### AT: Economics of Speed 2AC

#### Our framework is that the alternative should be judged on the efficacy of its response to existing institutional practices

#### This means that the neg should have to answer the following questions – what is the alternative institution/social order that should be put into place? Is that feasible? What would have to be done to create that change and what would be the consequences of those actions?

#### Absent these questions shifts in knowledge production are useless – governments’ obey institutional logics that exist independently of individuals and constrain decisionmaking

Wight – Professor of IR @ University of Sydney – 6

(Colin, Agents, Structures and International Relations: Politics as Ontology, pgs. 48-50

One important aspect of this relational ontology is that these relations constitute our identity as social actors. According to this relational model of societies, one is what one is, by virtue of the relations within which one is embedded. A worker is only a worker by virtue of his/her relationship to his/her employer and vice versa. ‘Our social being is constituted by relations and our social acts presuppose them.’ At any particular moment in time an individual may be implicated in all manner of relations, each exerting its own peculiar causal effects. This ‘lattice-work’ of relations constitutes the structure of particular societies and endures despite changes in the individuals occupying them. Thus, the relations, the structures, are ontologically distinct from the individuals who enter into them. At a minimum, the social sciences are concerned with two distinct, although mutually interdependent, strata. There is an ontological difference between people and structures: ‘people are not relations, societies are not conscious agents’. Any attempt to explain one in terms of the other should be rejected. If there is an ontological difference between society and people, however, we need to elaborate on the relationship between them. Bhaskar argues that we need a system of mediating concepts, encompassing both aspects of the duality of praxis into which active subjects must fit in order to reproduce it: that is, a system of concepts designating the ‘point of contact’ between human agency and social structures. This is known as a ‘positioned practice’ system. In many respects, the idea of ‘positioned practice’ is very similar to Pierre Bourdieu’s notion of *habitus*. Bourdieu is primarily concerned with what individuals do in their daily lives. He is keen to refute the idea that social activity can be understood solely in terms of individual decision-making, or as determined by surpa-individual objective structures. Bourdieu’s notion of the *habitus* can be viewed as a bridge-building exercise across the explanatory gap between two extremes. Importantly, the notion of a habitus can only be understood in relation to the concept of a ‘social field’. According to Bourdieu, a social field is ‘a network, or a configuration, of objective relations between positions objectively defined’. A social field, then, refers to a structured system of social positions occupied by individuals and/or institutions – the nature of which defines the situation for their occupants. This is a social field whose form is constituted in terms of the relations which define it as a field of a certain type. A *habitus* (positioned practices) is a mediating link between individuals’ subjective worlds and the socio-cultural world into which they are born and which they share with others. The power of the habitus derives from the thoughtlessness of habit and habituation, rather than consciously learned rules. The habitus is imprinted and encoded in a socializing process that commences during early childhood. It is inculcated more by experience than by explicit teaching. Socially competent performances are produced as a matter of routine, without explicit reference to a body of codified knowledge, and without the actors necessarily knowing what they are doing (in the sense of being able adequately to explain what they are doing). As such, the *habitus* can be seen as the site of ‘internalization of reality and the externalization of internality.’ Thus social practices are produced in, and by, the encounter between: (1) the *habitus* and its dispositions; (2) the constraints and demands of the socio-cultural field to which the habitus is appropriate or within; and (3) the dispositions of the individual agents located within both the socio-cultural field and the *habitus*. When placed within Bhaskar’s stratified complex social ontology the model we have is as depicted in Figure 1. The explanation of practices will require all three levels. Society, as field of relations, exists prior to, and is independent of, individual and collective understandings at any particular moment in time; that is, social action requires the conditions for action. Likewise, given that behavior is seemingly recurrent, patterned, ordered, institutionalised, and displays a degree of stability over time, there must be sets of relations and rules that govern it. Contrary to individualist theory, these relations, rules and roles are not dependent upon either knowledge of them by particular individuals, or the existence of actions by particular individuals; that is, their explanation cannot be reduced to consciousness or to the attributes of individuals. These emergent social forms must possess emergent powers. This leads on to arguments for the reality of society based on a causal criterion. Society, as opposed to the individuals that constitute it, is, as Foucault has put it, ‘a complex and independent reality that has its own laws and mechanisms of reaction, its regulations as well as its possibility of disturbance. This new reality is society…It becomes necessary to reflect upon it, upon its specific characteristics, its constants and its variables’.

#### The pragmatic process of power generation is key – effective transition away from fossil fuels requires discussion of practical alternatives and willingness to support corporate production of energy

Monbiot 11

(George, columnist for The Guardian, has held visiting fellowships or professorships at the universities of Oxford (environmental policy), Bristol (philosophy), Keele (politics), Oxford Brookes (planning), and East London (environmental science), March 31, “The double standards of green anti-nuclear opponents", http://www.guardian.co.uk/environment/georgemonbiot/2011/mar/31/double-standards-nuclear)

Like most environmentalists, I want renewables to replace fossil fuel, but I realise we make the task even harder if they are also to replace nuclear power. I'm not saying, as many have claimed, that we should drop our concerns about economic growth, consumption, energy efficiency and the conservation of resources. Far from it. What I'm talking about is how we generate the electricity we will need. Given that, like most greens, I would like current transport and heating fuels to be replaced with low-carbon electricity, it's impossible to see, even with maximum possible energy savings, how the electricity supply can do anything other than grow. All the quantified studies I have seen, including those produced by environmental organisations, support this expectation. Ducking the challenge of how it should be produced is not an option. Nor have I changed my politics (and nor for that matter am I an undercover cop, a mass murderer, a eugenicist or, as one marvellous email suggested, "the consort of the devil"). In fact it's surprising how little the politics of energy supply change with the mass-generation technology we choose. Whether or not there is a nuclear component, we are talking about large corporations building infrastructure, generating electricity and feeding it into the grid. My suspicion of big business and my belief that it needs to be held to account remain unchanged.

#### Economics of speed is key to neolib – maintains tek innovation and creates efficiency

Giaretta ‘5

(Elena, Associate Professor in Economics @ University of Verona, “Ethical Product Innovation: In Praise of Slowness”, TQM Magazine, Vol. 17 No. 2, 2005)

There are after all many advantages associated with such company conduct, both from the point of view of the business and that of the customer. From the company’s viewpoint there may be significant improvements in terms of efficiency (less design time and costs), as well as efficacy (in terms of the ability to reach the customer in the planned time scale and before competitors). Most of the systems worked out to reduce the times for any determined action in fact move in this direction: take for example the automatic teller machine, the highway Telepass, the locomotives placed at each end of the train, the doubling of a railway line and the reduction of “dead time” in the factory. The importance of the competitive advantage thusgained[30] has led some writers to talk of the “economies of speed”[31], i.e. the advantages deriving from the ability to make innovative choices and adopt new behaviour faster than the competition and thus determine the speed at which the continuous innovation is running. From the customer’s perspective, continuous product innovation may also result in equally significant benefits insofar as it tends to lead to the better satisfaction of his ever-higher expectations. This would seem to be all the more likely the more involved the customer is in the product planning stage, favouring the incorporation of his own knowledge into the products.

#### We resolve the problems with the economics of speed – natural gas volatility is a result of attempting short term gains to the expense of long term viability – shiny new tech like fracking means producers aren’t considering broader effects of reliance on natural gas – the aff overcomes this with secure long term tech

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#### No transition – institutional complexity and impersonal nature of systems cause cultural assimilation – only growth can solve social conflict

Barnhizer, 6

David, Prof of Law, Cleveland State U, ‘Waking from Sustainability's "Impossible Dream”,’ Geo Int’l Envtl L Rev, pg. l/n

Devotees of sustainability pin their hopes on an awakening by an enlightened populace that will rise up and insist that business and government behave in ways that reflect the idea that "[a] sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support." [n81](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n81) This awakening is not going to happen. There will never be a populist revolution in the way humans value the environment, social justice, and other matters of moral consequence. We frequently "talk the talk," but rarely "walk the walk." [n82](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n82) This discrepancy is partly an individual failure, but it is even more a result of the powerful forces that operate within our culture. Residents of Western cultures are shaped by the system in which they live. They will never possess either the clarity of agenda or the political will essential to a coherent and coordinated shift in behavior due to a combination of ignorance, greed, sloth, and inundation by political and consumerist propaganda. This combination means there will be no values shift welling up from the people and demanding the transformation of our systems of production and resource use. Paul Tournier captured the essence of the cultural forces when he observed: [People] have become merely cogs in the machine of production, tools, functions. All that matters is what they do, not what they think or feel. . . . [T]heir thoughts and feelings are . . . molded by propaganda, press, cinema and radio. They read the same newspaper each day, hear the same slogans, see the same advertisements. [n83](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n83)Feeling helpless in the face of inordinate complexity and vast impersonal forces causes us to flee from our personal responsibility and become absorbed into the systems of institutions. The price of the required allegiance includes accepting (or appearing to accept) the institution's values as our own. We become a contributing part of the same system that oppresses us and steals our humanity and idealism. This assimilation allows us to avoid the harshest application of the system's power while reaping the rewards of collaboration. We become, in the  [\*629]  words of Pink Floyd, "just another brick in the wall." [n84](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n84) When we attempt to talk about the need to do such things as internalize costs that are now allowed to remain external to the entities generating the harms and shifting to a system of low or no impact on the Earth's natural systems, we are talking about fundamental, non-voluntary changes in entitlements and lifestyle. Even Alan Greenspan drew severe criticism when he recently suggested that social security benefits should be reduced. [n85](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n85) Jacques Chirac's party in France has seen its public support plummet due to efforts to reduce social spending. [n86](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n86) Germans have taken to the streets in the hundreds of thousands to protest their leaders' efforts to develop plans to gain control of the German welfare state. [n87](http://www.lexisnexis.com.www2.lib.ku.edu:2048/us/lnacademic/frame.do?tokenKey=rsh-20.714257.8466500462&target=results_DocumentContent&reloadEntirePage=true&rand=1231738964826&returnToKey=20_T5507732879&parent=docview#n87) It is impossible to generate the political will that would be required to change the system we have constructed into one that satisfies the demands of sustainability. This is not surprising because the clear message is that we need economic growth. The situation we face is akin to Bangladesh where I was part of a group urging the country's Planning Minister to take potential environmental harms and ecosystem impacts into greater account in his planning. He responded that the ideas were admirable in theory but that he had to worry about generating jobs and food for 160 million people. He indicated that while he respected the arguments for sustainability his more immediate needs were to ensure jobs and food for Bangladeshis. In a similar context, while teaching international environmental law in St. Petersburg, Russia, my discussion with Russian academic colleagues related to water pollution in the area, radioactive materials dumping, and the raw air pollution from Lada cars running on 76 octane gasoline and other uncontrolled emitters of air pollution that fouled the air of this most beautiful city. At the end of the course one of my Russian colleagues said, "I found it all fascinating. But you know we have other problems with which we must deal before we can begin to worry about the environment. Perhaps in fifteen years or so we will be ready." I found myself unable to disagree with the speakers in either Bangladesh or Russia. Return to the idea of our inability to generate the political will that would be required to achieve fundamental change if we decided that the Agenda 21 type of sustainable development ideas were good social and economic strategies. Even if  [\*630]  they were desirable, they are "impossible dreams" because the people and institutions who set policy and decide on actions in the business and governmental arenas will never accept them as guides for behavior or as requirements for decisionmaking. This impossibility exists because we are not free and independent individuals but creatures of habit, dominated by the culture in which we exist. We desire to behave according to the dictates of the powerful systems that govern our lives and culture.

#### **Even if they win discourse first, you should evaluate impacts within the framework of neoliberal knowledge production – market relations are *stable* social constructions that people *assume to be true* – only using them as a starting point is politically productive**

Jones & Spicer ‘9

(Campbell, Senior Lecturer in the School of Management at U of Leicester, Andre, Associate Professor in the Dept of Industrial Relations @ Warwick Business School U of Warwick, Unmasking the Entrepreneur, pgs. 22-23)

The third strand in our proposed critical theory of entrepreneurship involves questions of the 'extra-discursive' factors that structure the context in which these discourses appear. The result of privileging language often results in losing sight of political and economic relations, and for this reason, a turn to language and a concomitant disavowal of things extra-discursive have been roundly criticised (Ackroyd and Fleetwood, 2000; Armstrong, 2001; Reed, 1998,2000,2009). An analysis of discourse cannot alone account for the enduring social structures such as the state or capitalism. Mike Reed has argued that a discursive approach to power relations effectively blinds critical theorists to issues of social structures: Foucauldian discourse analysis is largely restricted to a tactical and localised view of power, as constituted and expressed through situational-specific 'negotiated orders', which seriously underestimates the structural reality of more permanent and hierarchal power relations. It finds it difficult, if not impossible, to deal with institutionalised stabilities and continuities in power relations because it cannot get at the higher levels of social organisation in which micro-level processes and practices are embedded. (Reed, 2000: 526-7) These institutional stabilities may include market relations, the power of the state, relations like colonialism, kinship and patriarchy. These are the 'generative properties' that Reed (1998: 210) understands as 'mak(ing) social practices and forms - such as discursive formations - what they are and equip(ing) them with what they do'. Equally Thompson and Ackroyd also argue that in discourse analysis 'workers are not disciplined by the market, or sanctions actually or potentially invoked by capital, but their own subjectivities' (1995: 627). The inability to examine structures such as capitalism means that some basic forms of power are thus uninvestigated. Focusing solely on entrepreneurship discourse within organisations and the workplace would lead to a situation where pertinent relations that do not enter into discourse are taken to not exist. Such oversights in discursive analyses are that often structural relations such as class and the state have become so reified in social and mental worlds that they disappear. An ironic outcome indeed. Even when this structural context is considered, it is often examined in broad, oversimplified, and underspecified manners. This attention to social structure can be an important part of developing a critical theory of entrepreneurship, as we remember that the existing structural arrangements at any point are not inevitable, but can be subjected to criticism and change. In order to deal with these problems, we need to revive the concept of social structure. Thus we are arguing that 'there exist in the social world itself and not only within symbolic systems (language, myths, etc.) objective structures independent of the consciousness and will of agents, which are capable of guiding and constraining their practices or their representations' (Bourdieu, 1990: 122). Objective still means socially constructed, but social constructions that have become solidified as structures external to individual subjects. Examples of these structures may include basic 'organising principals' which are relatively stable and spatially and historically situated such as capitalism, kinship, patriarchy and the state. Some entrepreneurship researchers, particularly those drawing on sociology and political science, have shown the importance of social structure for understanding entrepreneurship (see for example Swedberg, 2000).

#### Economic rationality is ethical and solves war – self-interest motivates individuals to sacrifice some autonomy to produce security and protect the rights of others

Aasland ‘9

(Dag, Prof. of Economics @ U of Agder, Norway, Ethics and Economy: After Levinas, pgs. 65-66)

Business ethics, in the sense of ethics *for* business, illustrates this: its perspective is that of an ‘enlightened self-interest’ where the constraints that are put on the individual, thanks to the ability to see the unfortunate consequences for oneself, postpone the ‘war’, in a direct or metaphoric sense of the word (*ibid.*: 70-71). This enlightened self-interest forms the base not only of the market economy, but also of a social organization and manifestation of human rights, and even of some ethical theories. It is a calculated and voluntary renunciation of one’s own freedom in order to obtain in return security and other common goals (*ibid.*: 72). The fact that economic, political and legal theories appeal to enlightened self-interest does not imply, however, that we should discard them. Nor should we reject proclamations of human rights, legal constraints of individual freedom and, for that matter, business ethics, even if they are based on an enlightened self-interest. It is rather the opposite: such institutions and knowledge are indispensable because the primary quality of the enlightened self-interest is that it restricts egocentricity. Our *practical reason* (which was Kant’s words for the reason that governs our acts, where the moral law is embedded as a principle) includes the knowledge that it can be rational to lay certain restrictions on individual freedom. In this way practical reason may postpone (for an indefinite time) violence and murder among people. This has primarily been the raison-d’être of politics and the state, but it is today taken over more and more by corporate organizations, as expressed in the new term for business ethics, as *corporate social responsibility* and *corporate citizenship* (see chapter 2). Thanks to this ‘postponement of violence’ provided by politics and economic rationality, people may unfold their freedom within the laws and regulations set up by society (Burggraeve, 2003: 77).

#### **Permutation do both**

#### Neolib solves war and collapse causes it – historical evidence and studies prove

Tures ‘3 – Associate Professor of Political Science @ LaGrange College

John A. Tures, Associate Professor of Political Science at LaGrange College, 2003, “ECONOMIC FREEDOM AND CONFLICT REDUCTION: EVIDENCE FROM THE 1970S, 1980S, AND 1990S”, Cato Journal, Vol. 22, No. 3. http://www.cato.org/pubs/journal/cj22n3/cj22n3-9.pdf

The last three decades have witnessed an unprecedented expansion of market-based reforms and the profusion of economic freedom in the international system. This shift in economic policy has sparked a debate about whether free markets are superior to state controls. Numerous studies have compared the neoliberal and statist policies on issues of production capacity, economic growth, commercial vol- umes, and egalitarianism. An overlooked research agenda, however, is the relationship between levels of economic freedom and violence within countries. Proponents of the statist approach might note that a strong gov- ernment can bend the market to its will, directing activity toward policies necessary to achieve greater levels of gross domestic product and growth. By extracting more resources for the economy, a pow- erful state can redistribute benefits to keep the populace happy. Higher taxes can also pay for an army and police force that intimidate people. Such governments range from command economies of totali- tarian systems to autocratic dictators and military juntas. Other eco- nomically unfree systems include some of the authoritarian “Asian tigers.” A combination of historical evidence, modern theorists, and statis- tical findings, however, has indicated that a reduced role for the state in regulating economic transactions is associated with a decrease in internal conflicts. Countries where the government dominates the commercial realm experience an increase in the level of domestic violence. Scholars have traced the history of revolutions to explain the relationship between statism and internal upheavals. Contemporary authors also posit a relationship between economic liberty and peace. Statistical tests show a strong connection between economic freedom and conflict reduction during the past three decades.

### AT: CP

#### Perm – do both

#### No solvency – our evidence says conditions mean natural gas prices should rise – pipeline weakness, increased demand – CP means no one produces natural gas because input costs overwhelm costs to produce it

#### Doesn’t solve prolif – that’s obvious

#### Natural gas price volatility crushes the chemical industry

ACC, American Chemistry Council, 05

(THE IMPACTS OF HIGH ENERGY COSTS TO THE AMERICAN CONSUMER, www.gpo.gov/fdsys/pkg/CHRG-109hhrg21446/html/CHRG-109hhrg21446.htm)

The unbalanced and volatile U.S. natural gas market has had a severe impact on the chemical industry. Today, U.S. natural gas prices are the highest in the world--over $7 per million BTUs, versus $5.25 in Europe, $4.50 in China and Japan and $1.25 or less in the Middle East and Russia. The chemical industry is the backbone of our nation's manufacturing sector. It is the largest industrial user of natural gas. The chemical industry uses natural gas for heat and power, but also as a raw material, a key ingredient, used to make thousands of products that consumers use every day.

#### The chemical industry is key to solve sustainability problems – prevents extinction

Baum, Editor-in-chief of the American Chemical Society's Chemical and Engineering News, 99

(C&E News, “Millennium Special Report,” http://pubs.acs.org/hotartcl/cenear/991206/7749spintro2.html)

The pace of change in today's world is truly incomprehensible. Science is advancing on all fronts, particularly chemistry and biology working together as they never have before to understand life in general and human beings in particular at a breathtaking pace. Technology ranging from computers and the Internet to medical devices to genetic engineering to nanotechnology is transforming our world and our existence in it. It is, in fact, a fool's mission to predict where science and technology will take us in the coming decade, let alone the coming century. We can say with finality only this: We don't know. We do know, however, that we face enormous challenges, we 6 billion humans who now inhabit Earth. In its 1998 revision of world population estimates and projections,the United Nations anticipates a world population in 2050 of 7.3 billion to 10.7 billion, with a "medium-fertility projection," considered the most likely, indicating a world population of 8.9 billion people in 2050. According to the UN, fertility now stands at 2.7 births per woman, down from 5 births per woman in the early 1950s. And fertility rates are declining in all regions of the world. That's good news. But people are living a lot longer. That is certainly good news for the individuals who are living longer, but it also poses challenges for health care and social services the world over. The 1998 UN report estimates for the first time the number of octogenarians, nonagenarians, and centenarians living today and projected for 2050. The numbers are startling. In 1998, 66 million people were aged 80 or older, about one of every 100 persons. That number is expected to increase sixfold by 2050 to reach 370 million people, or one in every 24 persons. By 2050, more than 2.2 million people will be 100 years old or older! Here is the fundamental challenge we face: The world's growing and aging population must be fed and clothed and housed and transported in ways that do not perpetuate the environmental devastation wrought by the first waves of industrialization of the 19th and 20th centuries. As we increase our output of goods and services, as we increase our consumption of energy, as we meet the imperative of raising the standard of living for the poorest among us, we must learn to carry out our economic activities sustainably. There are optimists out there, C&EN readers among them, who believe that the history of civilization is a long string of technological triumphs of humans over the limits of nature. In this view, the idea of a "carrying capacity" for Earth—a limit to the number of humans Earth's resources can support—is a fiction because technological advances will continuously obviate previously perceived limits. This view has historical merit. Dire predictions made in the 1960s about the exhaustion of resources ranging from petroleum to chromium to fresh water by the end of the 1980s or 1990s have proven utterly wrong. While I do not count myself as one of the technological pessimists who see technology as a mixed blessing at best and an unmitigated evil at worst, I do not count myself among the technological optimists either. There are environmental challenges of transcendent complexity that I fear may overcome us and our Earth before technological progress can come to our rescue. Global climate change, the accelerating destruction of terrestrial and oceanic habitats, the catastrophic loss of species across the plant and animal kingdoms—these are problems that are not obviously amenable to straightforward technological solutions. But I know this, too: Science and technology have brought us to where we are, and only science and technology, coupled with innovative social and economic thinking, can take us to where we need to be in the coming millennium. Chemists, chemistry, and the chemical industry—what we at C&EN call the chemical enterprise—will play central roles in addressing these challenges. The first section of this Special Report is a series called ["Millennial Musings"](https://mail.kinkaid.org/Redirect/pubs.acs.org/hotartcl/cenear/991206/7749muse1.html) in which a wide variety of representatives from the chemical enterprise share their thoughts about the future of our science and industry. The five essays that follow explore the contributions the chemical enterprise is making right now to ensure that we will successfully meet the challenges of the 21st century. The essays do not attempt to predict the future. Taken as a whole, they do not pretend to be a comprehensive examination of the efforts of our science and our industry to tackle the challenges I've outlined above. Rather, they paint, in broad brush strokes, a portrait of scientists, engineers, and business managers struggling to make a vital contribution to humanity's future. manipulation and corporate control over food. The first essay, by Senior Editor Marc S. Reisch, is a case study of the [chemical industry's ongoing transformation to sustainable production.](https://mail.kinkaid.org/Redirect/pubs.acs.org/hotartcl/cenear/991206/7749sustain.html) Although it is not well known to the general public, the chemical industry is at the forefront of corporate efforts to reduce waste from production streams to zero. Industry giants DuPont and Dow Chemical are taking major strides worldwide to manufacture chemicals while minimizing the environmental "footprint" of their facilities.  This is an ethic that starts at the top of corporate structure. Indeed, Reisch quotes Dow President and Chief Executive Officer William S. Stavropolous: "We must integrate elements that historically have been seen as at odds with one another: the triple bottom line of sustainability—economic and social and environmental needs." DuPont Chairman and CEO Charles (Chad) O. Holliday envisions a future in which "biological processes use renewable resources as feedstocks, use solar energy to drive growth, absorb carbon dioxide from the atmosphere, use low-temperature and low-pressure processes, and produce waste that is less toxic." But sustainability is more than just a philosophy at these two chemical companies. Reisch describes ongoing Dow and DuPont initiatives that are making sustainability a reality at Dow facilities in Michigan and Germany and at DuPont's massive plant site near Richmond, Va.  Another manifestation of the chemical industry's evolution is its embrace of life sciences. Genetic engineering is a revolutionary technology. In the 1970s, research advances fundamentally shifted our perception of DNA. While it had always been clear that deoxyribonucleic acid was a chemical, it was not a chemical that could be manipulated like other chemicals—clipped precisely, altered, stitched back together again into a functioning molecule. Recombinant DNA techniques began the transformation of DNA into just such a chemical, and the reverberations of that change are likely to be felt well into the next century. Genetic engineering has entered the fabric of modern science and technology. It is one of the basic tools chemists and biologists use to understand life at the molecular level. It provides new avenues to pharmaceuticals and new approaches to treat disease. It expands enormously agronomists' ability to introduce traits into crops, a capability seized on by numerous chemical companies. There is no doubt that this powerful new tool will play a major role in [feeding the world's population](https://mail.kinkaid.org/Redirect/pubs.acs.org/hotartcl/cenear/991206/7749food.html) in the coming century, but its adoption has hit some bumps in the road. In the second essay, Editor-at-Large Michael Heylin examines how the promise of agricultural biotechnology has gotten tangled up in real public fear of genetic manipulation and corporate control over food.

#### Multiple conditional options bad – it’s a voter – rejecting the arg incentivizes abuse

#### First is skew – aff can’t read their best offense because the neg can just kick their argument and can cross-apply offense, kills fairness

#### Second is research – they can advocate contradictory positions, kills education and advocacy skills

#### One conditional advocacy solves their offense – we should get to advocate perms – only reciprocal option

### AT: Obama Good Elections (Harvard)

#### The plan won’t pass before the election --- the affirmative only has to defend the most realistic and likely means of passage. Forcing the affirmative to defend abnormal means undermines political decision making skills.

#### A. Congress is in recess now for campaign --- nothing will be done until after election

#### B. Promotes best reasoning skills --- the politics disad is good because it teaches an understanding of the political process and policy tradeoffs but their interpretation of fiat bastardizes this because it forces an illogical, abnormal means of passage.

#### C. Improves debate content --- causes the negative to dispute why the expansion of SMRs is bad or read other political arguments --- like a lame duck or Obama 2nd term disad.

#### Obama will lose --- no President has won when trailing at this point

Stoddard, 10/18 --- associate editor of The Hill (10/18/2012, A.B., “Obama spinning toward a loss,”

http://thehill.com/opinion/columnists/ab-stoddard/262925-obama-spinning-toward-a-loss)

President Obama is losing. So says the latest Gallup poll, and so do those swelling numbers in key states like Wisconsin, Florida, Virginia and Ohio.

Democrats say wait, he won the second debate. They are holding their breath, hoping polls next week will show that this week's debate brought the herky-jerk of the campaign back full swing, with Obama back to his September lead in the swing states and poised to win. But with two weeks to go, a sudden surge in voter support for a president as unpopular as this one, in an economy this weak, is simply hard to believe. Conservatives like Karl Rove note that this late in October, no candidate with support higher than 50 percent (see Mitt Romney: Gallup) has ever gone on to lose.

Perhaps Obama lost the presidency weeks ago, on Oct. 3, when he sleepwalked and scribbled through the first debate and helped make Romney a new candidate overnight. It was Obama's night to finish Romney off; behind in the polls, even Romney likely woke up that morning thinking it was over. But Obama underestimated the task, the challenger and the electorate — all in 90 minutes. So a win this week was critical but perhaps not decisive. There is no obvious reason for Obama's performance to reverse the course of the campaign and blunt Romney now. And though there is one final debate next week, a back-and-forth on national security and foreign policy isn't likely to make the sale for anyone who still cannot make up his or her mind.

Romney is arguing Obama has still failed to articulate a reason, plan or purpose for a second term. He is correct. But Obama has indeed, late in the game, come up with a more forceful defense of his first term, and an argument about the economy growing from the middle out instead of the top down.

In addition, Democrats finally did their research and came up with some embarrassing changes in policy positions by Romney to debut at the debates and are cutting new flip-flop ads around the clock. Stunned by the loss of female support the Romney debate surge has cost him, Obama is focusing intently on shoring up the votes of suburban women and giving them binders full of reasons not to buy what Romney is selling.

Romney too is running new ads about his abortion flexibility, his support for contraception and the job losses among women in the last four years. He has been fortunate that Obama's campaign and the Twitterverse have ignored his giddy prediction of Tuesday night that "We're going to have to have employers in the new economy, in the economy I'm going to bring to play, that are going to be so anxious to get good workers they're going to be anxious to hire women." A clunker, one could argue, even worse than his comment about the "binder full of women" he compiled to locate qualified women for his Cabinet as governor of Massachusetts.

Indeed, though President Obama was deemed the debate winner by numerous snap polls this week, the polls show just how firm Romney's support has grown. In every poll he beat Obama by a wide margin on who is stronger on the economy.

Obama can expect, even if he wins another debate on Oct. 22, that this will remain a tight race or that Romney will begin to break away at the end. Obama's September surge resulted from an increase in Democratic enthusiasm, which is waning. As Romney has hardened his support among Republicans, he is also winning over new voters, leaving Obama with the task of exciting his base of Latinos, women, African-Americans and young voters. Without enough of them he loses. With less than three weeks to go it's hard to see where he finds that excitement.

#### Energy decisions won’t swing votes

Freed & Fitzpatrick, October(Oct. 2012, Josh Freed and Ryan Fitzpatrick, “US Election Note: Energy Policy after 2012,” <http://www.chathamhouse.org/sites/default/files/public/Research/Americas/1012usen_energy.pdf>)

The growth in domestic shale oil and gas production seems inevitable. But the broader future of US energy faces much more uncertainty. There are enormous differences in how the two candidates would approach regulation of energy production and generation, climate change and America’s competition in the global clean energy race. Polling shows that these issues will have little impact on the decisions voters make.5 But they will have enormous implications for the price and source of the energy Americans consume, the success of America’s energy industries and the fate of international efforts to stem climate change.

#### Energy issues falling in importance to voters

Pew, 9/24 (Pew Research Center, 9/24/2012, “For Voters It's Still the Economy; Energy, Terrorism, Immigration Less Important Than in 2008,” <http://www.people-press.org/2012/09/24/for-voters-its-still-the-economy/>)

Energy Falls in Importance

Energy emerged as a major issue during the 2008 campaign. In August, as gas prices surged, 77% of voters said the issue of energy would be very important to their vote. Currently, just 55% view energy as very important.

Just 52% of Republican voters now say energy is very important, down from 74% four years ago when the phrase “drill baby drill” became a political slogan at the 2008 GOP convention. The declines have been comparable among independents (25 points) and Democrats (20 points).

#### Single event won’t swing the election

Feldmann, 10/3 (Linda, 10/3/2012, “Why Mitt Romney trails in polls, as presidential debates begin,” <http://www.csmonitor.com/USA/DC-Decoder/2012/1003/Why-Mitt-Romney-trails-in-polls-as-presidential-debates-begin-video>)

Fully two-thirds of voters know that it was Romney who made the statement, and among those voters, 55 percent reacted negatively, versus 23 percent who saw it positively, according to Pew. Most damaging to Romney is the reaction of independent voters. Some 55 percent of independents who are aware of Romney’s comment say they had a negative reaction to it, while only 18 percent viewed it positively.

But Gallup asked voters if the 47 percent comment has made them more or less likely to vote for Romney, and a plurality said it made no difference.

Indeed, analysts say it’s nearly impossible to isolate an individual event or comment as being decisive in turning a race.

“Voters are confronting a big wide Mississippi River of information flowing at them, and as a consequence it’s difficult to isolate the effect of any one thing,” says John Sides, an associate professor of political science at George Washington University in Washington. “That said, there’s no question it’s been several weeks of relatively bad news for the Romney campaign. It hasn’t enabled him to close the post-convention gap. If anything, that gap has grown.”

#### No link – Obama avoids crises

Rogers, 9/17 (Ed, 9/17/2012, “Obama's 21st-century Teflon is working,” <http://www.washingtonpost.com/blogs/the-insiders/post/obamas-21st-century-teflon-is-working/2012/09/17/82b05da8-00bf-11e2-bbf0-e33b4ee2f0e8_blog.html?wprss=rss_opinions> )

It is safe to say that America's outreach to the world under President Obama has been a complete failure. Does America enjoy more or less respect than it did four years ago? If you think more, please let me know where.

Last weekend was the end of Obama's foreign policy. Diplomats are being called in and troops are being sent out — at least to where our enemies will allow them. The likes of Sudan know they can refuse Obama's wish for more troops to protect our embassies. Obama will probably tell us the Sudanese promise to provide adequate protection for Americans was a hard-fought concession.

Anyway, for the first time since the 2012 campaign began, Obama might want to talk about the economy. The images of the fires burning and the angry crowds on the Arab streets all underscore the complete failure of Obama's foreign policy, reminding us of his naivete and the price we pay for his on-the-job-training. Remember, this is a man who thought he was worthy of the Nobel Peace Prize just for being who he was.

The planet would heal because of his desire for it to do so. His very presence meant tension in the Middle East would subside. And why not? He had some new ideas: Remember his instructions to his NASA administrator that there was no higher priority than to make Arabs feel better about themselves?

With the world mostly either disrespecting America or just sadly shaking its head and wondering where America has gone, perhaps the Obama campaign could use a few days of blaming George W. Bush for the Obama administration's economic failures.

Foreign policy can't win elections, but it can lose them. Obama is pushing his luck as it becomes more and more clear that he can't influence events that endanger America and American interests. Meanwhile, he has outsourced America's economic management to the Federal Reserve, an abdication of responsibility that will be the subject of books to come. By announcing another quantitative easing program, the Federal Reserve was irrefutably saying that Obama's policies are not working, that the economy is so weak it has to step in to do something to try and generate the jobs that Obama's policies haven't — and won't — deliver.

So as the campaign heads for the debates, voters must be asking themselves what a vote for Obama is really about. It's not about peace and prosperity. It's not about respect abroad and certainty at home. There is nothing about Obama's tenure in office that voters should want more of. So why is he winning? I'm not sure, but based on his record at home and the sorry state of affairs his foreign policy has produced, the fact that he isn't cratering suggests a 21st-century coat of Teflon that makes Reagan's legendary resilience look small-time.

[insert specific link defense]

#### Strong public support for federal nuclear power incentives – no effect from Fukushima

WNA 12

(September, World Nuclear Association, US Nuclear Power Policy, www.world-nuclear.org/info/inf41\_US\_nuclear\_power\_policy.html)

Public opinion regarding nuclear power has generally been fairly positive, and has grown more so as people have had to think about security of energy supplies. Different polls show continuing increase in public opinion favourable to nuclear power in the USA. More than three times as many strongly support nuclear energy than strongly oppose it. Two-thirds of self-described environmentalists favour it. A May 2008 survey (N=2925) by Zogby International showed 67% of Americans favoured building new nuclear power plants, with 46% registering strong support; 23% were opposed. Asked which kind of power plant they would prefer if it were sited in their community, 43% said nuclear, 26% gas, 8% coal. Men (60%) were more than twice as likely as women (28%) to be supportive of a nuclear power plant. A March 2010 Bisconti-GfK Roper survey showed that strong public support for nuclear energy was being sustained, with 74% in favour of it11. In particular, 87% think nuclear will be important in meeting electricity needs in the years ahead, 87% support licence renewal for nuclear plants, 84% believe utilities should prepare to build more nuclear plants, 72% supported an active federal role in encouraging investment in "energy technology that reduces greenhouse gases", 82% agree that US nuclear plants are safe and secure, 77% would support adding a new reactor at the nearest nuclear plant, and 70% say that USA should definitely build more plants in the future. Only 10% of people said they strongly opposed the use of nuclear energy. In relation to recycling used nuclear fuel, 79% supported this (contra past US policy), and the figure rose to 85% if "a panel of independent experts" recommended it. Although 59% were confident that used reactor fuel could be stored safely at nuclear power plant sites, 81% expressed a strong desire for the federal government to move used nuclear fuel to centralised, secure storage facilities away from the plant sites until a permanent disposal facility is ready. Half of those surveyed considered themselves to be environmentalists. A February 2011 Bisconti-GfK Roper survey showed similar figures, and that 89% of Americans agree that all low-carbon energy sources – including nuclear, hydro and renewable energy – should be taken advantage of to generate electricity while limiting greenhouse gas emissions. Just 10% disagreed. Also some 84% of respondents said that they associate nuclear energy "a lot" or "a little" with reliable electricity; 79% associate nuclear energy with affordable electricity; 79% associate nuclear energy with economic growth and job creation; and 77% associate nuclear energy and clean air. A more general March 2010 Gallup poll (N=1014) on energy showed 62% in favour of using nuclear power, including 28% strongly so, and 33% against, the most favourable figures since Gallup began polling the question in 1994. However, only 51% of Democrat voters were in favour12. An early March 2011 Gallup poll just before the Fukushima accident showed 57% in favour and 38% against, and in March 2012 (N=1024) still 57% in favour with 40% against (men: 72%-27%, women 42%-51%). Regarding plant safety, the polls showed consistent 56-58% positive views over 2009-12, but men-women split similar. A survey conducted in September 2011 by Bisconti Research Inc. with GfK Roper showed that although support for nuclear power decreased following the Fukushima accident and compared with a year earlier (a survey carried out in March 2010 by Bisconti Research found 74% of Americans favoured nuclear power), 62% of the 1000 adults surveyed in the latest poll were supportive of utilizing nuclear power while 35% expressed opposition. The survey found that 82% of Americans believed that lessons had been learned from Fukushima and 67% of respondents considered US nuclear power plants safe (the same level as reported one month before the nuclear accident in Japan occurred). Also 85% of said that an extension of commercial operation should be granted to those plants that comply with federal safety standards, and 59% believed more nuclear power plants should definitely be built in the future, while 75% contend that “Electric utilities should prepare now so that new nuclear power plants could be built if needed in the next decade.” Finally, further expansion of the site of the nearest already operating nuclear power plant is supported by 67% and opposed by 28%.

[insert specific impact answer ]

### AT: Israel Strikes Impact

#### Romney’s policy is the same as Obama on Iran

Armbruster, 9/14 (Ben, 9/14/2012, “Romney Aligns Himself With Obama On Key Aspect Of Iran Policy,” <http://thinkprogress.org/security/2012/09/14/849521/romney-iran-red-line-obama/>)

In an interview that aired on ABC’s Good Morning America on Friday, MItt Romney said that his “red line” on Iran — the point that would trigger a U.S. military response to Iran’s nuclear program — is the same as President Obama’s, despite a Romney adviser’s assertion that Iran represents “the sharpest foreign policy difference” between the two candidates.

After Romney told ABC’s George Stephanopoulos that his “red line” on Iran is that the Islamic Republic “may not have a nuclear weapon,” the host pointed out that his policy is the same as Obama’s. The GOP presidential nominee agreed:

STEPHANOPOULOS: President Obama said exactly the same thing. He said it’s unacceptable for Iran to have a nuclear weapon. So your red line is the same as his.

ROMNEY: Yeah, and I laid out what I would do to keep Iran from reaching that red line. [...]

STEPHANOPOULOS: But your red line going forward is the same?

ROMNEY: Yes. And recognize that when one says that it’s unacceptable to the United States of America that that means what it says. You’ll take any action necessary to prevent that development, which is Iran becoming nuclear.

Watch the clip:

Romney’s statement illustrates the confusion from Romney’s team on Iran, and indeed on the Romney camp’s wider foreign policy. (Romney’s foreign policy director would neither confirm nor deny that Romney is a neoconservative.) On one hand, the Romney campaign struggles to differentiate its Iran policy from President Obama’s, and on the other, his team sounds more like a neocon revival committee pushing for another war in the Middle East.

The New York Times noticed this contradiction as well, reporting in an article on Friday that a senior foreign policy adviser to Romney said the former Massachusetts governor “would not be content with an Iran one screwdriver’s turn away from a nuclear weapon.” But, the Times added, the adviser “stopped short of saying exactly where, in the development of nuclear capability, Mr. Romney would draw the line.”

President Obama has said that he won’t allow Iran to acquire a nuclear weapon. The Obama administration is aware, not only of the threat an Iranian nuclear weapon poses, but also the potential negative consequences of a military attack on Iran, such as those outlined in a new bipartisan expert report released yesterday. And that, coupled with U.N., U.S. and Israeli assessments that Iran has not yet decided on whether to build a nuclear weapon, leads the administration to pursue a diplomatic solution with Iran, a track the it deems the “best and most permanent way” to solve the nuclear crisis.

#### No significant foreign policy differences between Obama and Romney

Smith, 10/6 --- former editor of the (U.S.) Guardian Newsweekl (Jack A., “Obama and Romney: Similar Views on Foreign/Military Policy,” 10/6/2012 <http://www.foreignpolicyjournal.com/2012/10/06/obama-and-romney-similar-views-on-foreignmilitary-policy/>)

Despite the sharp charges and counter-charges about foreign/military and national security policy, there are no important differences on such matters between President Barack Obama and challenger Mitt Romney. The back and forth between the candidates on international issues is largely about appearance, not substance.

The Washington Post noted on Sept. 26 that the two candidates “made clear this week that they share an overriding belief — American political and economic values should triumph in the world.” Add to that uplifting phrase the implicit words “by any means necessary,” and you have the essence of Washington’s international endeavors.

There are significant differences within the GOP’s right wing factions — from neoconservatives and ultra nationalists to libertarians and traditional foreign policy pragmatic realists — that make it extremely difficult for the Republicans to articulate a comprehensive foreign/military policy. This is why Romney confines himself to criticizing Obama’s international record without elaborating on his own perspective, except to imply he would do everything better than the incumbent.

Only nuances divide the two ruling parties on the principal strategic international objectives that determine the development of policy. Washington’s main goals include:

• Retaining worldwide “leadership,” a euphemism for geopolitical hegemony.

• Maintaining the unparalleled military power required to crush any other country, using all means from drones to nuclear weapons. This is made clear in the incumbent administration’s 2010 Quadrennial Defense Review (QDR), the 2010 Nuclear Posture Review (NPR), and the January 2012 strategic defense guidance titled, “Sustaining U.S. Global Leadership: Priorities for 21st Century Defense.”

• Containing the rise of China’s power and influence, not only globally but within its own East Asian regional sphere of influence, where the U.S. still intends to reign supreme. Obama’s “pivot” to Asia is part of Washington’s encirclement of China militarily and politically through its alliances with key Asian-Pacific allies. In four years, according to the IMF, China’s economy will overtake that of the U.S. — and Washington intends to have its fleets, air bases, troops and treaties in place for the celebration.

• Exercising decisive authority over the entire resource-rich Middle East and adjacent North Africa. Only The Iranian and Syrian governments remain to be toppled. (Shia Iraq, too, if it gets too close to Iran.)

• Provoking regime change in Iran through crippling sanctions intended to wreck the country’s economy and, with Israel, threats of war. There is no proof Iran is constructing a nuclear weapon.

• Seeking regime change in Syria, Shia Iran’s (and Russia’s) principal Arab ally. Obama is giving political and material support to fractious rebel forces in the civil war who are also supported by Saudi Arabia, Qatar, and Turkey. The U.S. interest is in controlling the replacement regime.

• Weakening and isolating Russia as it develops closer economic and political ties to China, and particularly when it expresses opposition to certain of Washington’s less savory schemes, such as continuing to expand NATO, seeking to crush Iran and Syria, and erecting anti-missile systems in Europe. In 20 years, NATO has been extended from Europe to Central Asia, adjacent to China and former Soviet republics.

• Continuing the over 50-year Cold War economic embargo, sanctions and various acts of subversion against Cuba in hopes of destroying socialism in that Caribbean Island nation.

• Recovering at least enough hegemony throughout Latin America — nearly all of which the U.S. dominated until perhaps 15 years ago — to undermine or remove left wing governments in Venezuela, Bolivia and Ecuador.

• Significantly increasing U.S. military engagement in Africa.

Both the right/far right Republican Party and the center right Democratic Party agree on these goals, although their language to describe them is always decorated with inspiring rhetoric about the triumph of American political and economic values; about spreading democracy and good feeling; about protecting the American people from terrorism and danger.

Today’s foreign/military policy goals are contemporary adaptations of a consistent, bipartisan international perspective that began to take shape at the end of World War II in 1945. Since the implosion of the Soviet Union ended the 45-year Cold War two decades ago — leaving the U.S. and its imperialist ambitions as the single world superpower — Washington protects its role as “unipolar” hegemon like a hungry dog with a meaty bone.

The people of the United States have no influence over the fundamentals of Washington’s foreign/military objectives. Many Americans seem to have no idea about Washington’s actual goals. As far as a large number of voters are concerned the big foreign/military policy/national security issues in the election boil down to Iran’s dangerous nuclear weapon; the need to stand up for Israel; stopping China from “stealing” American jobs; and preventing a terrorist attack on America.

One reason is the ignorance of a large portion of voters about past and present history and foreign affairs. Another is that many people still entertain the deeply flawed myths about “American exceptionalism” and the “American Century.” Lastly, there’s round-the-clock government and mass media misinformation.

#### Bostrom reneged

Bostrom, Gannon Award for the Continued Pursuit of Human Achievement, ‘9 (Nick, “The Future of Humanity, New Waves in Philosophy of Technology” <http://www.nickbostrom.com/papers/future.pdf>)

Extinction risks constitute an especially severe subset of what could go badly wrong for humanity. There are many possible global catastrophes that would cause immense worldwide damage, maybe even the collapse of modern civilization, yet fall short of terminating the human species. An all-out nuclear war between Russia and the United States might be an example of a global catastrophe that would be unlikely to result in extinction. A terrible pandemic with high virulence and 100% mortality rate among infected individuals might be another example: if some groups of humans could successfully quarantine themselves before being exposed, human extinction could be avoided even if, say, 95% or more of the world's population succumbed. What distinguishes extinction and other existential catastrophes is that a comeback is impossible. A non-existential disaster causing the breakdown of global civilization is, from the perspective of humanity as a whole, a potentially recoverable setback: a giant massacre for man, a small misstep for mankind.

### AT: Space DA

#### This is so stupid – no evidence the government WOULD use these for space, just that they COULD – doesn’t rise to the level of an argument

#### Deterrence checks space weapon usage

**Shixiu, 2007**, Bao, senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA of China. He formerly served as director of the Institute. He recently was a visiting scholar at the Virginia Military Institute in the United States. His research focuses on China-U.S. relations in the field of comparative security strategies and the application of deterrence theory. “Deterrence Revisited: Outer Space\*,” pdf, KHaze

It is a well-known phenomenon that the use of nuclear weapons is considered taboo. Along with the doctrine of mutual assured destruction, the use of nuclear weapons in war is almost unimaginable. The utilitization of nuclear weapons is therefore almost entirely limited to a role of deterrence. What about the taboo of space weapons? More and more specialists are looking at the impact of space debris that results from the use of space weapons.10 Large amounts of space debris caused by space weapons will invariably threaten space assets of all space-faring countries, not just intended target countries. Any attack by one country against another using space weapons will result in many losers. With so much of commercial, scientific and military activity increasingly reliant on space, there exists a considerable and growing taboo against using space weapons in a situation of conflict. Thus, under the conditions of American strategic dominance in space, reliable deterrents in space will decrease the possibility of the United States attacking Chinese space assets. At a fundamental level, space weapons – like nuclear weapons – will not alter the essential nature of war. Throughout history, there has been much ink spilled over new weapons that have the unique power and ability to change the underlying quality of war. For example, military theorists once exaggerated the tank’s role in deciding the war’s outcome during World War I.11 The atom bomb itself is probably the most salient example, as many analysts and politicians described the weapon as the unique ultimate weapon.12 But this was a fundamental misunderstanding of war and its implements. Nuclear weapons crossed a threshold in terms of their immense capacity for destruction. But deterrence, mutual assured destruction and the nuclear taboo evolved to consign the use of nuclear weapons to a near impossibility, negating its utility as a tool of war-fighting. Weapons to change the nature of war have not emerged in the past and will not emerge in the future. As such, space weapons will not be the ultimate weapon nor will they be able to decide the outcome of war, even if they are used as a first strike.

#### Space misperceptions won’t escalate- empirics, communication, diplomacy

**Lambakis, 2001,** Steven, Hoover Institution, Stanford University. “Space Weapons: Refuting the Critics,” <http://www.hoover.org/publications/policy-review/article/6612>, KHaze

Those who believe we run extraordinary risks stemming from clouded perceptions and misunderstandings in an age of computerized space warfare might want to take a look at some real-world situations of high volatility in which potentially provocative actions took place. Take, for example, the tragedies involving the USS Stark and USS Vincennes. In May 1987, an Iraqi F-1 Mirage jet fighter attacked the Stark on patrol to protect neutral shipping in the Persian Gulf, killing 37 sailors. Iraq, a "near-ally" of the United States at the time, had never before attacked a U.S. ship. Analysts concluded that misperception and faulty assumptions led to Iraq’s errant attack. The memory of the USS Stark no doubt preoccupied the crew of the USS Vincennes, which little over a year later, in July 1988, was also on patrol in hostile Persian Gulf waters. The Vincennes crew was involved in a "half war" against Iran, and at the time was fending off surface attacks from small Iranian gunboats. Operating sophisticated technical systems under high stress and rules of engagement that allowed for anticipatory self-defense, the advanced Aegis cruiser fired anti-aircraft missiles at what it believed to be an Iranian military aircraft set on an attack course. The aircraft turned out to be a commercial Iran Air flight, and 290 people perished owing to mistakes in identification and communications. To these examples we may add a long list of tactical blunders growing out of ambiguous circumstances and faulty intelligence, including the U.S. bombing in 1999 of the Chinese Embassy in Belgrade during Kosovo operations. Yet though these tragic actions occurred in near-war or tinderbox situations, they did not escalate or exacerbate local instability. The world also survived U.S.-Soviet "near encounters" during the 1948 Berlin crisis, the 1961 Cuban missile crisis, and the 1967 and 1973 Arab-Israeli wars. Guarded diplomacy won the day in all cases. Why would disputes affecting space be any different? In other words, it is not at all self-evident that a sudden loss of a communications satellite, for example, would precipitate a wider-scale war or make warfare termination impossible. In the context of U.S.-Russian relations, communications systems to command authorities and forces are redundant. Urgent communications may be routed through land lines or the airwaves. Other means are also available to perform special reconnaissance missions for monitoring a crisis or compliance with an armistice. While improvements are needed, our ability to know what transpires in space is growing — so we are not always in the dark. The burden is on the critics, therefore, to present convincing analogical evidence to support the notion that, in wartime or peacetime, attempts by the United States to control space or exploit orbits for defensive or offensive purposes would increase significantly the chances for crisis instability or nuclear war. In Washington and other capitals, the historical pattern is to use every available means to clarify perceptions and to consider decisions that might lead to war or escalation with care, not dispatch.