theatlantic.com/international/archive/2013/01/give-peace-a-chance-in-space/267223/

**The surest way of foreclosing** on the possibility of **this all-too-plausible doomsday in space is through the same kind of multilateral efforts that have stanched the spread of nuclear arms, stigmatized the use of chemical weapons, and all but stricken catastrophic inter-state warfare from the face of the earth. The world needs a system of multilateral checks and balances that relegates war against space assets to the same political and psychic space as World War III**: something that humanity, by dint of mutual self-interest and robust international institutions, has successfully turned into a geopolitical boogeyman, a bandied-about but nevertheless distant worst-case scenario. **That work has already begun. There is an international effort underway to create a "rules of the road for space"** -- an update to the Outer Space Treaty **that would establish guidelines for conduct in space**. Secretary of State Hillary **Clinton endorsed the process**, if not every aspect of the still-to-be determined treaty, in a January, 2012 press release. The new treaty would be what international legal experts refer to as a "soft law:" a measure that would enshrine a set of shared principles and that might eventually gain the status of "hard" customary law, given enough time and enough precedent within the international system. For instance, the U.N. Security Council could sanction a country that violates the "rules of the road." But until such sanctions are passed, the treaty would exist without any solid coercive force -- it would be a declaration, rather than a piece of law; unspecific, and largely toothless. In the Star Wars universe, space is a place of danger, a domain where the powerful subjugate the weak, where Executors and TIE Fighters and Death Stars impose fascistic order. Luckily, **the rules of the road aren't the only space war treaty under discussion. Both China and Russia have expressed their support for a proposed Prevention of an Arms Race in Outer Space treaty**, a multilateral agreement that would be more like the 1996 Comprehensive Nuclear Test Ban treaty -- a document **that places very specific restrictions on the actions of its signatories**. Right now, the biggest obstacle to the treaty's passage is the United States. The U.S., which has obstructed or simply ignored the PAROS process, is concerned that the treaty could work against its interests. Russia and China might view the accord as a means of reigning in the U.S.'s future capabilities; the U.S., meanwhile, doesn't want to give its potential rivals a veto over the development of those capabilities. As von der Dunk puts it, the U.S. doesn't want to enter into "a treaty which would hurt the most powerful nation the most." This is a legitimate concern, especially if the U.S. observes the PAROS treaty while other, less scrupulous actors attempt to undermine it. By preventing the U.S. from developing space weaponry, PAROS could theoretically shield future actors that are actually the most dead-set on weaponizing space. Johnson-Freese of the Naval War College, who is broadly supportive of a PAROS-like treaty, says that arms control issues in space are a "series of Catch-22s. It becomes difficult if not impossible to get over definitional hurdles and verification hurdles, or it can be made to seem that way by people who don't want to get things done." But **these are problems that lie at the heart of nearly every multilateral arms treaty. The U.S. has signed quite a few of those over the years**. As the country with the most assets in space, **the U.S.** also **has the most to lose from a future space conflict.**

**no chn war-b) Different goals**

Brandon **Valeriano and** Ryan **Maness, 2012** (In Derek S. Reveron, 2012 (Cyberspace and National Security: Threats, Opportunities, and Power in a Virtual World, Georgetown University Press, accessed via Project Muse, Chapter 9)

Along with offensive cyber capabilities comparable to those of the United States, the Chinese government also has complete control of its Internet infrastructure.23 **If China were to come under a serious cyber attack, the government could shut off access to all international web portals, thus containing and suppressing the attack**. This capability is not something that the United States can claim because the multi­ple access points are privately owned by a number of diverse firms over which the government has no control. **Therefore**, in terms of cyberwar capabilities, **it can be argued that China has a definite advantage over the United States. Nevertheless, we have a problem with a potential cyber conflict between the United States and China**; these two countries are not considered to be rivals under any rivalry dataset. There is no history of serious disputes on the level of historic examples such as the United States and the Soviet Union or India and Pakistan. **Despite claims by pundits, China and the United States are not on a collision course. China's main foreign policy objective seems to be economic expansion, and there is little chance it will be able to compete militarily or economically with the United States in the near future**.24 If **the two main heavyweights** often **thought to be likely to fight** in the near future **are not rivals and are thus unlikely to fight**, what danger is there from their immense cyber capabilities?

**Soft power resilient**

**Nye 6** – IR Professor, Harvard (Joseph, 6/25, Why Do They Hate Us?, http://www.washingtonpost.com/wp-dyn/content/article/2006/06/22/AR2006062200972\_pf.html)

Fortunately, **even when** the U.S. government's **foreign policies are unattractive** to others, **our culture and our open** political **processes**can **produce a "meta" form of soft power -- winning grudging admiration** for our freedoms **at the same time that our policies are unpopular**. After all, **anti-American protests were rampant** around the world **during**the **Vietnam**War, **but**the protesters did not sing "The Internationale"; **they sang the American civil rights anthem** "We Shall Overcome." Today, **the fact** that **America remains democratic and self-critical**, that its free press exposes governmental flaws and that the legislative and judicial branches can act against the executive, **means**that anti-American **critics**of U.S. foreign policies can **still feel a residual attraction to our society.** As Sweig puts it, "The best antidote to Anti-America may well come not from how we fight (or prevent) the next war but from the degree to which we keep intact the social contract and international appeal of American society." She also urges Washington to adopt a changed foreign policy syle that develops empathy for foreign cultures, practices better manners and pays more attention to rules and fairness. **Anti-Americanism will not go away, but it need not dominate the 21st century i**f Americans follow the advice of this well-reasoned book.

**Growth ensures overshoot and extinction--tech can't save us, only a rapid collapse avoids omnicide**

Dr. Glen **Barry**, president, Ecological Internet and PhD, Land Resources, University of Wisconsin-Madison, "Ecology Bubble Bursts," Earth Meanders, 7--25--**11**, www.ecoearth.info/blog/2011/07/earth\_meanders\_ecology\_bubble.asp#more, accessed 2-2-13.

Ever since the human family embraced a growth based mentality and obsequious faith in liberal economics, we have witnessed a series of bubbles. The most recent boom-bust cycle has been the still unresolved financial and mortgage bubbles, but bubbles go as far back as the Dutch tulip mania of 1637. Exuberant yet clearly unsustainable growth, or inversely destruction, appears to be inherent to industrial, speculative, and growth obsessed capitalism. Bubbles represent the human proclivity for greed, to grow too fast, overshooting demand, while often exhausting key resources. **Global ecology, the biggest bubble of all, is now collapsing and will soon burst**. Voracious economic and human **growth** have **raged** for three centuries upon the back of **dismantling ecosystems globally**. Humanity’s economic outputs have been over-valued relative to the ecologically mediated resources incautiously razed for their production. Earth’s **carrying capacity** - meaning ecology's finite ability to provide ecosystem services and absorb pollution – **has been surpassed**. Having grown beyond what Earth can bear, the human family is said to be in **"overshoot",** which **can only lead to collapse**. Earth is a living being and like **all life can die. Earth is dying now as** virus-like **humanity destroys** its host's ecosystem organs. Every day we scrape Earth of its plants and animals, dig and drill into toxic “resources” not meant to be unearthed, and crap our wastes into air, land and water. Systems biology tells us **an exponentially growing system in positive feedback** – such as the super-sized economy feasting upon finite and precious global ecology – **always** eventually **destroys itself**. This is particularly so **given** perilous **lag times of** many ecosystem **processes and losses**. The **ecological systems underlying** human **existence are beginning to burst like bubbles**. Virtually **every type of ecosystem and their output** – fish, food, water, air, climate, forests, land, wetlands, soil, etc – **are now collapsing** locally and regionally. We are witnessing this steady biological impoverishment, of virtually every life-giving ecosystem, aggregate to the whole biosphere – the thin mantle of life surrounding an otherwise lifeless Earth. When speaking of a biosphere bubble burst it is accurate to say Earth is dying. And that **it need not be that way, if** only **we were able to change** to maintain ecosystems that foster all human and life’s being. Ecology has provided a constant stream of services to humanity and other life, making Earth habitable, for what seems like eternity. Food offers one illustrative example of humanity’s utter dependence upon ecology: sun, water, soil, climate, seeds and healthy agro-ecological systems are where food comes from - not grocery stores and mini-marts. That we need air, water, soil and other ecosystems are demonstrable truths – unlike beliefs in unknowable ancient messiahs, which have guided so much of Earth ecology’s destruction. **Industrial capitalism is dependent upon destroying ecosystems** as resources for temporary increases in the well-being of some. While climate change is one of several global ecosystems that are collapsing due to human over-use, it is important to remember there are other collapsing ecological systems – including soil, water, forest, wetland, nitrogen, ocean, toxic, ecosystem, poverty, food and others - that singly and together threaten continued human and ecological being. It is these potentially cumulative impacts of several assaults upon key global ecosystems that are most problematic and potentially chaotic. And it’s not even done fairly, as 2.5 billion live on under $2 a day. The industrial **growth** machine**’s** rampant **misuse of** inappropriate **tech**nology **to rip apart** Earth’s **life-support systems for** endless **frivolous wants** by **some as others starve** and eke out a living **must yield** to some basic truths. If we are to sustain the required ecosystem habitats necessary, we cannot cut and burn them simultaneously, or multiply to such numbers that we overwhelm them. If you’ve ever seen an over-grazed pasture you know what over-population does to a limited land and resource base – human population must be urgently and humanely reduced. Hubristic **faith in tech**nological solutions to Earth being beyond its carrying capacity **is fanatical madness**. Continued **tech**nological reliance to “solve” Earth’s ecological carrying capacity problem **will only inflate the bubble** further **and result in a bigger bursting, and less remnants from which to try to reconstitute** an ecologically based future. Inane **techno-optimism** **such as geo-engineering is** **ecocide right up to the end** – pushing Earth to the wall, raping her, before killing her. It is far preferable to begin to adjust human demands upon ecology to reasonable limits. Not only is ecology truth, and you cannot eat money, but collapsing ecosystems are not substitutable with technology. What to do? We need knowledge based solutions to sustaining global ecology that are also just, equitable and enhance human dignity - not superstitious, illogical, greedy, and ignorant responses of god's self-chosen ruling elites. **It is too late to stop the global ecology bubble from bursting. Yet a short window exists,** perhaps, **to lessen the impact** of the ecology bubble burst, **and provide for some manner of** decent **existence and potential for restoration** and regeneration of a new human/nature project **post-collapse**. But **if we continue** to do nothing, or next to nothing, **the cumulative impacts of global ecological collapse will intensify and prove to be unrecoverable**, unless met with opposing force to end the ecocidal activities surpassing ecology's limits. It is time for us to return to the land, air, water and oceans and fight for their and our protection and restoration. Simply we must embrace ecological restoration, ecosystem protection, industrial power down, escalating protest and a people’s power Earth Revolution. For continued shared survival the human family must protect and restore natural ecosystems as the keystone response to biodiversity, ecosystem, climate, food, water, poverty and rights crises. Few are doing so as rigorously as is necessary. Both the perpetrators and greenwashers of ecosystem destruction must be confronted with a wave of people power protests for ecologically sufficient policies like ending primary forest logging, fossil fuels and industrial agriculture. Existing non-violent, direct action protest is fine and must be enlarged, though it has not yet, nor is it likely to be, scaled to an extent able to win on its own. We will need to further intensify our efforts to use the wide myriad of civil and uncivil disobedience tactics known that disrupt ecocide. And if these appeals are not responded to affirmatively after 40 years of stonewalling, we may need to escalate tactics to sabotage, carefully targeted insurgency, and as a last resort, guerrilla warfare. We face a planetary ecological emergency. Misery and premature death from ecological collapse is all our fates unless we together and all at once resist ecocide. If we all rush and dismantle a coal mine or old forest logging operation, and when asked who did, we respond we all did, we will have won. To speak of sustaining ecology while pursuing anything less than the destruction and overthrow of the industrial growth machine is greenwash and subject itself to being destroyed. **The only hope for surviving** and regenerating from ecology’s burst bubble **is to stop destroying ecosystems** and change how we live – including more sustainability, equity and justice. Maybe people aren’t ready for what I have to say, but I am going to keep saying it because it is ecology truth vital for shared human and all life’s survival. At times it is hard to be heard because I and my organization Ecological Internet refuse to sugar coat our message as we take on difficult issues with ecological science based diagnoses and recommendations. In a world of so much hurt, pain and illness; it is outrageous to futilely cling to an industrial consumer way of living that destroys ecology, people and all that is good and necessary to simply live. Do not wait for others to heal yourself or your relationship with Earth. You have to start now and work harder at both, doing what your conscience tells you is necessary, and taking full responsibility for doing so.

**No offense – econ decline solves war**

Daniel **Deudney**, Hewlett Fellow in Science, Technology, and Society at the Center for Energy and Environmental Studies at Princeton, , “Environment and Security: Muddled Thinking”, BULLETIN OF THE ATOMIC SCIENTISTS, April 19**91**p. 27, google books, umn-rks

Poverty Wars. In a second scenario, declining living standards first cause internal turmoil. then war. If groups at all levels of affluence protect their standard of living by pushing deprivation on other groups class war and revolutionary upheavals could result. Faced with these pressures, liberal democracy and free market systems could increasingly be replaced by authoritarian systems capable of maintaining minimum order.9 If authoritarian regimes are more war-prone because they lack democratic control, and if revolutionary regimes are warprone because of their ideological fervor and isolation, then the world is likely to become more violent. **The record of previous depressions supports the proposition that widespread economic stagnation and unmet economic expectations contribute to international conflict**. **Although initially compelling, this scenario has major flaws**. **One is that it is arguably based on unsound economic theory**. **Wealth is formed not** so much **by the availability of cheap natural resources as by capital formation through savings and more efficient production**. **Many resource-poor countries**, like Japan, **are very wealthy, while many countries with more extensive resources are poor**. Environmental constraints require an end to economic growth based on growing use of raw materials, but not necessarily an end to growth in the production of goods and services. **In addition, economic decline does not necessarily produce conflict.** **How societies respond to economic decline may largely depend upon the rate at which such declines occur**. **And as people get poorer, they may become less willing to spend scarce resources for military forces**. **As** Bernard **Brodie observed** about the modein era, **“The predisposing factors to military aggression are full bellies, not empty ones**.”’” **The experience of economic depressions over the last two centuries may be irrelevant, because such depressions were characterized by under-utilized production capacity and falling resource prices**. **In the 1930 increased military spending stimulated economies, but** if economic growth is retarded by environmental constraints, **military spending will exacerbate the problem**. Power Wars. A third scenario is that environmental degradation might cause war by altering the relative power of states; that is, newly stronger states may be tempted to prey upon the newly weaker ones, or weakened states may attack and lock in their positions before their power ebbs firther. But such alterations might not lead to war as readily as the lessons of history suggest, **because economic power and military power are not as tightly coupled as in the past.** The economic power positions of Germany and Japan have changed greatly since World War 11, but these changes have not been accompanied by war or threat of war. **In the contemporary world, whole industries rise, fall, and relocate, causing substantial** **fluctuations in the economic well-being of regions and peoples without producing wars.** **There is no reason to believe that changes in relative wealth and power** caused by the uneven impact of environmental degradation **would inevitably lead to war**. **Even if** environmental **degradation were to destroy the basic** social and **economic fabric of a country** or region, **the impact on international order may not be very great. Among the first casualties in such country would be the capacity to wage war.** **The poor and wretched** of the earth may be able to deny an outside aggressor an easy conquest, but they **are themselves a minimal threat to other states.** **Contemporary offensive military operations require complex organizational skills, specialized industrial products and surplus wealth**.

### LOAC/Norms adv

#### conflation is globally inevitalbe

Robert Sloane 9, Associate Professor of Law, Boston University School of Law, 2009, “The Cost of Conflation: Preserving the Dualism of Jus ad Bellum and Jus in Bello in the Contemporary Law of War,” Yale Journal of International law, http://www.yale.edu/yjil/files\_PDFs/vol34/Sloane

This case reflects, in microcosm, a pressing issue in the contemporary law of war. After 9/11, countless scholars and statesmen have called for changes in the jus ad bellum, the law governing resort to force, or the jus in bello, the law governing the conduct of hostilities.10 These invitations to reform, whatever their merit, raise an equally vital but distinct legal issue that has been largely neglected in recent legal scholarship: the relationship between the traditional branches of the law of war.11 Since the U.N. Charter introduced a positive jus ad bellum into international law, the reigning dogma has been that reflected in the SCSL Appeals Chamber’s opinion: the jus ad bellum and the jus in bello are, and must remain, analytically distinct. In bello rules and principles apply equally to all combatants, whatever each belligerent’s avowed ad bellum rationale for resorting to force: self-defense, the restoration of democratic government, territorial conquest, or the destruction of a national, ethnic, racial, or religious group, as such.12 It is immaterial, on this view, whether the ad bellum intent of the militia leaders indicted by the SCSL had been to restore a democratic government or to topple that government and install a brutal regime in its stead: they must adhere to and be judged by the same in bello rules and principles.

Postwar international law regards this analytic independence as axiomatic,13 as do most just war theorists. They insist that “[i]t is perfectly possible for a just war to be fought unjustly and for an unjust war to be fought in strict accordance with the rules.”14 In theory, then, any use of force may be simultaneously lawful and unlawful: unlawful, because its author had no right to resort to force under the jus ad bellum; lawful, if and to the extent that its author observes “the rules,” that is, the jus in bello. 15 I will refer to this particular rule, which insists on the analytic independence of ad bellum and in bello, as the dualistic axiom. Despite its widespread acceptance,16 the axiom, as we will see, is logically questionable, 17 undertheorized, and at times disregarded or misapplied in practice—with troubling consequences for the policies that underwrite these components of the contemporary law of war. Consider briefly a few examples, which, among others, will be explored in greater detail below:

• In 1999, the North Atlantic Treaty Organization (NATO) carried out a four-month air campaign against Serbia. At the outset, NATO’s leaders made an in bello decision: its pilots would fly at a minimum height of 15,000 feet to reduce their risk from anti-aircraft fire essentially to zero, even though that would increase the risk to Serbian civilians because it often prevented visual confirmation of legitimate military targets. Many would argue that the in bello principle of proportionality obliges combatants to take some risk in an effort to reduce the risk to enemy civilians.18 If so, the perceived legitimacy of NATO’s avowed ad bellum goal, i.e., to halt the incipient ethnic cleansing of ethnic Albanian Kosovars, influenced the international ex post appraisal of NATO’s in bello conduct in the conflict.19

• After 9/11, the Bush administration launched and prosecuted what it described as a “Global War on Terror.” In this war, if it is a war,20 political elites and their lawyers invoked ad bellum factors—for example, the novel nature of the conflict or the enemy and the imperative to avoid at any cost another catastrophic terrorist attack— to justify or excuse in bello violations.21 Both treaties and custom, for example, categorically prohibit the in bello tactic of torture. It is difficult to dispute that the United States deliberately tortured some detainees in its custody. Alberto R. Gonzales also wrote in what has become an infamous memorandum that “the war against terrorism is a new kind of war,” which “renders obsolete Geneva’s strict limitations on questioning of enemy prisoners and renders quaint some of its provisions.” 22 One might recharacterize this assertion in the framework of this Article as a suggestion that ad bellum considerations may justifiably relax, or even vitiate, what some see as anachronistic in bello constraints.23

• In 1996, the International Court of Justice (ICJ) considered the legality of the threat or use of nuclear weapons.24 This required it to analyze both the jus ad bellum and the jus in bello. The Court concluded that the jus in bello generally prohibits nuclear weapons— with a curious qualification. It could not say “whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.”25 Again, to recharacterize this statement in the framework of this Article: if the ad bellum consequences for one party to a conflict become bad enough, a weapon otherwise categorically prohibited by the jus in bello might become legal for that party, although presumably it would remain illegal for the other—unless that other party, too, “a State,” faced an “extreme circumstance of self-defence.”

The logic in each of these examples is contrary to the dualistic axiom, which insists that in bello constraints apply equally to all parties to a conflict. They do not vary based on ad bellum appraisals of the justice, legitimacy, or even urgency of one side’s asserted casus belli (cause or justification for resort to force). 26 Yet these examples reflect a trend in contemporary international law to relax or disregard the dualistic axiom, that is, to allow ad bellum considerations to influence and, at times, even to vitiate the jus in bello—an outcome that degrades the efficacy of both components of the law of war. Recent state practice and some jurisprudence also suggest a related, and equally misguided, tendency to collapse the distinct ad bellum and in bello proportionality constraints imposed by the law of war. As explained in greater detail below, today, in contrast to the pre-U.N. Charter era, all force must be doubly proportionate: that is, proportionate relative to both the jus ad bellum and the jus in bello. 27 Yet, at times, the ICJ has confused, neglected, or misapplied the two principles, as have belligerents—again to the detriment of the key values and policies that underwrite the contemporary law of war.

**LOAC is redundant**

**Glazier 09** (David, Professor of Law, Loyola Law School Los Angeles, Dec. 2009, "PLAYING BY THE RULES: COMBATING AL QAEDA WITHIN THE LAW OF WAR" William and Mary Law Review, Lexis)

But even the most cursory study of the law of war quickly reveals the fallacy of this view. Virtually every society that has left a written record has documented legal constraints on the conduct of hostilities. n133 **The law of war constitutes a major portion of eighteenth- and nineteenth-century international law treatises.** n134 **The explosive growth of international law in the twentieth century, including the proliferation of multinational organizations and international courts, as well as the development of such new fields as international environmental and human rights law, relegated the law of war to relative obscurity. Today, it typically occupies just a single chapter in an international law text.** n135 This is ironic given the equally expansive development of the law of war during this same era n136 but may explain why expertise on this subject seems so limited among policymakers.

#### nanotech impossible--fat and sticky fingers

Smalley in 2001 [Richard – Gene and Norman Hackerman Professor of Physics and Chemistry @ Rice University, received the 1996 Nobel Prize in Chemistry for the discovery of fullerenes – September, “Nanofallacies: of Chemistry, Love, and Nanobots,” Scientific American, Vol. 285 #3]

But how realistic is this notion of a self-replicating nanobot? Let's think about it. Atoms are tiny and move in a defined and circumscribed way--a chemist would say that they move so as to minimize the free energy of their local surroundings. The electronic "glue" that sticks them to one another is not local to each bond but rather is sensitive to the exact position and identity of all the atoms in the near vicinity. So when the nanomanipulator arm of our nanobot picks up an atom and goes to insert it in the desired place, it has a fundamental problem. It also has to somehow control not only this new atom but all the existing atoms in the region. No problem, you say: our nanobot will have an additional manipulator arm for each one of these atoms. Then it would have complete control of all the goings-on that occur at the reaction site. But remember, this region where the chemistry is to be controlled by the nanobot is very, very small--about one nanometer on a side. That constraint leads to at least two basic difficulties. I call one the fat fingers problem and the other the sticky fingers problem. Because the fingers of a manipulator arm must themselves be made out of atoms, they have a certain irreducible size. There just isn't enough room in the nanometer-size reaction region to accomodate all the fingers of all the manipulators necessary to have complete control of the chemistry. In a famous 1959 talk that has inspired nanotechnologists everywhere, Nobel physicist Richard Feynman memorably noted, "There's plenty of room at the bottom." But there's not that much room. Manipulator fingers on the hypothetical self-replicating nanobot are not only too fat; they are also too sticky: the atoms of the manipulator hands will adhere to the atom that is being moved. So it will often be impossible to release this minuscule building block in precisely the right spot. Both these problems are fundamental, and neither can be avoided. Selfreplicating, mechanical nanobots are simply not possible in our world. To put every atom in its place--the vision articulated by some nanotechnologists-would require magic fingers. Such a nanobot will never become more than a futurist's daydream.

**The worst case scenario happened – no extinction**

**Dove 12** [Alan Dove, PhD in Microbiology, science journalist and former Adjunct Professor at New York University, “Who’s Afraid of the Big, Bad Bioterrorist?” Jan 24 2012, http://alandove.com/content/2012/01/whos-afraid-of-the-big-bad-bioterrorist/]

The second problem is much more serious. Eliminating the toxins, we’re left with a list of **infectious bacteria and viruses**. With a single exception, these organisms **are**probably**near-useless as weapons, and history proves it**.¶There have been at least three well-documented military-style deployments of infectious agents from the list, plus one deployment of an agent that’s not on the list. I’m focusing entirely on the modern era, by the way. There are historical reports of armies catapulting plague-ridden corpses over city walls and conquistadors trying to inoculate blankets with Variola (smallpox), but it’s not clear those “attacks” were effective. Those diseases tended to spread like, well, plagues, so there’s no telling whether the targets really caught the diseases from the bodies and blankets, or simply picked them up through casual contact with their enemies.¶**Of** the **four modern biowarfare incidents, two have been fatal**. The first was the **1979 Sverdlovsk anthrax incident**, which **killed** an estimated **100 people**. In that case, a Soviet-built biological weapons lab accidentally released a large plume of weaponized Bacillus anthracis (anthrax) over a major city. Soviet authorities tried to blame the resulting fatalities on “bad meat,” but in the 1990s Western investigators were finally able to piece together the real story. The **second fatal incident also involved anthrax from a government-run lab**: the 2001 “Amerithrax” attacks. That time, a rogue employee (or perhaps employees) of the government’s main bioweapons lab sent weaponized, powdered anthrax through the US postal service. **Five people died.¶That gives us** a grand total of around **105 deaths, entirely from agents that were grown and weaponized in officially-sanctioned and funded bioweapons research labs**. Remember that.¶**Terrorist groups have** also **deployedbiological weapons twice**, and these cases are very instructive. The first was **the** 1984 **Rajneeshee** bioterror attack, in which members of **acult in Oregon inoculated restaurant salad bars with Salmonella** bacteria (an agent that’s not on the “select” list). **751 people got sick, but nobody died. Public health authorities handled it as a conventional foodborne Salmonella outbreak**, identified the sources and contained them. Nobody even would have known it was a deliberate attack if a member of the cult hadn’t come forward afterward with a confession. Lesson: **our existing public health infrastructure was entirely adequate to respond to a major bioterrorist attack**.¶The**second genuine bioterrorist attack took place in 1993**. **Members of the AumShinrikyocult**

 **successfully** isolated and **grew** a large stock of **anthrax** bacteria, **then sprayed it as an aerosol from the roof of a building in downtown Tokyo**. **The cult was well-financed,and had many highly educated members, so this release over the world’s largest city really represented a worst-case scenario**.¶**Nobody got sick or** died. From the cult’s perspective, it was a complete and utter failure. Again, the only reason we even found out about it was a post-hoc confession. Aum members later demonstrated their lab skills by producing Sarin nerve gas, with far deadlier results. Lesson: **one of the top “select agents” is extremely hard to grow and deploy even for relatively skilled non-state groups. It’s a really crappy bioterrorist weapon**.¶ Taken together, these events point to an uncomfortable but inevitable conclusion: **our biodefense industry is a far greater threat to us than any actual bioterrorists.**

## 2NC

### Not Defense: PPD Overview 2NC

#### Our interpretation comes from presidential policy directive 20 which is a framing issue- most precise and recent interpretation with intent to define

By Ellen Nakashima, Washington Post, “Obama signs secret directive to help thwart cyberattacks”¶ ,November 14, 2012 http://articles.washingtonpost.com/2012-11-14/world/35505871\_1\_networks-cyberattacks-defense

Presidential Policy Directive 20 establishes a broad and strict set of standards to guide the operations of federal agencies in confronting threats in cyberspace, according to several U.S. officials who have seen the classified document and are not authorized to speak on the record. The president signed it in mid-October.¶ The new directive is the most extensive White House effort to date to wrestle with what constitutes an “offensive” and a “defensive” action in the rapidly evolving world of cyberwar and cyberterrorism, where an attack can be launched in milliseconds by unknown assailants utilizing a circuitous route. For the first time, the directive explicitly makes a distinction between network defense and cyber-operations to guide officials charged with making often-rapid decisions when confronted with threats.¶ The policy also lays out a process to vet any operations outside government and defense networks and ensure that U.S. citizens’ and foreign allies’ data and privacy are protected and international laws of war are followed.¶ “What it does, really for the first time, is it explicitly talks about how we will use cyber-¶ operations,” a senior administration official said. “Network defense is what you’re doing inside your own networks. . . . Cyber-operations is stuff outside that space, and recognizing that you could be doing that for what might be called defensive purposes.”¶ The policy, which updates a 2004 presidential directive, is part of a wider push by the Obama administration to confront the growing cyberthreat, which officials warn may overtake terrorism as the most significant danger to the country.¶ “It should enable people to arrive at more effective decisions,” said a second senior administration official. “In that sense, it’s an enormous step forward.”¶ Legislation to protect private networks from attack by setting security standards and promoting voluntary information sharing is pending on the Hill, and the White House is also is drafting an executive order along those lines.¶ James A. Lewis, a cybersecurity expert at the Center for Strategic and International Studies, welcomed the new directive as bolstering the government’s capability to defend against “destructive scenarios,” such as those that Defense Secretary Leon E. Panetta recently outlined in a speech on cybersecurity.¶ “It’s clear we’re not going to be a bystander anymore to cyberattacks,” Lewis said.¶ The Pentagon is expected to finalize new rules of engagement that would guide commanders on when and how the military can go outside government networks to prevent a cyberattack that could cause significant destruction or casualties.¶ The presidential directive attempts to settle years of debate among government agencies about who is authorized to take what sorts of actions in cyberspace and with what level of permission.¶ An example of a defensive cyber-operation that once would have been considered an offensive act, for instance, might include stopping a computer attack by severing the link between an overseas server and a targeted domestic computer.¶ “That was seen as something that was aggressive,” said one defense official, “particularly by some at the State Department” who often are wary of actions that might infringe on other countries’ sovereignty and undermine U.S. advocacy of Internet freedom. Intelligence agencies are wary of operations that may inhibit intelligence collection. The Pentagon, meanwhile, has defined cyberspace as another military domain — joining air, land, sea and space — and wants flexibility to operate in that realm.¶ But cyber-operations, the officials stressed, are not an isolated tool. Rather, they are an integral part of the coordinated national security effort that includes diplomatic, economic and traditional military measures.¶ Offensive cyber actions, outside of war zones, would still require a higher level of scrutiny from relevant agencies and generally White House permission.¶ The effort to grapple with these questions dates to the 1990s but has intensified as tools and weapons in cyberspace become ever more sophisticated.¶ One of those tools was Stuxnet, a computer virus jointly developed by the United States and Israel that damaged nearly 1,000 centrifuges at an Iranian nuclear plant in 2010. If an adversary should turn a similar virus against U.S. computer systems, whether public or private, the government needs to be ready to preempt or respond, officials have said.¶ Since the creation of the military’s Cyber Command in 2010, its head, Gen. Keith Alexander, has forcefully argued that his hundreds of cyberwarriors at Fort Meade should be given greater latitude to stop or prevent attacks. One such cyber-ops tactic could be tricking malware by sending it “sleep” commands.¶ Alexander has put a particularly high priority on defending the nation’s private-sector computer systems that control critical functions such as making trains run, electricity flow and water pure.¶ But repeated efforts by officials to ensure that the Cyber Command has that flexibility have met with resistance — sometimes from within the Pentagon itself — over concerns that enabling the military to move too freely outside its own networks could pose unacceptable risks. A major concern has always been that an action may have a harmful unintended consequence, such as shutting down a hospital generator.¶ Officials say they expect the directive will spur more nuanced debate over how to respond to cyber-incidents. That might include a cyberattack that wipes data from tens of thousands of computers in a major industrial company, disrupting business operations, but doesn’t blow up a plant or kill people.

### Not Defense: A2 “WM”

#### OCOs, defensive cyber ops and cyberexploitation are distinct- at best aff is FX topical

Robert ChesneyCharles I. Francis Professor in Law at the University of Texas School of Law, as well as a non-resident Senior Fellow of the Brookings Institution Wednesday, December 14, 2011 at 10:17 PM Offensive Cyberspace Operations, the NDAA, and the Title 10-Title 50 Debate

A third issue arises when one considers the fuzzy lines distinguishing among OCOs, defensive cyberspace operations, and cyberexploitation, all of which may have effects comparable to an OCO. The presidential authorization requirement obviously is meant to attach only to offensive operations, but it seems clear that there could be lots of disagreement as to when this obligation truly must be brought to bear. As I note below, it may be that nothing turns on this insofar as Congress is concerned, and so any disputes on these points most likely would arise as an interagency matter…assuming, of course, that non-DOD elements in the interagency actually learn about whatever operation is in question. Further complicating matters, it may be that there are cyberspace operations that are best thought of as “offensive,” yet which are relatively de minimis in significance, not rising to the level of “use of force” implicating jus ad bellum and LOAC concerns….and as to those, it is not quite clear that this language is meant to require presidential authorization. That is, it may be that OCOs as used in this context are meant to encompass only those more serious uses of (cyber)force.

#### Interpretation – OCO includes only cyberattacks – that excludes exploitation and active defense – key to precision

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

Cyberattacks are "efforts to alter, disrupt, or destroy computer systems or networks or the information or programs on them ... [,] encompassing activities that range in target (military versus civilian, public versus private), consequences (minor versus major, direct versus indirect), and duration (temporary versus long-term)." n83 While this definition provides broad [\*977] guidance as to what may constitute a cyberattack, for the purposes of applying existing legal structures, the definition must be conceptualized in a way that usefully fits into those preexisting regimes. Because of the complexity and great number of potential means of cyberattack, this Comment groups such attacks based on employment, i.e., the way in which they are utilized and their intended purposes. Such an approach provides greater clarity as to which U.S. domestic legal regime will likely govern their employment. The following section proceeds by first discussing some of the technical details of cyberattacks and then moves into understanding how they have been - and likely will be - employed in future conflicts.¶ Before moving to a discussion of what cyberattacks are, it is important to note what they are not. They are not cyberexploitation, that is, "the use of actions and operations ... to obtain information that would otherwise be kept confidential ... . Cyberexploitations are usually clandestine and conducted with the smallest possible intervention that still allows extraction of the information sought." n84 The core difference between attack and exploitation is in the cyber operation's purpose; cyberattacks are meant to be destructive whereas cyberexploitation acquires information nondestructively. n85 While the term offensive cyber operations usually encompasses both attack and exploitative elements, here "OCO" refers only to attacks. n86

### Not Defense: Stds 2NC

#### broad definitions of cyber operations turns solvency

NAME: Commander Todd C. **Huntley 10** Judge Advocate General's Corps, United States Navy. Currently serving as the Staff Judge Advocate for Commander, Special Operations Command Central and Combined Forces Special Operations Component Command. B.A., 1991, University of Cincinnati; J.D., 1996, University of Cincinnati; M.A., 2006, Fletcher School of Law and Diplomacy; L.L.M., 2009, Harvard Law School. ARTICLE, ESSAY & NOTE: CONTROLLING THE USE OF FORCE IN CYBER SPACE: THE APPLICATION OF THE LAW OF ARMED CONFLICT DURING A TIME OF FUNDAMENTAL CHANGE IN THE NATURE OF WARFARE2010 Naval Law Review 60 Naval L. Rev. 1. Lexis

Legal writing has tended to focus solely on state-on-state cyber warfare as part of a broader, more traditional, armed conflict, or that takes place solely in cyber space. n10 There has been relatively little written about the application of existing legal regimes to persistent cyber attacks that fall below the level of an armed attack or use of force and the difficulty faced by states in responding to these attacks, and even less written about the offensive use of such cyber operations to further U.S. national interests. n11 Although the U.S. may be the nation most vulnerable to cyber attacks, it also has much to gain from offensive cyber operations, and must carefully consider any changes to existing legal regimes that may further limit such activity. Existing legal regimes fail to provide adequate guidance both to U.S. responses to cyber attacks as well as U.S. offensive cyber operations. II. DEFINING AND CHARACTERIZING CYBER ACTIVITY The terms "cyber warfare" and "cyber attack" are commonly used to refer to all unauthorized cyber activity, regardless of the nature of the activity, [\*4] who is conducting the activity, or the consequences which result from the activity. Distributed denial of service "attacks," extraction or modification of information, website vandalism, as well as insertion of malicious code designed to damage, or destroy, data and systems, are all referred to as "cyber attack" or even "cyber warfare" regardless of whether these activities result in death, destruction of property, or merely the loss of information. Intrusions and other activity conducted by disgruntled employees, teen-age hackers, and criminals, are typically not distinguished from those by terrorists or foreign intelligence and military personnel. n12 Overbroad use of the terms "cyber attack" and "cyber warfare" and a failure to clearly define the various cyber capabilities also creates problems for the development of policy and doctrine for the use of these capabilities, as well as adding difficulty in developing a response to such activities. How an activity or capability is defined will often determine the authority for conducting that activity or using that capability. This may also determine which personnel have authority to conduct the activity, including which Executive agency will conduct the activity as well as who will be responsible for the oversight of the activity. Such oversight would include not only oversight bodies within the Executive branch, but also which Congressional committee(s) will have oversight responsibilities. Perhaps even more importantly, how an activity or capability is classified will determine which appropriated funds may be used for the purchase of equipment and tools, the payment of personnel conducting the activity, and the research and development of tools and capabilities.

#### Precision outweighs: Establishing clear definitions on OCOs is a prerequisite to action

By Robert **Belk and** Matthew **Noyes 12** (Advised by Professor Joseph Nye & Professor Monica Toft) Rob ert Belk is a Naval aviator and Politico - Military Fellow, studying international and global affairs at the Harvard Kennedy School . In his 16 years of service, he has mad e four carrier - based deployments and one ground - based deployment to Iraq. Following graduation, he is scheduled to report to the Naval Operations staff in the Pentagon to develop and execute Navy network and cybersecurity policy. Matthew Noyes studies inte rnational security policy and is a senior associate with the cybersecurity practice at Good Harbor Consulting. Prior to attending the Harvard Kennedy School, he ser ved for five years as an infantry officer in the US a rmy serving multiple tours in Iraq . Following graduation he plans to continue working on cybersecurity issues. He has a degree in Computer Science and Applied Computational Mathematics from the University of Washington 20 March 2012 “On the Use of Offensive Cyber Capabilities A Policy Analysis on Offensive US Cyber Policy” Harvard Kennedy School of Government <http://belfercenter.ksg.harvard.edu/files/cybersecurity-pae-belk-noyes.pdf>

**\*\*NOTE\*\*: Ontology=”** a formal representation of a domain of knowledge as a set of concepts and the relationships between those concepts.”

The majority of current literature on cyber operations suffers from dependence on weak metaphors and unclear or ambiguous definitions. Moreover, to the extent definitions do exist regarding aspects of cyber operations, they are often ill suited for the particular policy debate. This inhibits policy ma kers from making intelligent decisions and developing effective cyber policy. For this reason, establishing a clear and policy - relevant ontology for cyber operations is the essential first - step for conducing productive cyber policy discussions.

### --Cyber Exploitation Violation 2NC

#### cyberexploitation is distinct from OCOs (so are providing and protecting capacity)

ROSEMARY M. **CARTER,** BRENT **FEICK, and** ROY C**. UNDERSANDER** July **2012** Offensive Cyber for the Joint Force Commander: It's Not That Different JFQ • JFQ-66 • OFFENSIVE CYBER FOR THE JOINT FORCE COMMANDER <http://www.ndu.edu/press/offensive-cyber.html>

The cyber domain consists of four operating areas: providing capability, protecting that capacity, exploiting within the domain, and conducting offensive operations that are also referred to as computer network attack. The areas of “provide” and “protect” are the most mature because our day-to-day information technology operations require a secure and functioning cyber domain. This article focuses instead on offensive cyber capability, which is the newest segment of the domain but is rapidly maturing. Unlike airpower, where development was limited to nations with significant industrial and financial resources, the cyber warfare arena is inexpensive and characterized by state and nonstate actors limited only by creativity and the Internet. Therefore, to maintain strategic capability for cyber superiority,4the cyber domain must be rapidly synchronized with the other warfighting domains. A full understanding of the features, capabilities, limitations, and impacts of the cyber domain may be years away, but actionable knowledge of this domain at the operational level will not be achieved as long as cyber operations remain segregated from the other warfare mission areas

#### offensive is distinct from defensive, espionage and other information operation capabilities

NAME: Commander Todd C. **Huntley 10** Judge Advocate General's Corps, United States Navy. Currently serving as the Staff Judge Advocate for Commander, Special Operations Command Central and Combined Forces Special Operations Component Command. B.A., 1991, University of Cincinnati; J.D., 1996, University of Cincinnati; M.A., 2006, Fletcher School of Law and Diplomacy; L.L.M., 2009, Harvard Law School. ARTICLE, ESSAY & NOTE: CONTROLLING THE USE OF FORCE IN CYBER SPACE: THE APPLICATION OF THE LAW OF ARMED CONFLICT DURING A TIME OF FUNDAMENTAL CHANGE IN THE NATURE OF WARFARE2010 Naval Law Review 60 Naval L. Rev. 1. Lexis

 [\*7] This article will use the term "cyber activities" to refer to the entire spectrum of activities that states and their agents conduct in cyber space, i.e., in a manner roughly equivalent to the DoD doctrinal term "computer network operations." "Cyber activities" would include defensive response actions, offensive cyber attack, and cyber espionage. Although not specifically addressed in this paper, this term would also encompass cyber facilitated Information Operation capabilities such as psychological operations and military deception.

### Disease--1NC

#### burnout

The **Independent** **3** [UK “Future Tense: Is Mankind Doomed?”, http://www.commondreams.org/headlines03/0725-04.htm 7/25/03]

Maybe - though plenty of experienced graduate students could already have a stab. But nature knows that infectious diseases are very hard to get right. Only HIV/Aids has 100 per cent mortality, and takes a long time to achieve it. By definition, lethal diseases kill their host. If they kill too quickly, they aren't passed on; if too slowly, we can detect them and isolate the infected. Any mutant smallpox or other handmade germ would certainly be too deadly or too mild. And even Sars killed fewer people worldwide than die on Britain's roads in a week. As scares go, this one is ideal - overblown and unrealistic.

#### Risk is decreasing, its hype and cures solve

**Ridley** 8/17/**12** [Matt Ridley, columnist for The Wall Street Journal and author of *The Rational Optimist: How Prosperity Evolves,* “Apocalypse Not: Here’s Why You Shouldn’t Worry About End Times,” <http://www.wired.com/wiredscience/2012/08/ff_apocalypsenot/all/>]

The emergence of AIDS led to a theory that other viruses would spring from tropical rain forests to wreak revenge on humankind for its ecological sins. That, at least, was the implication of Laurie Garrett’s 1994 book, The Coming Plague: Newly Emerging Diseases in a World Out of Balance. The most prominent candidate was Ebola, the hemorrhagic fever that starred in Richard Preston’s The Hot Zone, published the same year. Writer Stephen King called the book “one of the most horrifying things I’ve ever read.” Right on cue, Ebola appeared again in the Congo in 1995, but it soon disappeared. Far from being a harbinger, HIV was the only new tropical virus to go pandemic in 50 years.¶ In the 1980s British cattle began dying from mad cow disease, caused by an infectious agent in feed that was derived from the remains of other cows. When people, too, began to catch this disease, predictions of the scale of the epidemic quickly turned terrifying: Up to 136,000 would die, according to one study. A pathologist warned that the British “have to prepare for perhaps thousands, tens of thousands, hundreds of thousands, of cases of vCJD [new variant Creutzfeldt-Jakob disease, the human manifestation of mad cow] coming down the line.” Yet the total number of deaths so far in the UK has been 176, with just five occurring in 2011 and none so far in 2012.¶ In 2003 it was SARS, a virus from civet cats, that ineffectively but inconveniently led to quarantines in Beijing and Toronto amid predictions of global Armageddon. SARS subsided within a year, after killing just 774 people. In 2005 it was bird flu, described at the time by a United Nations official as being “like a combination of global warming and HIV/AIDS 10 times faster than it’s running at the moment.” The World Health Organization’s official forecast was 2 million to 7.4 million dead. In fact, by late 2007, when the disease petered out, the death toll was roughly 200. I

n 2009 it was Mexican swine flu. WHO director general Margaret Chan said: “It really is all of humanity that is under threat during a pandemic.” The outbreak proved to be a normal flu episode.¶The truth is, a new global pandemic is growing less likely, not more. Mass migration to cities means the opportunity for viruses to jump from wildlife to the human species has not risen and has possibly even declined, despite media hype to the contrary. Water- and insect-borne infections—generally the most lethal—are declining as living standards slowly improve. It’s true that casual-contact infections such as colds are thriving—but only by being mild enough that their victims can soldier on with work and social engagements, thereby allowing the virus to spread. Even if a lethal virus does go global, the ability of medical science to sequence its genome and devise a vaccine or cure is getting better all the time.

**Ext1--Conflation Inev--A/C Ext**

#### drones, ID- all disproves IMPCT bc its generic

**LOAC is destroyed now**

**A. PMCs**

Daniel P. **Ridlon**, A.F. Captain, JD Harvard, **2008**, “CONTRACTORS OR ILLEGAL COMBATANTS? THE STATUS OF ARMED CONTRACTORS IN IRAQ,” 62 A.F. L. Rev. 199, ln

In addition to legal liability, the United States' **employment of PMF personnel in future conflicts has potential negative policy ramifications**. Employing **PMF personnel** who are potentially viewed as illegal combatants **may undermine the public image that the United States conducts its military operations in accordance with the laws of war**. **This** **would** not only **serve as a p**ublic **r**elations **problem** for the United States, **but it could also be used as justification for other nations** or non-state actors **to violate the l**aws **o**f **w**ar, especially if those states or groups are engaged in a conflict against the United States. In the end, the employment of illegal combatants could reduce prisoner of war [\*253] protections afforded to United States military personnel if they are captured.

**C. UN peace operations**

Matthew E. **Dunham 13**, JD Dickinson, “SACRIFICING THE LAW OF ARMED CONFLICT IN THE NAME OF PEACE: A PROBLEM OF POLITICS,” 69 A.F. L. Rev. 155, ln

**Peace operations are the** United Nation's (**UN's**) **core business** and its most visible activity. n3 Between 1948 and 2012, the UN Department of Peacekeeping Operations (DPKO) conducted sixty-seven peace operations with the general purpose of ending violence. n4 The worldwide presence of peace operation forces is even larger when one adds operations carried out by states under unified command. n5 [\*157] When conducting peace operations, the DPKO maintains that successful operations are based in the rule of law. n6 This principle clearly follows from one of the major purposes of the UN to "maintain international peace and security . . . in conformity with the principles of justice and international law." n7 Nevertheless, to sustain political support for some peace operations, **the UN** **and** its **member states intentionally ignore** the applicability of the law of armed conflict (**LOAC**) n8 **by refusing to classify hostilities as an armed conflict and by wrongly denying that peace operation forces have become belligerents** in armed conflict. **If the international community wishes to conduct high-intensity peace operations without causing the LOAC to be cast aside** in future conflicts, **it must** promote the rule of law by **ceasi**ng **to pretend** that such operations are passive and impartial. This paper provides three examples where the UN and its member states improperly circumvented the LOAC. The first two examples concern intervention of peace operation forces in East Timor by Australia and then the UN between 1999 and 2000. Both Australia and the UN determined the LOAC did not apply to hostilities even though the facts on the ground required its application. n9 The third example examines the UN's intervention in the Ivory Coast in 2011, where the UN conducted air assaults against one party to a non-international armed conflict (NIAC). After the offensive, the UN Secretary-General implausibly denied the UN had become a party to the conflict, thereby denying the application of the LOAC as a matter of law to those UN actions. n10 **The UN and its member states sacrifice the LOAC in peace operations because of conflicting concepts of sovereignty and an unsustainable adherence to traditional peacekeeping doctrine**. Under traditional peacekeeping doctrine, a peace operation force must gain consent from the parties, remain impartial to the conflict, and only use force in self-defense. n11 Traditional peacekeeping is based on a Westphalian concept of sovereignty, which absolutely prohibits interference in the [\*158] internal affairs of another state. n12 More recently, however, peace operations have become more robust and aggressive. n13 Particularly since the mid-1990s, the UN Security Council has typically authorized peace operations under Chapter VII of the UN Charter to not only use force for individual and unit self-defense, but also to further the mission's mandate and protect civilians. n14 These more aggressive peace operations are based on a post-Westphalian view that a sovereign's inability or unwillingness to protect its citizens could result in involuntary forfeiture of sovereignty. n15 Further obscuring the application of the LOAC in peace operations is the fact that the international community lacks accepted definitions for peace operations and its different forms, such as "peacekeeping" and "peace enforcement." n16 While the DPKO distinguishes five types of peace operations (conflict prevention, peacekeeping, peace enforcement, peacemaking, and peace building), it only generically describes the activities. n17 The lack of clear definitions makes it difficult [\*159] to consistently apply the terms. While Part II of this paper generally distinguishes between peacekeeping and peace enforcement, the majority of the paper uses the generic term "peace operation" when feasible to emphasize the importance of consistency in the application of terms. n18 The international community is forcing a square peg into a round hole by trying to apply traditional Westphalian principles of consent, impartiality, and the use of force in self-defense to robust peace operations justified under a post-Westphalian concept of sovereignty. To fit the peg into the Westphalian idea of a valid peace operation, the UN and its member states avoid objective classification of hostilities and proper characterization of participants in hostilities. Unfortunately, **such political maneuvering sacrifices the LOAC**--represented by the pieces shaved off the square peg as it breaks down to fit the round hole. Instead of avoiding the LOAC, peace operation forces should promote and respect the LOAC by objectively identifying their role and the nature hostilities. Otherwise, **states may use examples of peace operations to justify unlawful actions in armed conflict.** The next section of this paper, Part II, focuses on the evolution of peace operations as background for considering why the UN and states conducting peace operations sacrifice the LOAC in the name of peace. It discusses the origin of peace operations under a Westphalian concept of sovereignty and shows how such operations have expanded with a shifting view of sovereignty. This section also examines the evolution of the application of the LOAC to peace operations--from an initial perspective that the LOAC never applies to peacekeepers, to a view that the LOAC will apply if peacekeepers become a party to a conflict. Despite theoretical progression on the application of the LOAC to peace operations, Part III analyzes hostilities in East Timor between 1999 and 2000, and the Ivory Coast in early 2011, to illustrate intentional avoidance of the LOAC in peace operations. Within these contexts, Part IV shows how peace operation forces in East Timor and the Ivory Coast applied traditional Westphalian peacekeeping principles to post-Westphalian peace operations for political purposes. Further, this section shows [\*160] why such political calculations undermine the LOAC. Finally, Part V argues the error in sacrificing the LOAC to justify humanitarian intervention. This section contends that intentional avoidance of the LOAC in peace operations creates a model for states to ignore the LOAC in other conflicts. It also shows that the apparent success in one peace operation undertaken by political maneuver may, in fact, be detrimental to the next humanitarian crisis. Accordingly, the UN and its member states must properly categorize hostilities and the participant's status if they wish to use military force in peace operations. II. THE EVOLUTION OF PEACE OPERATIONS AND THE APPLICABILITY OF THE LAW OF ARMED CONFLICT Peace operations are a core activity of the UN, which is charged with maintaining international peace and security in accordance with the rule of law. When conducting such operations, however, **traditional notions of sovereignty undermine the ability of the UN and its member states to effectively adhere to the LOAC**. To explore this problem, this section examines the origin of peace operations in light of the Westphalian concept of sovereignty in which they were developed, n19 and it shows how the purpose of peace operations has expanded with a shifting concept of sovereignty. The section then discusses the types of circumstances that trigger the LOAC. Finally, it addresses the evolving application of the LOAC to peace operations and identifies the political dilemma of applying the LOAC to certain types of peace operations.

**D. Decapitation strikes**

**Boyle 05** (Francis, Professor of Law, University of Illinois, "Iraq and the Laws of War" Information Clearing House) www.informationclearinghouse.info/article10621.htm

**On 19 March 2003** President **Bush** Jr. **commenced his** criminal **war against Iraq by ordering a** so-called **decapitation strike against the President of Iraq in violation of a 48-hour ultimatum he had given publicly to the Iraqi President and his sons to leave the country. This duplicitous behavior violated the customary international laws of war set forth in the 1907 Hague Convention on the Opening of Hostilities** to which the United States is still a contracting party, as evidenced by paragraphs 20, 21, 22, and 23 of U.S. Army Field Manual 27-10 (1956). Furthermore, President Bush Jr.'s attempt to assassinate the President of Iraq was an international crime in its own right. Of course the Bush Jr. administration's war of aggression against Iraq constituted a Crime against Peace as defined by the Nuremberg Charter (1945), the Nuremberg Judgment (1946), and the Nuremberg Principles (1950) as well as by paragraph 498 of U.S. Army Field Manual 27-10 (1956).

### i-law

#### Ilaw fails --- states will either inevitably cooperate, or ilaw can’t convince them to

Eric A. Posner 9, Kirkland and Ellis Professor of Law at the University of Chicago Law School. The Perils of Global Legalism, 34-6

34 ¶ Most global legalists acknowledge that international law is created and enforced by states. They believe that states are willing to expand international law along legalistic lines because states’ long-term interests lie in solving global collective action problems. In the absence of a world govern- ment or other forms of integration, international law seems like the only way for states to solve these problems. The great difﬁculty for the global legalist is explaining why, if states create and maintain international law, they will also not break it when they prefer to free ride. In the absence of an enforcement mechanism, what ensures that states that create law and legal institutions that are supposed to solve global collective action prob- lems will not ignore them? ¶ For the rational choice theorist, the answer is plain: states cannot solve global collective action problems by creating institutions that themselves depend on global collective action. This is not to say that international law is not possible at all. Certainly, states can cooperate by threatening to retaliate against cheaters, and where international problems are matters of coordination rather than conﬂ ict, international law can go far, indeed.7 But if states (or the individuals who control states) cannot create a global government or q uasi-g overnment institutions, then it seems unlikely that they can solve, in spontaneous fashion, the types of problems that, at the national level, require the action of governments. ¶ Global legalists are not enthusiasts for rational choice theory and have ¶ 35¶ grappled with this problem in other ways.8 I will criticize their attempts in chapter 3. Here I want to focus on one approach, which is to insist that just as individuals can be loyal to government, so too can individuals (and their governments) be loyal to international law and be willing to defer to its requirements even when self-i nterest does not strictly demand that they do so. International law has force because (or to the extent that) it is legitimate.9 ¶ What makes governance or law legitimate? This is a complicated ques- tion best left to philosophers, but a simple and adequate point for present purposes is that no system of law will be perceived as legitimate unless those governed by that law believe that the law does good — serves their interests or respects and enforces their values. Perhaps more is required than this — such as political participation, for example — but we can treat the ﬁ rst condition as necessary if not sufﬁ cient. If individuals believe that a system of law does not advance their interests and respect their values, that instead it advances the interests of others or is dysfunctional and helps no one at all, they will not believe that the law is legitimate and will not voluntarily submit to its authority. ¶ Unfortunately, international law does not satisfy this condition, mainly because of its institutional weaknesses; but of course, its institutional weaknesses stem from the state system — states are not willing to tolerate powerful international agencies. In classic international law, states enjoy sovereign equality, which means that international law cannot be created unless all agree, and that international law binds all states equally. What this means is that if nearly everyone in the world agrees that some global legal instrument would be beneﬁ cial (a climate treaty, the UN charter), it can be blocked by a tiny country like Iceland (population 300,000) or a dictatorship like North Korea. What is the attraction of a system that puts a tiny country like Iceland on equal footing with China? When then at- torney general Robert Jackson tried to justify American aid for Britain at the onset of World War II on the grounds that the Nazi Germany was the aggressor, international lawyers complained that the United States could not claim neutrality while providing aid to a belligerent — there was no such thing as an aggressor in international law.10 Nazi Germany had not agreed to such a rule of international law; therefore, such a rule could not exist. Only through the destruction of Nazi Germany could international law be changed; East and West Germany could reenter international so-¶ 36¶ ciety only on other people’s terms. How could such a system be perceived to be legitimate? ¶ There is, of course, a reason why international law works in this fash- ion. Because no world government can compel states to comply with inter- national law, states will comply with international law only when doing so is in their interest. In this way, international law always depends on state consent. So international law must take states as they are, which means that little states, big states, good states, and bad states, all exist on a plane of equality. ¶

### Nanotech 2NC

#### nanotech impossible

fat fingers- you need 10 atoms to manipulate- too big

sticky- they can’t hange onto atoms

#### give it zero risk

oxidization, laws of thermodynamics, no experimental support, hype, at best hudreds of eyars away,

Locklin 10 Physicist specializing in Quantitative Finance, PhD UC Davis, “Nano-nonsense: 25 years of charlatanry” http://scottlocklin.wordpress.com/2010/08/24/nano-nonsense-25-years-of-charlatanry/ [EDymit]

I used to work next to the center for nanotechnology. The first indication I had that there was something wrong with the discipline of “nanotechnology” is I noticed that the people who worked there were the same people who used to do chemistry and material science. It appeared to be a more fashionable label for these subjects. Really “material science” was a sort of fancy label for the chemistry of things we use to build other things. OK, new name for “chemist.” Hopefully it ups the funding. Good for you guys.¶ Later on, I actually read Drexler’s Ph.D. thesis which invented the subject. I can sum it up thusly:¶ Behold, the Schroedinger equation! ¶ With this mighty equation we may go forth and invent an entirely new form of chemistry, with which we may create new and superior forms of life which are mechanical in their form, rather than squishy inefficient biological looking things. We shall use the mighty powers of the computer to do these things! It shall bring forth many great marvels!¶ That’s it. That’s what the whole book is. Oh yes, there are a few collections of intimidating tables and graphs purporting to indicate that such a thing might be possible, and Drexler does sketch out some impressive looking mechanical designs of what he supposes a nanobot might look like, but, without more than a passing justification. He seems to lack the imagination, and of course, the physics to figure out what a real nanosized doodad might look like. Much of his thesis seems to be hand wavey arguments that his “looking rather a lot like a meter scale object” designs would work on a nano or small microscale. I know for a fact that they will not. You can wave your hands around all you want; when you stick an atomic force microscope down on nanosized thingees, you know what forces they produce. They don’t act like macro-objects, at all. Drexler would also occasionally notice that his perfect little robots would probably, you know, oxidize, like most reactive things do, and consign them to Ultra High Vacuum chambers in a fit of embarrassment. Then sometimes he would forget about the chemical properties of oxygen, and enthusiastically stick them everywhere. None of the chemistry you’d need to figure out to even begin to do this was done in his book. Little real thought was given to thermodynamics or where the energy was coming from for all these cool Maxwell-Demon like “perpetual motion” reactions. It was never noticed that computational chemistry (aka figuring out molecular properties from the Schroedinger equation) is basically useless. Experimental results were rarely mentioned, or explained away with the glorious equation of Schroedinger, with which, all things seemed possible. Self assembly was deemed routine, despite the fact that nobody knows how to engineer such thing using macroscopic objects.¶ There is modern and even ancient nano sized tech; lithographic electronic chip features are down to this size now, and of course, materials like asbestos were always nano sized. As far as nano objects for manipulating things on nanoscales; such things don’t exist. Imagining self replicating nanobots or nano machines is ridiculous. We don’t even have micromachines. Mechanical objects on microscales do not exist. On milliscales, everything that I have seen is lithographically etched, or made on a watchmakers lathe. Is it cool? Yep; it’s kind of cool. I have already worked for a “millitech” company which was going to use tiny accelerometers to do sensing stuff in your cell phone. Will it change the universe? Nope. Millitech miniaturization has been available fo

r probably 300 years now (assuming the Greeks didn’t have it); lithography just allows us to mass produce such things out of different materials.¶ This is an honest summary of Drexler’s Ph.D. thesis/book, and with that, a modest act of imagination, accompanied by a tremendous act of chutzpah, and a considerable talent for self promotion, he created what must be the most successful example of “vaporware” of the late 20th and early 21st century. The “molecular foundry” or “center for nanotechnology” or whatever nonsense name they’re calling the new chemistry building at LBL is but the tip of the iceberg. There are government organizations designed to keep up America’s leadership in this imaginary field. There are zillionaire worryworts who are afraid this mighty product of Drexler’s imagination will some day turn us all into grey goo. There are news aggregators for this nonexistent technology. There are even charlatans with foundations promoting, get this, “responsible nanotech.” All this, for a technology which can’t even remotely be thought of as existing in even pre-pre-prototype form. It is as if someone read Isaac Asimov’s books on Robots of the future (written in the 1950s) and thought to found government labs and foundations and centers to responsibly deal with the implications of artificial intelligence from “positronic brains.” ¶ You’d think such an endeavor would have gone on for, I don’t know, a few years, before everyone realized Drexler was a science fiction author who doesn’t do plot or characterization. Nope; this insanity has gone on for 25 years now. Generations of academics have spent their entire careers on this subject, yet not a single goal or fundamental technology which would make this fantasy a remote possibility has yet been developed. Must we work on it for another 25 years before we realize that we can’t even do the “take the Schroedinger equation, figure out how simple molecules stick together” prerequisites which are a fundamental requirement for so called molecular engineering? How many more decades or centuries of research before we can even create a macroscopic object which is capable of the feat of “self replication,” let alone a self replicator which works at length scales which we have only a rudimentary understanding of? How many more cases of nincompoops selling “nanotech sunscreen” or “nanotech water filters” using the “nanotechnology” of activated carbon; must I endure? How many more CIA reports on the dangers of immanent nanoterrorism must my tax dollar pay for, when such technologies are, at best, centuries away? How many more vast coffers of government largesse shall we shower on these clowns before we realize they’re selling snake oil?¶ Drexler’s answer to all this is, since nobody can disprove the necessary things to develop nanotech, they will be developed. Well, that depends what you mean by the words “can” and “disprove.” It also depends on what your time scale is. I’m willing to bet, at some nebulous point in the future, long after Drexler and I are dead, someone may eventually develop a technology sort of vaguely like what he imagines. At least the parts that don’t totally violate the laws of thermodynamics and materials physics (probably, most of the details do). As an argument, “you can’t disprove my crazy idea” doesn’t hold much water with me. Doubtless there are many denizens of the booby hatch who claim to be Jesus, and I can’t really disprove any of them, but I don’t really see why I should be required to. ¶ I have nothing against there being a few people who want to achieve some of the scientific milestones needed to accomplish “nanotech.” I have a great deal against charlatans who claim that we should actually invest significant resources into this crazy idea. If you’re an investor, and somebody’s prospectus talks about “nano” anything, assuming they’re not selling you a semiconductor fab, you can bet that they are selling you snake oil. There is no nanotech. Stop talking about it. Start laughing at it. As Nobel prize winning chemist Richard Smalley put it to Drexler: “No, you don’t get it. You are still in a pretend world where atoms go where you want because your computer program directs them to go there.”

## Defense: Bioweapons

#### No threatening programs and current defenses solve bioweapons

Orent 9 [Wendy, Ph.D. in anthropology from the University of Michigan, leading freelance science writer, and author of Plague: The Mysterious Past and Terrifying Future of the World's Most Dangerous Disease, "America's Bioterror Bugaboo." Los Angeles Times (Los Angeles, CA) 17 Jul 2009: A.29. SIRS Researcher. Web. 29 January 2010]

After the anthrax letter attacks of October 2001, the Bush administration pledged $57 billion to keep the nation safe from bioterror. Since then, the government has created a vast network of laboratories and institutions to track down and block every remotely conceivable form of bioterror threat. The Obama administration seems committed to continuing the biodefense push, having just appointed a zealous bioterror researcher as undersecretary of science and technology in the Department of Homeland Security. But is the threat really as great as we've been led to believe? Last summer, the FBI concluded that the anthrax letters that killed five Americans came not from abroad but from an American laboratory, the United States Army Medical Research Institute of Infectious Diseases. Meanwhile, the Russian bioweapons program was officially shut down in 1992, and it's unlikely that anything remaining of it could pose much of a threat. Iraq, it has turned out, had no active program. And Al Qaeda's rudimentary explorations

 were interrupted, according to an Army War College report, by the U.S. invasion of Afghanistan.

## 1NR

### Gr Impact: 2NC

#### Magnitude—nuke war is survivable, eco-doom is forever

Richard **Tobin 90**, The Expendable Future, 1990, p. 22

Norman Meyers observes, no other form of environmental degradation “is anywhere so significant as the fallout of species.” Harvard biologist Edward O. Wilson is less modest in assessing the relative consequences of human-caused extinctions. To Wilson, the worst thing that will happen to earth is not economic collapse, the depletion of energy supplies, or even nuclear war. As frightful as these events might be, Wilson reasons that they can “be repaired within a few generations. The one process ongoing…that will take millions of years to correct is the loss of genetic and species diversity by destruction of natural habitats.

#### evaluate extinction first--ethical obligation

Lester W. **Milbrath**, Director Emeritus, Environment and Society Program, SUNY-Buffalo, “Envisioning a Sustainable Society,” EXPLORATIONS IN ENVIRONMENTAL POLITICAL THEORY, ed. J.J. Kassiola, 20**03**, p. 51.

Our common journey promises to be challenging and exciting, even though difficult. It will be much easier, and more likely to be successful, if we face it optimistically with a deep understanding of the pace and character of social transformation. We humans are special. Not because of our reason-other species can reason-rather it is our ability to recall the past and foresee the future. We are the only creatures that can imag- ine our extinction. That special gift of understanding places a unique moral responsibility on humans. Once we have contemplated the future, every decision that could affect that future becomes a moral decision. Even the decision not to act, or to decide not to decide, becomes a moral iudgment. We humans, given the ability to anticipate the consequences of our actions, will become the conscious mind of the biocommunity, a global mind that will guide and hasten social transformation. Those who understand what is happening to our world are not free to shrink from this responsibility.

#### nuke war won’t cause extinction

**Seitz 11**, Harvard University Center for International Affairs visiting scholar, (Russell, “Nuclear winter was and is debatable,” Nature, 7-7-11, Vol 475, pg37, accessed 9-27-11, )

Alan Robock's contention that there has been no real scientific debate about the 'nuclear winter' concept is itself **debatable** (Nature 473, 275–276; 2011). This potential climate disaster, popularized in Science in 1983, rested on the output of a one-dimensional model that was later shown to overestimate the smoke a nuclear holocaust might engender. More refined estimates, combined with advanced three-dimensional models (see http://go.nature.com.libproxy.utdallas.edu/kss8te), have dramatically reduced the extent and severity of the projected cooling. Despite this, Carl Sagan, who co-authored the 1983 Science paper, went so far as to posit “the extinction of Homo sapiens” (C. Sagan Foreign Affairs 63, 75–77; 1984). Some regarded this apocalyptic prediction as **an exercise in** mythology. George Rathjens of the Massachusetts Institute of Technology protested: “Nuclear winter is the worst **example of the** misrepresentation of science **to the public** in my memory,” (see http://go.nature.com.libproxy.utdallas.edu/yujz84) and climatologist Kerry Emanuel observed that the subject had “become notorious for its lack of scientific integrity” (Nature 319, 259; 1986). Robock's single-digit fall in temperature is at odds with the subzero (about −25 °C) continental cooling originally projected for a wide spectrum of nuclear wars. Whereas Sagan predicted darkness at noon from a US–Soviet nuclear conflict, Robock projects global sunlight that is several orders of magnitude brighter for a Pakistan–India conflict — literally the difference between night and day. Since 1983, the projected worst-case cooling has fallen from a Siberian deep freeze spanning 11,000 degree-days Celsius (a measure of the severity of winters) to numbers so unseasonably small as to call the very term 'nuclear winter' into question.

#### more scenarios for extinction

#### --endocrine disruption

Richard **Douthwaite**, fellow, Post Carbon Institute and Visiting Lecturer, University of Plymouth, CRITICAL DEVELOPMENT THEORY: CONTRIBUTIONS TO A NEW PARADIGM, ed. R.Munck & D.O'Hearn, 19**99**, p. 158.

A third reason that the world economy is unsustainable is that some of the chemicals it employs mimic human hormones and disrupt the body's endocrine system. As a result, the sperm counts of European men have been falling at 3 per cent per year since these chemicals came into use after the Second World War (Swan et al 1997). The same chemicals are also causing increases in testicular and breast cancer (European Workshop 1996) and are causing fewer boys to be born relative to girls. Moreover, a higher proportion of these boys than ever before have defective genitals. In short, the world economic system is undermining humanity's ability to reproduce itself. If the human race is not sustainable then neither is its economic system.

#### --Pandemics—no burnout

Frank **Ryan**, M.D., 19**97**, virus X, p. 366

How might the human race appear to such an aggressively emerging virus? That teeming, globally intrusive species, with its transcontinental air travel, massively congested cities, sexual promiscuity, and in the less affluent regions — where the virus is most likely to first emerge — a vulnerable lack of hygiene with regard to food and water supplies and hospitality to biting insects' The virus is best seen, in John Hollands excellent analogy, as a swarm of competing mutations, with each individual strain subjected to furious forces of natural selection for the strain, or strains, most likely to amplify and evolve in the new ecological habitat.3 With such a promising new opportunity in the invaded species, natural selection must eventually come to dominate viral behavior. In time the dynamics of infection will select for a more resistant human population. Such a coevolution takes rather longer in "human" time — too long, given the ease of spread within the global village. A rapidly lethal and quickly spreading virus simply would not have time to switch from aggression to coevolution. And there lies the danger. Joshua Lederbergs prediction can now be seen to be an altogether logical one. Pandemics are inevitable. Our incredibly rapid human evolution, our overwhelming global needs, the advances of our complex industrial society, all have moved the natural goalposts. The advance of society, the very science of change, has greatly augmented the potential for the emergence of a pandemic strain. It is hardly surprising that Avrion Mitchison, scientific director of Deutsches Rheuma Forschungszentrum in Berlin, asks the question: "Will we survive!” We have invaded every biome on earth and we continue to destroy other species so very r

apidly that one eminent scientist foresees the day when no life exists on earth apart from the human monoculture and the small volume of species useful to it. An increasing multitude of disturbed viral-host symbiotic cycles are provoked into self-protective counterattacks. This is a dangerous situation. And we have seen in the previous chapter how ill-prepared the world is to cope with it. It begs the most frightening question of all: could such a pandemic virus cause the extinction of the human species?

### Gr Transition: A2 “Too Late”

#### even if some decline is inevitable, only dedev solves total collapse

Dr. Glen **Barry**, president, Ecological Internet and PhD, Land Resources, University of Wisconsin-Madison, "On Violence and Earth Revolution," Earth Meanders, 1--31--**12**, http://www.ecoearth.info/blog/2012/01/on\_violence\_and\_earth\_revoluti.asp#more, accessed 2-2-13.

Earth's ecosystems are collapsing under the burden of human growth, destroying our one shared biosphere that makes life possible. Industrial growth – frantically destroying ecosystems to feed insatiable, ever-growing appetites – is an aberration, a mistake, a disease. If left untreated, this will be the end of the human family, all life, and Earth's very being. Infinite economic growth at the expense of ecosystems is impossible, and seeking endless and inequitable growth in consumption and population can only lead to collapse and massive die-off. Humanity’s last best chance to justly and equitably sustain a livable planet is to protect and restore ecosystems, end fossil fuels, and a people's power Earth revolution to utterly destroy the ecocidal industrial growth machine. We are all bloody fools to tolerate and not immediately overthrow a violently ecocidal system that is killing us all. If we all understood the implications of global ecosystem collapse, we would go now, together, and slay the global growth machine. It is too late to escape profound ecological decline, yet complete disastrous social and ecological collapse – and possible end to most or all life – may yet be avoided. Sustaining ecology must become society’s central organizing principle or humans and all species face horrendous death. Globally it is time for radical change to simply survive converging ecology, food, war, water, inequity, population, climate, jobs, ocean, and extinction crises. It is deeply troubling most "environmentalists" deny the severity of ecosystem collapse, rejecting out of hand revolutionary measures sufficient to sustain ecology. Earth is dying a death of a billion lashes as ecosystems are liquidated for consumption as if nature has no worth. 80% of old forests are gone, 50% of top soil, 90% of big ocean fish, bee populations are collapsing, we are undergoing abrupt climate change, and two billion are hungry and thirsty – to say nothing of acidic and dead oceans, nitrogen pollution, fracking and tar sands, extinction, desertification, water scarcity, pervasive toxics, and how all these ecological crises interact and reinforce each other. Yes, you read this right – EARTH IS DYING – not that humans are going extinct, but Earth will recover. A whole body of global change and ecology science and intuition indicates Earth is well past its carrying capacity and planetary boundaries, that enough ecosystems have been lost, diminished, and changed forever, that the biogeochemical process that make life possible are failing. We face an unprecedented planetary ecological emergency.

### Gr Unsustainable: 2NC

#### TWO—lags—their ev underestimates the threat--Current overshoot risks irrecoverable damage to ecosystems because of lags, their ev underestimates the threat

Dr. Glen **Barry**, president, Ecological Internet and PhD, Land Resources, University of Wisconsin-Madison, "Old Forests, Kerala India's Elephants, and the Biosphere: Proposing a Planetary Boundary for Ecosystem Loss," Paper Presented at the Kerala Law Academy International Law Conference on Conservation of Forests, Wildlife and Ecology, **12--16**--12, http://forests.org/blog/2012/12/scientific-paper-old-forests-k.asp, accessed 2-2-13.

It is generally accepted that humanity is in ecological overshoot, which means we have already surpassed planetary limits upon sustainability, with lags in full impacts yet to be realized. A growing human population takes goods and services from the Earth System at a rate that erodes its capacity to support us (Steffen et al. 2011). And it is clear that civilization depends upon humanity remaining within thresholds (Folke 2011). Some have proposed that this human dominance signals a new geological epoch that could supplant the Holocene; it has been dubbed the Anthropocene (Crutzen 2002; Steffen et al. 2011). As we move further into the Anthropocene, humanity risks driving the Earth into "hostile states from which we cannot easily return" (Steffen et al. 2011). Humans depend upon the biosphere – the global Earth System which integrates life and its relationships – for the human life-support system. Human development and advancement are often not perceived as being connected with the biosphere and ecosystem services. Given human domination of the biosphere, ecology must more fully incorporate human behavior (Peterson 2000). There is a strong consensus that human activities are influencing the Earth's climate (IPCC 2007). Yet an understanding of the impacts of loss and diminishment of natural ecosystems – whether terrestrial, aquatic, or marine; expressed at various scales, and examined using numerous ecological criteria including genetic, organism, species, plant community, and landscape perspectives – remains more elusive. The scale and magnitude, the sheer momentum behind biological impoverishment of the planet is in this researcher's opinion not well understood. And it seems clear that worst-case scenarios of global ecological collapse are not being given their just and prudent consideration.

#### Social complexity ensures collapse

Rob **Hengeveld**, Phd, Professor Earth and Life Science, University of Amsterdam, "Our Apocalyptic Odds," SALON, 4--14--**12**, ,” <http://www.salon.com/2012/04/14/our_apocalyptic_odds/>

 Because they are much of a jumble as well, societies can crash or collapse. Such crashes not only develop rapidly, but their cause, course, and timing are unpredictable. Mathematicians call thisfield of study deterministic chaos: unpredictability reigns, even when nothing happens by chance;chancewithin the processonly gives additional unpredictability. Imagine, therefore, what happens when such systems contain an element of chance as well. So, how does chance work, and does chance depend on the number of people making up society and its complexity? If so, does the chance of societal collapse increase over time as our numbers and their resulting societal complexity grow? Have our living conditions changed (gradual soil salination, or a sudden rise in the price of food due to drought in Australia or Russia, for example)? Think for a moment of a die: what is the chance of throwing, say, a five? A die has six sides, each with the same chance of turning up. The chance of throwing a five is one in six, or 17 percent. Conversely, the combined chance of throwing any number other than five is five in six, or 83 percent. But how great is the chance of getting a five within two consecutive throws? That chance is obviously twice as large, or 33 percent, and the chance of getting any other number is 67 percent. Therefore, the more throws, the greater the chance of getting your preferred five at least once. And the chance of missing it reduces accordingly. The same reasoning applies to, say, the chance of some explosion happening in an oil pipe, though in this case you are interested in the chance of the event not happening. Now the chance that some disaster will not happen is made as small as possible, say, one in 10,000, and the chance of an explosion occurring is only one in 9,999. Obviously, these chances also depend on the length of the pipe, on the number of pipes, on the number of welds, or the number of pumping and control stations, that is, on the complexity of the pipe system, and also on the length of the period the system is operating: the longer the pipes and the more there are,the greater the complexity of the system they form and the longer the period of operation,the greater the chance of something going wrong, resulting in an explosion. Moreover,all these mistakes and disasters have different chances of happening, and all these chances are superimposed.You can try out for yourself what happens by throwing different kinds of dice, the normal one with six sides, then one with four, eight, ten, twelve, twenty, and one with thirty sides. The result is a very wiggly line when you add the outcomes of these sets of dice for a number of throws together for each point on this line. Each new point is different from any of the previous ones and therefore is impossible to predict; it was already impossible to predict the outcome of one single die. Still,this curve resembles the real worldin many respects where also many chance events occur, the one adding to another and each with a different chance of happening. In reality,the chances have different and varying weights relative to the total process as well, and they interact both linearly and nonlinearly, which we all kept constant and independent when we threw our seven sets of dice.How can we predict the future of society but in general terms of depletion and pollution rates?These are our certainties, but we really can’t predict in detail what will happen and when as a social or economic result.For these societal effects we can only say that the chance of collapse increases with an increasing complexity of society, as well as with increasing stress from resource depletion, pollution, and social inequality.Think of the decline of ancient Rome,which took centuries;nobody knows why it declined; we have more explanations than authors. Because of the great influence of chance in all aspects of society, whose behavior is unknowable and, hence, unpredictable—manageable only up to some point, after which further developments grow out of hand.Why the reasonf or a crash such as the decline of Rome is also unknowable, and why its crash was unmanageable,is that people usually look at only one process in isolation,such as the invasion of the Gothic tribes or the general poisoning of people by lead in the water pipes.In many cases, however,a disaster is triggered by the coinciding of a number of different events or processes, not by a single event or process. Therefore,as our numbers continue to grow exponentially, the size and complexity of society increases exponentially relative to those numbers.Consequently, the predictability of a particular crash developing from the occurrence of a certain combination of chance events or processes decreases. Moreover,because many factors can be interdependent, a crash in one sector pulls others in its wake, making it a general crashi n no time and also making it more difficult to manipulate or manage.Crashes of our socioeconomic system will thereforebecome more frequent and less easy to control. I think that the collapse of the present human population, its numbers and quality of life, is likely, and also thatthe most humane way to weather this period is to design a strategy and follow it ourselves rather than sit back and wait complacently. Unfortunately, the time for old customs and cultural traditions or of long-held beliefs and trusts is over. As the latest calculations from 1992 by Meadows and colleagues in “Beyond the Limits“ showed ,our world can collapse, and this can happen even before any resource has definitively been depleted; collapse may come at any time and out of nowhere.It’s an inevitable, unavoidable result of the behavior ofan oversized, complex, nonlinear system in which interdependent chance processes dominate.The wave of large-scale deregulations because of the globalization of the last thirty years have only made this worse by allowing more positive feedback loops into the system. Nobody knows exactly how likely it is that our societal system will collapse or when.We know that this is theoretically inescapable, because all the local and national infrastructures and the global superstructure are based on abstractions.Moreover,system collapse follows from almost any simulation experiment based on relatively recent data—data that are now already twenty years old and are therefore too optimistic.Inthosetwenty years, it has become even more likely that the conditions theoretically leading to system collapse will occur.

#### Markets can’t price environmental externalities

Glen **Barry**, PhD & President, Ecological Internet, “Overshoot: Climate, Inequity and Corruption,” Sustainability Education Network, 3-29-**10**, <http://sen4earth.org/articles/2010/03/29/overshoot-climate-inequity-and-corruption/>, accessed 9-22-10.

Economic growth cannot continue forever if greenhouse gases are to be curbed, and the myriad of other eco-crises solved. Efforts to cap and trade, certify, sustainably manage and otherwise reform our way out of the situation are orders of magnitude inadequate and failing. Free markets appear to inherently be unable to price carbon and other externalities. It is becoming increasingly unlikely (if not impossible) that current political and business growth systems can reform in time to maintain the ecosystems necessary for life.

### Gr Transition: A2 “Human Nature”

#### ONE-Cultural and biological evolution proves humans are naturally cooperative

The difference of being human: Morality Francisco J. **Ayala 10** - Author Affiliations Department of Ecology and Evolutionary Biology, University of California, Irvine, CA 92697 Published online before print May 5, 2010, doi: 10.1073/pnas.0914616107 PNAS May 11, 2010 vol. 107 no. Supplement 2 9015-9022 PNAS.org

I propose that the moral evaluation of actions emerges from human rationality or, in Darwin's terms, from our highly developed intellectual powers. Our high intelligence allows us to anticipate the consequences of our actions with respect to other people and, thus, to judge them as good or evil in terms of their consequences for others. But I will argue that the norms according to which we decide which actions are good and which actions are evil are largely culturally determined, although conditioned by biological predispositions, such as parental care to give an obvious example. Previous SectionNext Section Moral Behavior as Rational Behavior The moral sense refers first and foremost to our predisposition to evaluate some actions as virtuous, or morally good, and others as evil, or morally bad. Morality, thus, consists of the urge or predisposition to judge human actions as either right or wrong in terms of their consequences for other human beings. In this sense, humans are moral beings by nature because their biological constitution determines the presence in them of the three necessary conditions for ethical behavior. These conditions are (i) the ability to anticipate the consequences of one's own actions; (ii) the ability to make value judgments; and (iii) the ability to choose between alternative courses of action. These abilities exist as a consequence of the eminent intellectual capacity of human beings. The ability to anticipate the consequences of one's own actions is the most fundamental of the three conditions required for ethical behavior. Only if I can anticipate that pulling the trigger will shoot the bullet, which in turn will strike and kill my enemy, can the action of pulling the trigger be evaluated as nefarious. Pulling a trigger is not in itself a moral action; it becomes so by virtue of its relevant consequences. My action has an ethical dimension only if I do anticipate these consequences. The ability to anticipate the consequences of one's actions is closely related to the ability to establish the connection between means and ends; that is, of seeing a means precisely as a means, as something that serves a particular end or purpose. This ability to establish the connection between means and their ends requires the ability to anticipate the future and to form mental images of realities not present or not yet in existence. The ability to establish the connection between means and ends happens to be the fundamental intellectual capacity that has made possible the development of human culture and technology. An evolutionary scenario, seemingly the best hypothesis available, proposes that the remote evolutionary roots of this capacity to connect means with ends may be found in the evolution of bipedalism, which transformed the anterior limbs of our ancestors from organs of locomotion into organs of manipulation. The hands thereby gradually became organs adept for the construction and use of objects for hunting and other activities that improved survival and reproduction; that is, which increased the reproductive fitness of their carriers. The construction of tools depends not only on manual dexterity, but on perceiving them precisely as tools, as objects that help to perform certain actions; that is, as means that serve certain ends or purposes: a knife for cutting, an arrow for hunting, an animal skin for protecting the body from the cold. According to this evolutionary scenario, natural selection promoted the intellectual capacity of our bipedal ancestors because increased intelligence facilitated the perception of tools as tools, and therefore their construction and use, with the ensuing improvement of biological survival and reproduction. The development of the intellectual abilities of our ancestors took place over several million years, gradually increasing the ability to connect means with their ends and, hence, the possibility of making ever-more complex tools serving more diverse and remote purposes. According to the hypothesis, the ability to anticipate the future, essential for ethical behavior, is therefore closely associated with the development of the ability to construct tools, an ability that has produced the advanced technologies of modern societies and that is largely responsible for the success of humans as a biological species. The second condition for the existence of ethical behavior is the ability to advance value judgments, to perceive certain objects or deeds as more desirable than others. Only if I can see the death of my enemy as preferable to his survival (or vice versa) can the action leading to his demise be thought of as moral. If the consequences of alternative actions are neutral with respect to value, an action cannot be characterized as ethical. Values are of many sorts: not only ethical but also aesthetic, economic, gastronomic, political, and so on. But in all cases, the ability to make value judgments depends on the capacity for abstraction; that is, on the capacity to perceive actions or objects as members of general classes. This makes it possible to compare objects or actions with one another and to perceive some as more desirable than others. The capacity for abstraction requires an advanced intelligence such as it exists in humans and apparently in them alone. I will note at this point that the model that I am advancing here does not necessarily imply the ethical theory known as utilitarianism (or, more generally, consequentialism). According to the so-called “act consequentialism” the rightness of an action is determined by the value of its consequences, so that the morally best action in a particular situation is the one, the consequences of which would have the most benefit to others. I am proposing that the morality of an action depends on our ability (i) to anticipate the consequences of our actions, and (ii) to make value judgments. But I am not asserting that the morality of actions is exclusively measured in terms of how beneficial their consequences will be to others. The third condition necessary for ethical behavior is the ability to choose between alternative courses of actions. Pulling the trigger can be a moral action only if you have the option not to pull it. A necessary action beyond conscious control is not a moral action: the circulation of the blood and the process of food digestion are not moral actions. Whether there is free will is a question much discussed by philosophers, and the arguments are long and involved (e.g., refs. 15–18). Here, I will advance two considerations that are common-sense evidence of the existence of free will. One is personal experience, which indicates that the possibility to choose between alternatives is genuine rather than only apparent. The second consideration is that when we confront a given situation that requires action on our part, we are able mentally to explore alternative courses of action, thereby extending the field within which we can exercise our free will. In any case, if there were no free will, there would be no ethical behavior; morality would only be an illusion. A point to be made, however, is that free will is dependent on the existence of a well-developed intelligence, which makes it possible to explore alternative courses of action and to choose one or another in view of the anticipated consequences (Fig. 4). Fig. 4. View larger version: In this page In a new window Download as PowerPoint Slide Fig. 4. Theodosius Dobzhansky (1900–1975), a principal author of the modern theory of evolution. The In the Light of Evolution (ILE) Sackler colloquium series is named after Dobzhansky's well-known statement, “Nothing in biology makes sense except in the light of evolution.” Previous SectionNext Section Adaptation vs. Exaptation I will now consider explicitly two issues that are largely implicit in the previous section. The moral sense, as I have proposed, emerges as a necessary implication of our high intellectual powers, which allow us to anticipate the consequences of our actions, to evaluate such consequences, and to choose accordingly how to act. But is it the case that the moral sense may have been promoted by natural selection in itself and not only indirectly as a necessary consequence of our exalted intelligence? The question in evolutionary terms is whether the moral sense is an adaptation or, rather, an exaptation. Evolutionary biologists define exaptations as features of organisms that evolved because they served some function but are later co-opted to serve an additional or different function, which was not originally the target of natural selection. The new function may replace the older function or coexist together with it. Feathers seem to have evolved first for conserving temperature, but were later co-opted in birds for flying. The beating of the human heart is an exaptation used by doctors to diagnose the state of health, although this is not why it evolved in our ancestors. The issue at hand is whether moral behavior was directly promoted by natural selection or rather it is simply a consequence of our exalted intelligence, which was the target of natural selection (because it made possible the construction of better tools). Art, literature, religion, and many human cultural activities might also be seen as exaptations that came about as consequences of the evolution of high intelligence. The second issue is whether some animals, apes or other nonhuman primates, for example, may have a moral sense, however incipient, either as directly promoted by natural selection or as a consequence of their own intelligence. The position that I will argue here is that the human moral sense is an exaptation, not an adaptation. The moral sense consists of judging certain actions as either right or wrong, not of choosing and carrying out some actions rather than others. It seems unlikely that making moral judgments would promote the reproductive fitness of those judging an action as good or evil; acting in one way or another might be of consequence in promoting fitness, but passing judgment by itself would seem unlikely to increase or decrease adaptive fitness. Nor does it seem likely that there might be some form of “incipient” ethical behavior that would then be further promoted by natural selection. The three necessary conditions for there being ethical behavior are manifestations of advanced intellectual abilities. It, indeed, rather seems that the target of natural selection was the development, which happened mostly through the Pleistocene, of advanced intellectual capacities. This was favored by natural selection because the construction and use of tools, made possible by advanced intelligence, improved the strategic position of our biped ancestors. In the account I am advancing here, once bipedalism evolved and after tool-using and tool-making became practiced, those individuals more effective in these functions had a greater probability of biological success. The biological advantage provided by the design and use of tools persisted long enough so that intellectual abilities continued to increase, eventually yielding the eminent development of intelligence that is characteristic of H. sapiens. A related question is whether morality would benefit a social group within which it is practiced and, indirectly, would also benefit individuals who are members of the group. This seems likely to be the case, if indeed moral judgment would influence individuals to behave in ways that increase cooperation, or benefit the welfare of the social group in some way; for example, by reducing crime or protecting private property. That is, the moral sense that had evolved as an exaptation associated with high intelligence could eventually become an adaptation, by favoring beneficial behaviors. Previous SectionNext Section Group Selection in Human Populations I have asserted that patterns of actions beneficial to the tribe or social group might, in humans, be favored by natural selection. This brings up the issue known as “group selection.” Evolutionists generally contend that group selection based on altruistic behavior is not an evolutionarily stable strategy. Altruistic behavior within an animal population would benefit the population itself, so that a population consisting of altruists would do better than a population consisting of selfish individuals. This would be group selection: the population as a whole benefits from the behavior of its individuals. But this state of affairs is not evolutionarily stable in an animal population. The reason is that mutations that favor selfish over altruistic behavior will be favored by natural selection, because the behavior of an altruistic individual implies a cost. The altruistic individual as well as the rest of the population will benefit from the behavior of the altruist. A selfish individual also benefits from the behavior of the altruist, but the selfish individual does not incur the cost implied by the altruistic behavior. Thus, selfish behavior will be favored within the population. Natural selection will thus eliminate genetically determined altruistic behaviors. Of course, it is admitted that it might be the case that populations with a preponderance of altruistic alleles would survive and spread better than populations consisting of selfish alleles. This would be group selection. But typically there are many more individual organisms than there are populations; and individuals are born, procreate, and die at rates much higher than populations. Thus, the rate of multiplication of selfish individuals over altruists in a given population is likely to be much higher than the rate at which altruistic populations multiply relative to predominantly selfish populations. There is, however, an important difference between animals and humans that is relevant in this respect. Namely, the fitness advantage of selfish over altruistic behavior does not necessarily apply to humans, because humans can understand the benefits of altruistic behavior (it benefits the group but indirectly it benefits them as well) and thus adopt altruism and protect it, by laws or otherwise, against selfish behavior that harms the social group. As Darwin wrote in The Descent of Man: “It must not be forgotten that, although a high standard of morality gives but a slight or no advantage to each individual man and his children over the other men of the same tribe, yet that an advancement in the standard of morality and an increase in the number of well-endowed men will certainly give an immense advantage to one tribe over another” (ref. 1, chap. V, p. 159). The theory of sociobiology advances a ready answer to the second question raised above, whether morality occurs in other animals, even if only as a rudiment. The theory of kin selection, they argue, explains altruistic behavior, to the extent that it exists in other animals as well as in humans. I will propose, however, that moral behavior does not exist, even incipiently, in nonhuman animals. The reason is that the three conditions required for ethical behavior depend on an advanced intelligence—which includes the capacities for free will, abstract thought, and anticipation of the future—such as it exists in H. sapiens and not in any other living species. It is the case that certain animals exhibit behaviors analogous with those resulting from ethical actions in humans, such as the loyalty of dogs or the appearance of compunction when they are punished. But such behaviors are either genetically determined or elicited by training (conditioned responses). Genetic determination and not moral evaluation is also what is involved in the altruistic behavior of social insects and other animals. Biological altruism (altruismb) and moral altruism (altruismm) have disparate causes: kin selection in altruismb, regard for others in altruismm. Previous SectionNext Section Mind to Morality The capacity for ethics is an outcome of gradual evolution, but it is an attribute that only exists when the underlying attributes (i.e., the intellectual capacities) reach an advanced degree. The necessary conditions for ethical behavior only come about after the crossing of an evolutionary threshold. The approach is gradual, but the conditions only appear when a degree of intelligence is reached such that the formation of abstract concepts and the anticipation of the future are possible, even though we may not be able to determine when the threshold was crossed. Thresholds occur in other evolutionary developments—for example, in the origins of life, multicellularity, and sexual reproduction—as well as in the evolution of abstract thinking and self-awareness. Thresholds occur in the physical world as well; for example, water heats gradually, but at 100 °C boiling begins and the transition from liquid to gas starts suddenly. Surely, human intellectual capacities came about by gradual evolution. Yet, when looking at the world of life as it exists today, it would seem that there is a radical breach between human intelligence and that of other animals. The rudimentary cultures that exist in chimpanzees (19, 20) do not imply advanced intelligence as it is required for moral behavior. A different explanation of the evolution of the moral sense has been advanced by proponents of the theory of “gene–culture coevolution” (5, 21–24). It is assumed that cultural variation among tribes in patriotism, fidelity, sympathy, and other moralizing behaviors may have occurred incipiently in early hominid populations, starting at least with H. habilis. This cultural variation may have, in turn, selected for genes that endowed early humans with primitive moral emotions. Primitive moral emotions would in turn have facilitated the evolution of more advanced cultural codes of morality. Repeated rounds of gene–cultural coevolution would have gradually increased both the moral sense itself and the systems of moral norms. That is, the evolution of morality would have been directly promoted by natural selection in a process whereby the moral sense and the moral norms would have coevolved. The gene–culture coevolution account of the evolution of morality is, of course, radically different from the theory I am advancing here, in which moral behavior evolved not because it increased fitness but as a consequence of advanced intelligence, which allowed humans to see the benefits that adherence to moral norms bring to society and to its members. The extreme variation in moral codes among recent human populations and the rapid evolution of moral norms over short time spans would seem to favor the explanation I am proposing. Gene–culture coevolution would rather lead to a more nearly universal system of morality, which would have come about gradually as our hominid ancestors gradually evolved toward becoming H. sapiens. Empathy, or the predisposition to mentally assimilate the feelings of other individuals, has recently been extensively discussed in the context of altruistic or moral behavior. Incipient forms of empathy seem to be present in other animals. In humans, increasing evidence indicates that we automatically simulate the experiences of other humans (ref. 25, chap. 5, pp. 158–199). Empathy is a common human phenomenon, surely associated with our advanced intelligence, which allows us to understand the harms or benefits that impact other humans, as well as their associated feelings. Empathic humans may consequently choose to behave according to how their behavior will impact those for whom we feel empathy. That is, human empathy occurs because of our advanced intelligence. Humans may then choose to behave altruistically, or not, that is morally, or not, in terms of the anticipated consequences of their actions to others. The question remains, when did morality emerge in the human lineage? Did H. habilis or H. erectus have morality? What about the Neandertals, Homo neanderthalensis? When in hominid evolution morality emerged is difficult to determine. It may very well be that the advanced degree of rationality required for moral behavior may only have been reached at the time when creative language came about, and perhaps in dependence with the development of creative language. When creative language may have come about in human evolution is discussed in ref. 3. Previous SectionNext Section Moral Codes I have distinguished between moral behavior—judging some actions as good, others as evil—and moral codes—the precepts or norms according to which actions are judged. Moral behavior, I have proposed, is a biological attribute of H. sapiens, because it is a necessary consequence of our biological makeup, namely our high intelligence. But moral codes, I argue, are not products of biological evolution but rather of cultural evolution. It must, first, be stated that moral codes, like any other cultural systems, cannot survive for long if they prevailingly run in outright conflict with our biology. The norms of morality must be by and large consistent with human biological nature, because ethics can only exist in human individuals and in human societies. One might therefore also expect, and it is the case, that accepted norms of morality will often, or at least occasionally, promote behaviors that increase the biological fitness of those who behave according to them, such as child care. But the correlation between moral norms and biological fitness is neither necessary nor indeed always the case: some moral precepts common in human societies have little or nothing to do with biological fitness, and some moral precepts are contrary to fitness interest. How do moral codes come about? The short answer is, as already stated, that moral codes are products of cultural evolution, a distinctive human mode of evolution that has surpassed the biological mode, because it is a more effective form of adaptation: it

 is faster than biological evolution and it can be directed. Cultural evolution is based on cultural heredity, which is Lamarckian, rather than Mendelian, so that acquired characteristics are transmitted. Most important, cultural heredity does not depend on biological inheritance, from parents to children, but is transmitted also horizontally and without biological bounds. A cultural mutation, an invention (think of the laptop computer, the cell phone, or rock music) can be extended to millions and millions of individuals in less than one generation. In chapter V of The Descent of Man, entitled, “On the Development of the Intellectual and Moral Faculties during Primeval and Civilized Times,” Darwin writes: “There can be no doubt that a tribe including many members who, from possessing in a high degree the spirit of patriotism, fidelity, obedience, courage, and sympathy, were always ready to give aid to each other and to sacrifice themselves for the common good, would be victorious over most other tribes; and this would be natural selection. At all times throughout the world tribes have supplanted other tribes; and as morality is one element in their success, the standard of morality and the number of well-endowed men will thus everywhere tend to rise and increase” (ref. 1, pp. 159–160). Darwin is making two important assertions. First, that morality may contribute to the success of some tribes over others, which is natural selection in the form of group selection. Second, Darwin is asserting a position of moral optimism, namely that the standards of morality will tend to improve over human history precisely on grounds of group selection, because the higher the moral standards of a tribe, the more likely the success of the tribe. This assertion depends on which standards are thought to be “higher” than others. If the higher standards are defined by their contribution to the success of the tribe, then the assertion is circular. But Darwin asserts that there are some particular standards that, in his view, would contribute to tribal success: patriotism, fidelity, obedience, courage, and sympathy. Previous SectionNext Section Moral Norms and Natural Selection Parental care is a behavior generally favored by natural selection that may be present in virtually all codes of morality, from primitive to more advanced societies. There are other human behaviors sanctioned by moral norms that have biological correlates favored by natural selection. One example is monogamy, which occurs in some animal species but not in many others. It is also sanctioned in many human cultures, but surely not in all. Polygamy is sanctioned in some current human cultures and was more so in the past. Food sharing outside the mother–offspring unit rarely occurs in primates, with the exception of chimpanzees—and, apparently, in capuchin monkeys (26, 27)—although even in chimpanzees food sharing is highly selective and often associated with reciprocity. A more common form of mutual aid among primates is coalition formation; alliances are formed in fighting other conspecifics, although these alliances are labile, with partners readily changing partners. One interesting behavior, associated with a sense of justice, or equal pay for equal work, has been described by Sarah Brosnan and Frans de Waal (26, 27) in the brown capuchin monkey, Cebus paella. Monkeys responded negatively to unequal rewards in exchanges with a human experimenter. Monkeys refused to participate in an exchange when they witnessed that a conspecific had obtained a more attractive reward for equal effort. Is the capuchin behavior phylogenetically related to the human virtue of justice? This seems unlikely, because similar behavioral patterns have not been observed in other primates, including apes, phylogenetically closer to humans. Cannibalism is practiced by chimps, as well as by human cultures of the past. Do we have a phylogenetically acquired predisposition to cannibalism as a morally acceptable behavior? This seems unlikely. The interpretation of the capuchin monkeys’ behavior as an incipient sense of justice (26) has been challenged by other investigators. Silberberg and collaborators (28) have shown that the capuchins rejected a reward whenever a more desirable reward was visible to them, not just whenever the more desirable reward was offered to other individuals. Schiff and de Waal (29) observed also that chimpanzees rejected a reward when they observed another chimpanzee obtaining a more attractive reward for equal exchange with the human experimenter, although the tolerance for inequity increased with the social closeness among the chimpanzees. However, this interpretation of inequality rejection has also been challenged in the case of the chimpanzees. The chimpanzees’ rejection may be attributed to a breach in their expectations, rather than to a sense of equality (30, 31). Moral codes arise in human societies by cultural evolution. Those moral codes tend to be widespread that lead to successful societies. Since time immemorial, human societies have experimented with moral systems. Some have succeeded and spread widely throughout humankind, like the Ten Commandments, although other moral systems persist in different human societies. Many moral systems of the past have surely become extinct because they were replaced or because the societies that held them became extinct. The moral systems that currently exist in humankind are those that have been favored by cultural evolution. They were propagated within particular societies for reasons that might be difficult to fathom but that surely must have included the perception by individuals that a particular moral system was beneficial for them, at least to the extent that it was beneficial for their society by promoting social stability and success (25, 32). Cultures, of course, do not evolve as completely differentiated units. Rather, cultures often incorporate elements from other cultures. “Far from being self-preserving monoliths, cultures are porous and constantly in flux. Language … is a clear example” (ref. 4, p. 66). The norms of morality, as they exist in any particular culture, are felt to be universal within that culture. Yet, similarly as other elements of culture, they are continuously evolving, often within a single generation. As Steven Pinker has pointed out, western societies have recently experienced the moralization and amoralization of diverse behaviors. Thus, “smoking has become moralized … now treated as immoral … At the same time many behaviors have become amoralized, switched from moral failings to lifestyle choices. They include divorce, illegitimacy, working mothers, marijuana use and homosexuality” (ref. 2, p. 34). Acceptance by individuals or groups of particular sets of moral norms is often reinforced by civil authority (e.g., those who kill or commit adultery will be punished) and by religious beliefs (God is watching, and you'll go to hell if you misbehave). But it is worth noticing that the legal and political systems that govern human societies, as well as the belief systems held by religion, are themselves outcomes of cultural evolution, as it has eventuated over human history, particularly over the last few millennia (33).

### Gr Transition: A2 “Wars”

#### if we win the transition works it saps the motivation for wars because a global consciousness shift towards sustainability occurs

#### recent studies disprove diversionary theory

**Tir 10** [Jaroslav Tir - Ph.D. in Political Science, University of Illinois at Urbana-Champaign and is an Associate Professor in the Department of International Affairs at the University of Georgia, “Territorial Diversion: Diversionary Theory of War and Territorial Conflict”, The Journal of Politics, 2010, Volume 72: 413-425), Ofir]

Empirical support for the economic growth rate is much weaker. The finding that poor economic performance is associated with a higher likelihood of territorial conflict initiation is significant only in Models 3–4.14 The weak results are not altogether surprising given the findings from prior literature. In accordance with the insignificant relationships of Models 1–2 and 5–6, Ostrom and Job (1986), for example, note that the likelihood that a U.S. President will use force is uncertain, as the bad economy might create incentives both to divert the public’s attention with a foreign adventure and to focus on solving the economic problem, thus reducing the inclination to act abroad. Similarly, Fordham (1998a, 1998b), DeRouen (1995), and Gowa (1998) find no relationbetween a poor economy and U.S. use of force. Furthermore, Leeds and Davis (1997) conclude that the conflict-initiating behavior of 18 industrialized democracies is unrelated to economic conditions as do Pickering and Kisangani (2005) and Russett and Oneal (2001) in global studies. In contrast and more in line with my findings of a significant relationship (in Models 3–4), Hess and Orphanides (1995), for example, argue that economic recessions are linked with forceful action by an incumbent U.S. president. Furthermore, Fordham’s (2002) revision of Gowa’s (1998) analysis shows some effect of a bad economy and DeRouen and Peake (2002) report that U.S. use of force diverts the public’s attention from a poor economy. Among cross-national studies, Oneal and Russett (1997) report that slow growth increases the incidence of militarized disputes, as does Russett (1990)—but only for the United States; slow growth does not affect the behavior of other countries. Kisangani and Pickering (2007) report some significant associations, but they are sensitive to model specification, while Tir and Jasinski (2008) find a clearer link between economic underperformance and increased attacks on domestic ethnic minorities. While none of these works has focused on territorial diversions, my own inconsistent findings for economic growth fit well with the mixed results reported in the literature.15 Hypothesis 1 thus receives strong support via the unpopularity variable but only weak support via the economic growth variable. These results suggest that embattled leaders are much more likely to respond with territorial diversions to direct signs of their unpopularity (e.g., strikes, protests, riots) than to general background conditions such as economic malaise. Presumably, protesters can be distracted via territorial diversions while fixing the economy would take a more concerted and prolonged policy effort. Bad economic conditions seem to motivate only the most serious, fatal territorial confrontations. This implies that leaders may be reserving the most high-profile and risky diversions for the times when they are the most desperate, that is when their power is threatened both by signs of discontent with their rule and by more systemic problems plaguing the country (i.e., an underperforming economy).

**China-US War--A2 “Miscalc” 2NC**

**High level dialogue and mutual interests deter miscalculation**

**Yang 11**—Minister of Foreign Affairs, People's Republic of China (Jiechi, 6 January 2011, A Conversation with Yang Jiechi, <http://www.cfr.org/publication/23777/conversation_with_yang_jiechi.html>)

We have good reason to believe that with the efforts of both sides, **President Hu's state visit this time will forcefully move forward the positive, cooperative and comprehensive China-U.S. relationship in the new era. It will take our practical cooperation to a new high and enhance the mutual understanding and friendship** between the two peoples. And it will demonstrate the will of China and the United States to act together for world peace, stability and development. Ladies and gentlemen, President Hu's upcoming visit to the United States will take place when the Obama administration concludes its second year in office. We commend the good progress the China-U.S. relations have made over the past two years. The China-U.S. relationship is an extremely important bilateral relationship in today's world. We believe that though China-U.S. relationship has seen some difficulties in the past two years, it has made important overall progress, particularly in the following areas. First, the exchanges and **communication between the two countries at the high level and various other levels have never been closer.** China-U.S. relations achieved a smooth transition shortly after President Obama took office. In the past 24 months, the two presidents have had seven successful meetings. I had the good fortune to be present at all the seven meetings. And I always came away with a deep impression of the sincerity of the leaders in their discussion about how to move forward the relationship, how to face the challenges and how to work for the common good of our two peoples and the people of the world. President Obama paid a state visit to China, and now President Hu will come to the United States for a state visit. Officials of the two countries at various levels have had frequent contacts in diverse forms. The two sides have established the China-U.S. Strategic and Economic Dialogues and the high-level consultation on people-to-people exchange. This time in Washington, we discussed when to have the third round of SED, Strategic and Economic Dialogues. I think it will happen sometime in mid-2011. Setting up unique and effective -- I mean,these **exchanges are setting up unique and effective platforms to enhance mutual trust and cooperation between China and the United States. Second, the desire and resolve of the two countries to strengthen their cooperation have never been stronger**. In April 2009, President Hu and President Obama reached an important agreement when they met in London that the two sides should work together to build a positive, cooperative and comprehensive China-U.S. relationship for the 21st century. This has charted the course for the growth of China-U.S. relations in the new era. President Hu emphasizes on many occasions that a sound China-U.S. relationship is in the fundamental interests of the two countries and serves peace, stability and prosperity in the Asia-Pacific region and the world at large. He stressed that **the Chinese government places high importance on its relations with the United States it and will work to promote cooperation with the United States.** Likewise, President Obama attaches a great deal of importance to China-U.S. relations. The U.S. government has stressed its commitment to stronger cooperation between the two countries. Third, the Chinese and American interests have converged as never before. Today, we have tackled the international financial crisis, pushed forward the reform of global economic governance and played an important role in spurring world economic recovery. The China-U.S. business ties have been taken to a new level. Two-way trade is expected to top $380 billion U.S. dollars in 2010. China has been the fastest-growing major export market of the United States for nine consecutive years. Investment by Chinese enterprises in the United States has rapidly increased. By the end of November 2010, Chinese businesses had made over 4.4 billion U.S. dollars of non-financial direct investment in the United States. All this has contributed to the economic recovery and the protection of jobs in the United States. Our bilateral exchanges and cooperation in a wide range of areas, including energy and the environment, have been growing in breadth and depth. Fourth, the two peoples have never been engaged in China-U.S. relations in such a broad and in-depth manner. Today, around 120,000 Chinese students are studying in the United States and more than 20,000 American students are studying in China. According to Chinese statistics, over 3 million tourists visit each others' countries every year and 110 plus passenger flights fly between the two countries every week. China and the United States have forged 36 pairs of friendship, province-state and 161 sister-city relationships. Such close interactions have built countless bridges of friendship and cooperation between the two countries. Fifth, the communication and coordination between China and the United States on major regional and international issues have never been better. The two countries have maintained effective coordination on regional hotspot issues, such as the situation on the Korean Peninsula, the Iranian nuclear issue and South Asia. And now during this visit of mine, we discussed these issues. We also discussed the situation in Sudan, which figures prominently in the coming weeks. Also, on global issues, including climate change, G-20, the U.N. reform and fighting transnational crimes, working together the two countries have played an important and positive role in upholding world peace and security and promoting global sustainable development. The China-U.S. cooperation has become more strategic in terms of substance and more important in terms of global impact. What is it that has brought China and the United States closer to each other in the course of cooperation in the past two years? I believe that it is our growing common interests. It is the growing sense of any important reality that China-U.S. relations in the 21st century should be anchored in joint efforts to seize common opportunities and address common challenges for the welfare of our two peoples and the people of the world. **With regard to issues in China-U.S. relations, whatever the differences, there is a basic consensus between China and the United States: namely, the China-U.S. relationship is far too important. The two countries have far more common interests than disagreements and cooperation is always the defining feature of this relationship.**

### MAD

**Nuclear weapons enhance deterrence—5 reasons.**

**(1) increase costs of aggression.**

**(2) costs induce caution.**

**(3) decrease need for territorial conflict.**

**(4) increases will of defenders.**

**(5) adds outcome certainty.**

Kenneth N. **Waltz**, Adjunct Professor, Columbia University, Professor Emeritus, UC-Berkeley, THE SPREAD OF NUCLEAR WEAPONS: A DEBATE RENEWED, with Scott D. Sagan, 20**03**, p. 6-9.

Weapons and strategies change the situation of states in ways that make them more or less secure. If weapons are not well suited for conquest, neighbors have more peace of mind. We should expect war to become less likely when weaponry is such as to make conquest more: difficult, to discourage preemptive and preventive war, and to make coercive threats less credible. Do nuclear weapons have these effects? Some answers can be found by considering how nuclear deterrence and nuclear defense improve the prospects for peace.

First, war can be fought in the face of deterrent threats, but the higher the stakes and the closer a country moves toward winning them, the more surely that country invites retaliation and risks its own destruction**. States are not likely to run major risks for minor gains**. War between nuclear states may escalate as the loser uses larger and larger warheads. Fearing that, **states will want to draw back. Not escalation but de-escalation becomes likely. War remains possible, but victory in war is too dangerous to fight for. If states can score only small gains, because large ones risk retaliation, they have little incentive to fight.**

**Second, states act with less care if the expected costs of war are low and with more care if they are high**. In 1853 and 1854 Britain and France expected to win an easy victory if they went to war against Russia. Prestige abroad and political popularity at home would be gained, if not much else. The vagueness of their expectations was matched by the carelessness of their actions. In blundering into the Crimean War, they acted hastily on scant information, pandered to their people's frenzy for war, showed more concern for an ally's whim than for the adversary's situation, failed to specify the changes in behavior that threats were supposed to bring, and inclined toward testing strength first and bargaining second. In sharp contrast, **the presence of nuclear weapons makes states exceedingly cautious**. Think of Kennedy and Khrushchev in the Cuban missile crisis. Why fight if you can't win much and might lose everything?

**Third,** the deterrent deployment of nuclear weapons contributes more to a country's security than does conquest of territory**. A country with a deterrent strategy does not need territory as much as a country relying on conventional defense. A deterrent strategy makes it unnecessary for a country to fight for the sake of increasing its security, and thus removes a major cause of war.**

**Fourth, deterrent effect depends both on capabilities and on the will to use them. The will of the attacked, striving to preserve its own territory, can be presumed to be stronger than the will of the attacker, striving to annex someone else's territory. Knowing this, the would-be attacker is further inhibited. Fifth, certainty about the relative strength of adversaries also makes war less likely.** From the late nineteenth century onward, the speed of technological innovation increased the difficulty of estimating relative strengths and predicting the course of campaigns. Since World War II, technological advance has been even faste~, but short of a ballistic missile defense breakthrough, this has not mattered. It did not disturb the American-Soviet military equilibrium, because one side's missiles were not made obsolete by improvements in the other side's missiles. In 1906, the British Dreadnought, with the greater range and fire power of its guns, made older battleships obsolete. This does not happen to missiles. As Bernard Brodie put it, "Weapons that do not have to fight their like do not become useless because of the advent of newer and superior types." They may have to survive their like, but that is a much simpler problem to solve.

Many wars might have been avoided had their outcomes been foreseen. "To be sure," Georg Simmel wrote, "the most effective presuppositioh for preventing struggle, the exact knowledge of the comparative strength of the two parties, is very often only to be obtained by the actual fighting out of the conflict." Miscalculation causes wars. One side expects victory at an affordable price, while the other side hopes to avoid defeat. Here the differences between conventional and nuclear worlds are fundamental. In the former, states are too often tempted to act on advantages that are wishfully discerned and narrowly calculated. In 1914, neither Germany nor France tried very hard to avoid a general war. Both hoped for victory even though they believed the opposing coalitions to be quite evenly matched. In 1941, Japan, in attacking the United States, could hope for victory only if a series of events that were possible but unlikely took place.

Japan hoped to grab resources sufficient for continuing its war against China and then to dig in to defend a limited perimeter. Meanwhile, the United States and Britain would have to deal with Germany, supposedly having defeated the Soviet Union and therefore reigning supreme in Europe. Japan could then hope to fight a defensive war until America, her purpose weakened, became willing to make a compromise peace in Asia.

Countries more readily run the risk of war when defeat, if it comes, is distant and is expected to bring only limited damage. Given such expectations, leaders do not have to be crazy to sound the trumpet and urge their people to be bold and courageous in the pursuit of victory. The outcome of battIes and the course of campaigns are hard to foresee because so many things affect them. Predicting the result of conventional wars has proved difficult.

Uncertainty about outcomes does not work decisively against the fighting of wars in conventional worlds. Countries armed with conventional weapons go to war knowing that even in defeat their suffering will be limited. Calculations about nuclear war are made differently. **A nuclear world calls for a different kind of reasoning. If countries armed with nuclear weapons go to war with each other, they do so knowing that their suffering may be unlimited.** Of course, it also may not be, but that is not the kind of uncertainty that encourages anyone to use force. In a conventional world, one is uncertain about winning or losing. In a nuclear world, one is uncertain about surviving or being annihilated. If force is used, and not kept within limits, catastrophe will result. That prediction is easy to make because it does not require close estimates of opposing forces. The number of one's cities that can be severely damaged is equal to the number of strategic warheads an adversary can deliver. Variations of number mean little within wide ranges. The expected effect of the deterrent achieves an easy clarity because wide margins of error in estimates of the damage one may suffer do not matter. Do we expect to lose one city or two, two cities or ten? When these are the pertinent questions, we stop thinking about running risks and start worrying about how to avoid them. In a conventional world, deterrent threats are ineffective because the damage threatened is distant, limited, and problematic. **Nuclear weapons make military miscalculation, difficult and politically pertinent prediction easy.**