# T

### Procurement T

#### 1. We meet- plan creates incentives and secures a market for nuclear energy

#### 2. We meet- paying them is the financial incentive

#### 3. Counter interpretation- financial incentives are disbursement of public funds or contingent commitments

Webb 93

(lecturer in the Faculty of Law at the University of Ottawa (Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993) Hein Online)

In this paper, "financial incentives" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired behaviour may vary with the type of incentive in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration.¶ By limiting the definition of financial incentives to initiatives where *public funds are either disbursed or contingently committed*, a large number of regulatory programs with incentive *effects* which exist, but in which no money is forthcoming,23 are excluded from direct examination in this paper. Such programs might be referred to as *indirect* incentives. Through elimination of indirect incentives from the scope of discussion, thedefinition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and *ad hoc* industry bailout initiatives because such programs are not designed primarily to *encourage* behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

#### Ground- it is grounded in the literature and is the only way to intrinsically keep military affs in the topic which are key to beat states counterplans, and it links much harder to disads

#### Predictability- our evidence has a definitive list and an intent to define, and is supported in the literature

#### Limits- only adds procurement affs to their list, but limits out all indirect incentive effects their allows

#### Education- key to talk about different actors use of energy and how energy’s connection to the military, and no aff makes sense where the government is the consumer

#### Reasonability key to prevent a race to the most limiting definition

# Case

## Barriers

#### Manufacturing can switch quickly

U.S. Department of Commerce International Trade Administration 11

(“The Commercial Outlook for¶ U.S. Small Modular Nuclear¶ Reactors” <http://www.trade.gov/publications/pdfs/the-commercial-outlook-for-us-small-modular-nuclear-reactors.pdf>, SEH)

A primary advantage of SMRs is in their production. Their small size means that they do not need ¶ the ultra-heavy forged components that currently ¶ can be made only by Japan Steel Works and Doosan Heavy Industries in South Korea.¶ 7¶ In most of ¶ the current U.S. SMR designs, the reactor pressure ¶ vessels and other large forgings could be supplied ¶ by domestic vendors, which would create U.S. ¶ jobs and potential exports of SMR components ¶ to international customers. In addition, most ¶ SMR designs allow for factory manufacturing, ¶ which could potentially provide opportunities for ¶ cost savings, for increased quality, and for more ¶ efficient production. Those attributes mean that ¶ SMRs could be a significant source of economic ¶ growth in the United States.

## Terrorism

### A2: No Dispersion

#### Terrorists could pull a bioterror attack off– remote control planes, hijacking

Condron and Leake ‘12

(STEPHANIE CONDRON and CHRISTOPHER LEAKE of Daily Mail. Christopher Leake has been defence and home affairs editor at Mail on Sunday, UK communications director at tesco plc, Industrial and Consumer Affairs Editor at The Mail on Sunday, the daily telegraph, industrial correspondent at the daily telegraph, London, industrial corrrespondent at express & star¶ Reporter and Deputy Editor at West Cheshire Newspapers. “Poison drones carrying biological weapon are new Olympic threat, warns Colonel in charge of keeping London calm” UPDATED: 18:23 EST, 5 May 2012 accessed online August 25, 2012 at http://www.dailymail.co.uk/news/article-2140173/Poison-drones-new-Olympic-threat-warns-Colonel-charge-keeping-London-calm.html)

A senior Army officer has warned that unmanned drones carrying deadly poison could be used in a devastating terrorist attack during the Olympic Games.¶ Lieutenant Colonel Brian Fahy delivered the grim warning at a meeting intended to allay the fears of residents worried about the Army’s plans to place missiles on the rooftops of flats.¶ He said it was ‘feasible’ that remote-controlled aircraft filled with poison and small enough to fit into a backpack could be used as a biological weapon in the capital.¶ § Marked 07:33 § He told The Mail on Sunday: ‘An Unmanned Aerial Vehicle (UAV) can be put in a backpack. They come in all sorts of sizes and it’s feasible they could be filled with something noxious and flown by remote-control.’¶ ¶ Now there's a block of flats you wouldn't break into! Surface-to-air weapons are put in place to form an Olympic ring of steel to protect the Games¶ The biggest ship in London! HMS Ocean heads up the Thames in show of strength before the Olympics (as Defence Secretary warns: 'We would shoot down a jet if necessary')¶ Lieut Col Fahy – the officer responsible for community relations during the Games – made his remarks on Friday in Leytonstone, East London, near one of six sites which could see the deployment of surface-toair missile batteries in order to shoot down aircraft attempting to infiltrate an Olympic ‘no fly’ zone.¶ Fears: An unmanned drone could be used by terrorists to deliver a biological weapon strike, a senior army officer warned¶ During the meeting at Buxton School, his team showed locals a ‘dummy’ missile battery and allowed children to play on the unarmed weapon.¶ Lieut Col Fahy declined to elaborate on what type of poison might be used during an aerial attack.¶ He said: ‘For the duration of the Olympics anyone flying into controlled airspace is to file their flight plan with the Civil Aviation Authority.¶ ‘The range of threats varies in size and capability. It could be a commercial airliner hijacked by somebody with malicious intentions or a protest group using a microlight to get their name in the papers.’¶ His poison warning came as it was revealed that SAS troops have had anthrax emergency training at the Government’s top-secret military research establishment at Porton Down, Wiltshire.¶ Sources say the elite soldiers wore biochemical protection suits, gloves and masks during exercises over the past few months to prepare for any attack using the deadly bacteria.¶ Such an incident could threaten the lives of thousands of people attending the Games this summer.¶ Lieut Col Fahy told The Mail on Sunday: ‘We have worked up a comprehensive plan to protect against the potential hijacking of a commercial airliner down to slow-moving microlights or radio-controlled planes.’ ¶ Battle stations: The army placed a surface-to-air missile on top the Fred Wigg tower block in Waltham Forest, est London as part of a series of security tests for the 2012 Olympics¶ Asked if they would fire a missile at a protester flying a microlight near the Olympic site, Lieut Col Fahy said: ‘We would not take it out. For something like that we would scramble helicopters to go and look at it.¶ ‘There will be an RAF sniper on board if there was serious evidence to suggest something like that represented a threat. That information gets passed on and it’s a political decision to engage.¶ ‘It’s the same politicians who will decide whether we fire surface-to-air missiles at a potential threat. It’s a decision that I’m quite happy not to make. It will weigh very heavily.’¶ Defence Secretary Philip Hammond has made it clear he is ready to give the order to shoot down any aircraft threatening the Olympics with a 9/11-style attack.

##  AT Lasers

#### Lasers haven’t been approved

Grossman, Global Security Newswire, 9-25-12

(Elaine, “U.S. Nuclear Agency OKs License for Laser Enrichment, Despite Worries,” http://www.nti.org/gsn/article/us-nuclear-agency-oks-license-laser-enrichment-despite-worries/, accessed 9-29-12)

Led by Chairwoman Allison Macfarlane, the NRC commissioners have not actually voted on whether to approve the GE-Hitachi license, according to McIntyre. Rather, the NRC spokesman said, “the commission was notified verbally that staff was prepared to issue the license, and since the commission did not direct otherwise, the staff proceeded.”

#### There’s no impact and the US isn’t key

Steve Packard 11, member of the James Randi educational foundation – contributor to the Bad Science Blog, “Laser Enrichment: No it doesn’t mean terrorists will have the bomb”, August 23, <http://beforeitsnews.com/environment/2011/08/laser-enrichment-no-it-doesnt-mean-terrorists-will-have-the-bomb-996015.html>

The very notion that there are some kind of special “risks” to building a laser enrichment plant really shows that most of those who are opposing the development of this technology have no idea what it actually does or how it works.

Laser-based isotope enrichment accomplishes exactly the same thing that the existing methods of gaseous diffusion and gas centrifuges do: it increases the concentration of uranium-235 to uranium-238. Each time the process is preformed, it increases the concentration relatively slightly, so it must be done repeatedly, in a so-called “cascade.” If the same material is processed through the cascade a few times, it produces low enrichment uranium, suitable for nuclear power reactors. If it is done many more times, it produces highly enriched uranium, which can be used for weapons.

Both the gas centrifuge and gaseous diffusion utilize the small difference in mass between uranium-235 and uranium-238 to separate the two isotopes and thus provide enriched uranium. Laser enrichment, on the other hand, uses the slightly different absorption of differing frequencies of light. A high power tunable dye laser is tuned to precisely the frequency which tends to excite uranium-235 more than uranium-238. This selectively vaporizes the uranium-235, allowing it to be separated. In most forms of laser enrichment, this is done with a compound like uranium hexafluoride, since it vaporizes at lower energies than pure uranium, although processes for elemental uranium have been experimented with before.

Laser enrichment has been experimented with in the laboratory since the 1960’s and until recently, the high cost of the specialized lasers needed made it uneconomical for anything beyond small experimental setups. However, improvements in the efficiency and economics of lasers have started to change that and now a number of organizations are working to construct laser enrichment facilities. These facilities are expected to be more energy efficient than existing uranium enrichment facilities and may be more economical to run in general.

But, lets keep this in perspective: laser enrichment facilities are still enormous, complex and expensive operations that cost hundreds of millions or billions of dollars. This is not something that can be done with simple diode lasers that an individual can easily acquire. It’s far beyond even the large lasers used for welding and fabrication in factories. These are very precisely built and tuned, very high power laser systems. Powerful copper vapor lasers pump secondary dye lasers. Uranium compounds are vaporized in a vacuum, creating super hot gasses that are highly corrosive and reactive. These are once-again sublimated back to solids so that they can be again vaporized. Multiple-megawatts of laser energy are required along with the supporting equipment to power and cool the lasers and other systems.

Laser enrichment also does not remove the other challenges of fabricating weapons material. The uranium must be highly purified and converted to uranium hexafluoride. After enrichment, it must be defluoridated. The materials involved are highly reactive and special care must be used at all steps of the process. Finally, the uranium must be reduced back to its metallic form before it can go through a final alloying process. Only then is it ready for use in a weapon, which still requires more effort and resources to produce.

This kind of funding and technology is certainly within the capabilities of many nation states, but is far from within the grasp of any individual, small group or terrorist organization.

The US Stands Poised to Make the Same Boneheaded Mistake Twice:

Even as General Electric works to secure approval for the first laser-based enrichment plant in the US, politicians and various activists are working hard to stop it from happening. It seems lost on them that the technology will advance and will be used whether or not the US decides to do so.

Of course, whether the US actually moves forward with laser separation has no baring at all on whether other nations decide to enrich uranium or use it for weapons. Many other countries already do enrich uranium and there’s no reason to think they would pass up the opportunity to improve the economics and efficiency of doing so by turning to laser enrichment as it becomes available, which it will.

# States

## AT States

#### Perm do both

#### Links as much to politics as the plan

#### Don’t solve

#### States can’t force DoD policy

#### States don’t have legal authority over military bases- they are enclaves

Tymkovich 12

(Seymour, Circuit Judge, “ALLISON v. BOEING LASER TECHNICAL SERVICES” <http://www.leagle.com/xmlResult.aspx?xmldoc=In%20FCO%2020120810042.xml&docbase=CSLWAR3-2007-CURR>, SEH)

Under a body of constitutional law applicable to federal enclaves, U.S. Const. art. I, § 8, cl. 17, state law that is adopted after the creation of the enclave generally does not apply on the enclave. A federal enclave is created when a state cedes jurisdiction over land within its borders to the federal government and Congress accepts that cession. These enclaves include numerous military bases, federal facilities, and even some national forests and parks. Federal enclave doctrine operates as a choice of law doctrine that dictates which law applies to causes of action arising on these lands.¶ It is well-established that after a state has transferred authority over a tract of land creating a federal enclave, the state may no longer impose new state laws on these lands. But state laws enacted before the cession continue to apply unless Congress specifically overrides them. The question here is whether state common law causes of action recognized after the state ceded the enclave to the federal government are available on federal enclaves. This question is governed by a long string of Supreme Court precedent that makes it clear that the law on a federal enclave is the state law that governed the land at the time the federal government established the enclave, not state law enacted thereafter—unless that law was expressly adopted by the enclave's new sovereign, the federal government.

#### If they can get around that proves 50 state fiat is bullshit because allows them to skirt around literature and moot all 1AC offense

# Elections

#### Obama budget

**New York Times 11**

(Matthew L. Wald, “Administration to Push for Small ‘Modular’ Reactors” <http://www.nytimes.com/2011/02/13/science/earth/13nuke.html?_r=3>, SEH)

The Obama administration’s 2012 budget proposal will include a request for money to help develop small “modular” reactors that would be owned by a utility and would supply electricity to a government lab, people involved in the effort say. The department is hoping for $500 million over five years, half of the estimated cost to complete two designs and secure the Nuclear Regulatory Commission’s approval. The reactors would be built almost entirely in a factory and trucked to a site like modular homes.¶ In promoting the reactor, the administration’s immediate goal is to help the Energy Department meet a federal target for reducing its carbon dioxide emissions by relying more on clean energy and less on gas and coal. Like other federal agencies, the department is required by an executive order to reduce its carbon footprint by 28 percent by 2020.

**Romney has endorsed SMR’s and removing restrictions**

**Physics Today 10-1**

“Obama, Romney Agree on Support for Basic Research But Little Else,” <http://www.physicstoday.org/resource/1/phtoad/v65/i10/p22_s1?bypassSSO=1>

**Romney has embraced nuclear energy**, which by any reckoning is capital intensive. He would streamline the Nuclear Regulatory Commission licensing process to accelerate approval of new reactors to be built on or adjacent to preapproved sites and using preapproved designs. **He would also expand the NRC’s capabilities so the agency could swiftly approve new reactor designs such as small modular units.** Obama also favors growth for nuclear energy; his administration has provided $8 billion in loan guarantees to finance construction of the first two reactors to be built in the US since the 1970s.

**Romney can’t come back- history**

**Klein 9-24**

Ezra is a Columnist for the Washington Post and Bloomberg, “Romney’s Nightmare Scenario,” <http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/09/24/romneys-nightmare-scenario/?tid=pm_business_pop>

After all, **Romney’s deficit in the polls is not a momentary blip. He hasn’t led in the polls since 2011.** And as Robert Erikson and Christopher Wlezien point out in ‘The Timeline of Presidential Elections,’ **in the last 15 elections, which are all the elections we have accurate polling for, every candidate who has led in the polls at this point in the cycle has gone on to win in November. It would be literally unprecedented for Romney to mount a comeback at this stage.**

**Romney foreign policy will be pragmatic- flip flopping and advisors**

**Heilbrunn 8-27**

Jacob is senior editor at National Interest, “Will Romney Discover his Inner Nixon,” <http://www.foreignpolicy.com/articles/2012/08/27/will_romney_discover_his_inner_nixon>

Given the somersaults that previous presidents have performed in moving from the campaign trail to the Oval Office, **it's at least worth pondering whether Romney -- the preeminent flip-flopper of our time**, after all -- **might not perform yet another one**. A potentially auspicious sign is that Romney has been longer on sweeping criticisms of Obama than on spelling out just where he would differ from the president. He has brayed about American exceptionalism, while hardly promising anything very exceptional. At most, he has backed a massive and antediluvian shipbuilding plan. **While his campaign boasts a number of neocon stars**, ranging from the intellectually deft Robert Kagan to the cantankerous John Bolton, **he has also appointed Robert Zoellick, a bête noire of the neocons, to head his foreign-policy transition team. He has also successfully sought to water down some of the more reactionary planks that Tea Party types wanted to promulgate in the GOP's official platform**, as FP has reported, **such as** officially **jettisoning the two-state solution**. In short, the right's fears about Romney -- that he is something of a squish -- may be justified not only on domestic policy, but also on foreign policy, the area where a president has the most unilateral authority as commander in chief.¶ Romney's evasiveness on foreign affairs has prompted a number of foreign-policy commentators to engage in the modern-day equivalent of the Roman practice of haruspicy. In the Washington Post, for example, David Ignatius discusses the Romney "enigma." In the National Interest, longtime defense reporter James Kitfield calls it "Romney's neocon puzzle." And on the right, Human Events frets, "When it comes to defense and foreign affairs, Republican presidential challenger Mitt Romney has played strategy cards close to his chest for much of his campaign."¶ Indeed he has. One reason is that foreign affairs commands little interest in the 2012 election. For his part, Obama, as has been widely observed, stole the Republicans' neocon lunch money when he successfully killed Osama bin Laden. Romney may grouse that "Even Jimmy Carter would have given that order" -- though during the 2008 campaign John McCain said unilateral action inside Pakistan was bonkers and that Obama's support for the idea showed his naiveté -- but Obama effectively stilled opposition on national security grounds by dispatching the al Qaeda chief. It's also the case that Obama, to the dismay of some of his supporters, has turned out to be much more of a -- dare one say it? -- neocon than they ever imagined. He retreated on closing the Guantánamo Bay prison. He upped the Predator drone program. And he backed the surge in Afghanistan.¶ **The** very **fact** that **foreign affairs occupies so little prominence** during the campaign **suggest**s that **Romney would**, in common with most fledgling presidents, **focus during his first year on domestic affairs** -- tax cuts, the budget deficit, and unemployment. **Foreign affairs would** distinctly **play second fiddle**. Put otherwise, **the notion** that **Romney would be thirsting for a new war** -- a potential new Bay of Pigs, in other words -- **at the outset** of his presidency **is questionable**. As with so much concerning Romney, **the more likely scenario is that his belligerent talk is simply cheap bluster that he has no intention of acting upon**. **Even Bush, for** all **his ranting about an "axis of evil," never had the cojones to take on either Iran or North Korea**, settling instead for what he thought would be an easy, glittering victory in Iraq.¶ **What's more, to assume that a Romney administration would be a simple rerun of the Bush years may be mistaken**. For one thing, **no one could play the role of Dick Cheney to Romney**. Unlike Bush, **Romney would hardly be inclined to place his presidency at the disposal of his running mate**, Paul Ryan, **who has no** discernible **foreign-policy experience,** in stark contrast to previous Republican vice presidents such as Richard Nixon, George H.W. Bush, and Cheney. It's also the case that when it comes to cabinet-level positions, Romney would send a strong signal that he wasn't about to embark upon adventures abroad if Council on Foreign Relations President Richard Haass is appointed secretary of state. And it would be telling if the moderate Evan A. Feigenbaum, a co-chairman of Romney's Asia-Pacific working group, gets a plum post.¶ So the truth is that **a replay of previous Republican administrations, with neocons duking it out against realists, may be the most likely outcome**. **Romney**, like most of his Republican predecessors, **would probably try to split the difference among the neocons, the realists, and the Tea Party types**, all vying for the president's ear. Remember that **Reagan, whom Romney** **constantly invokes, had a number of neocons inside his administration**, including Abrams and Jeane Kirkpatrick, **but when push came to shove, Reagan sided with realists** such as Secretary of State Shultz, **who emphasized diplomacy** and alliances **over** bellicose **unilateralism.** George W. **Bush himself reverted** to this model in 2006, **when he relied on** Robert **Gates and** Condoleezza **Rice rather than the neocons**. The open question, of course, is whether, after a decade of neocon suzerainty in the GOP, enough realists remaining standing to make a difference**.¶ But perhaps the strongest argument for a moderate Romney is his own oleaginous character**. In trying to stand for everything that Reagan stood for, **Romney has ended up standing for nothing except his own personal advancement**. The only thing that would be worse than Romney proclaiming things he doesn't believe is if he believed them. Yes, there's always the chance that Romney will feel forced to cater to the neocons and plunge America into a war with Iran -- which is why voters may end up deciding it's not worth taking the chance to find out whether he puts much credence in his own malarkey about creating a new American century.¶ Still, the odds are against it. **Democrats who warn about Romney provoking China and Russia or bombing Iran may be engaging in their own form of threat inflation. All three are a sideshow next to the economy**. Cautious and hard-nosed, shrewd and unprincipled, Romney is undoubtedly aware that the only way he can become a successful president is by fulfilling the right's worst fears about him. Romney, in other words, needs to pull an Obama. If he plays his cards right and jettisons his foreign-policy flapdoodle upon entering the Oval Office, Romney might even end up earning the grudging respect of moderates and liberals who will be as amazed at his transformation as they were aghast at Obama's morphing into a hawk. Perhaps even Colin Powell will be placated by his performance.¶

#### New Military Base Spending is popular

**Bloomberg 9/4**

(Danielle Ivory, “Virginia Leads Swing States at Risk Over Cliff: BGOV Barometer” <http://www.bloomberg.com/news/2012-09-04/virginia-leads-swing-states-at-risk-over-cliff-bgov-barometer.html>, SHE)

For some swing-state voters, the presidential election may come down to who they want holding the net if their economies go over the fiscal cliff.¶ The BGOV Barometer shows that the battlegrounds of Virginia, Colorado and Pennsylvania are among 19 states and the District of Columbia that depended on U.S. government contracts for more than 3 percent of their 2011 gross domestic product. The states are vulnerable to $1.2 trillion in automatic 10-year budget reductions, called sequestration, that will begin in January if Congress and the White House fail to agree on a deficit-reduction plan. ¶ President Barack Obama and his Republican challenger, Mitt Romney , need the 42 electoral votes represented by Virginia, Colorado and Pennsylvania as they compete for the 270 it takes to win. Their lines of attack on the automatic cuts, which along with tax increases make up the fiscal cliff, may help determine the outcome in those swing states.¶ “It’s going to increasingly become an issue in this election,” said Todd Harrison , a senior fellow at the Center for Strategic and Budgetary Assessments in Washington. “Both sides want to run against sequestration.¶ “Maybe that’s what this boils down to,” Harrison said in an interview. “Whose approach do you prefer for avoiding sequestration?”¶ The government spent more than $500 billion on federal contracts in 2011. Agencies awarded $58.9 billion in orders that year for work performed in Virginia.¶ ‘Tentacles Everywhere’¶ Federal awards represented 14 percent of the economy in the state, home to the Pentagon and headquarters of top federal contractors such as McLean-based SAIC Inc. (SAI) The company was the top recipient of awards in Virginia, receiving $3 billion for work in the state. SAIC performs computer and engineering services for agencies including the Department of Defense .¶ Federal awards support economies outside the state, so a contract in Virginia might have implications for a lawyer or consultant in Ohio or Texas, Ric Brown, the state’s finance secretary, said in an interview. “It has tentacles everywhere,” he said.¶ Contractors performing work in Colorado won $10.2 billion in U.S. awards last year, which represented 3.8 percent of the state’s economy. Lockheed Martin Corp. (LMT), based in Bethesda, Maryland , won the most in contracts, $2.41 billion, for work in the state. The company is the No. 1 U.S. defense contractor.¶ ‘Held Hostage’¶ Agencies last year awarded $17.7 billion in contracts for work in Pennsylvania. The state relied on the awards for 3.1 percent of its economy. Bechtel Group, based in San Francisco , was the top recipient of contracts in the state with $1.99 billion in awards.¶ The three swing states also have direct federal employees and military bases that require additional government funding. Nevada, Florida, Wisconsin, Ohio and Iowa -- swing states with 69 electoral votes -- may be less vulnerable because they derived less than 3 percent of their economy from federal contracts.

**Energy not key**

**Wang 9-27**

Herman writes for The Barel which is McGraw-Hill’s energy website, “Even with U.S. Gasoline Prices at a Higher Number, Energy isn’t a Big Deal in White House Race,” <http://blogs.platts.com/2012/09/27/energy_campaign/>

Political ads have been filling up television airwaves in the US, with the heated presidential race between Barack Obama and Republican challenger Mitt Romney less than six weeks away.¶ Energy issues have been featured prominently in those ads, with Obama talking up his support for clean energy while also championing recent increases in domestic oil and gas production. Romney, meanwhile, has hammered Obama over the high-profile failure of government-backed solar panel maker Solyndra and his administration’s increased regulations on fossil fuels.¶ So **is the energy ad blitz impressing voters? Or are Americans giving** the ads **a big “meh**”?¶ Probably the latter, if recent polling is to be believed.¶ The respected polling firm **Gallup asked voters in August what the most important issue facing the country was, and only 1% cited energy. § Marked 07:36 § That’s down** sharply **from** the **25%** of poll respondents who cited energy as the top issue in the days **before the 2008 election**, in which Republicans coined the rallying cry “Drill, baby, drill!” in response to high oil and gasoline prices.¶ This time around, **the economy, unemployment**, general dissatisfaction with **government and health care are greater concerns** for voters, said Frank Newport, editor in chief of The Gallup Poll.¶ Energy “doesn’t show up when we [ask voters] to tell us in your own words why you’re voting for the candidates,” he said. “We just don’t see much evidence that it’s a high top-of-mind issue in the campaign.”¶ The only time energy perks up as a major electoral factor is when gasoline prices rise up, he added. But even when that happens, as it did earlier this summer when gasoline prices surpassed $4 a gallon in many parts of the country, the impact on voter behavior seems muted.¶ “We asked the question, how high would [gasoline prices] have to be to really affect your family, and people were saying $5/gallon or more,” Newport said. “It didn’t get there, of course. I think Americans have a set point now where these fluctuations up and down don’t make as much difference anymore.”¶ Larry **Sabato, an elections expert at the University of Virginia**’s Center for Politics, **said energy is “a secondary issue**” in the presidential race between Obama and Republican Mitt Romney. But because energy issues are often tied to the economy, he said he still expects rhetoric on both sides to talk up their energy policies in stump speeches and campaign ads.¶ “Republicans plan to make energy a big part of their appeal since they believe President Obama is vulnerable [on the economy] and has held back progress,” Sabato said. “Energy sells as an issue in coal states, coastal states with offshore drilling, and states with a large solar or wind energy industry, such as Iowa. GOP success in this sector depends on their skill in making clear the ties between energy and jobs.”¶ Kevin Book, managing director of research at ClearView Energy Partners, agreed and said that if the economy were more robust, both Obama and Romney would moderate their messages to appeal to centrist voters.¶ “With a tepid economy, however, we expected that both parties would emphasize ‘wedge’ issues aimed at keeping their respective bases from losing interest and staying home from the polls,” Book said in a note to clients. “Energy policy seems to be tracking the broader trend, with both candidates emphasizing differences in recent weeks.”¶ To the extent that American voters are paying attention, Newport said that both candidates offer up messages that can appeal to the general public.¶ Polling consistently shows that Americans by a wide margin favor greater development of alternative energy, such as wind and solar, a pet cause of Obama.¶ But when the economy tends to do poorly, Americans become more receptive to oil drilling and increasing energy supply over conservation, a position most associate with Republicans.¶ Gallup annually asks voters, “Which of the following approaches to solving the nation’s energy problems do you think the US should follow right now – emphasize production of more oil, gas and coal supplies, or emphasize more conservation by consumers of existing energy supplies?”¶ For 2012, 51% of voters said they favored more conservation, while 40% favored more production. That contrasts with 61% who favored more conservation in 2008, and 29% who favored more production.¶ If anything, Newport said that trend may favor Romney slightly.¶ “We do see at this point and time, there’s probably more sympathy for the drill position and probably less sympathy for the other kinds of approaches,” Newport said. “That’s what I’d say our data shows. Now, alternatives play well, and the American people say they like the idea of alternatives. But when the economy’s bad, the whole idea of drilling sounds good to people.”

#### DOD energy programs don’t link---conservative won’t oppose

Davenport 12

Coral Davenport, energy and environment correspondent for National Journal. Prior to joining National Journal in 2010, Davenport covered energy and environment for Politico, and before that, for Congressional Quarterly. In 2010, she was a fellow with the Metcalf Institute for Marine and Environmental Reporting. From 2001 to 2004, Davenport worked in Athens, Greece, as a correspondent for numerous publications, including the Christian Science Monitor and USA Today, covering politics, economics, international relations and terrorism in southeastern Europe. She also covered the 2004 Olympic Games in Athens, and was a contributing writer to the Fodor’s, Time Out, Eyewitness and Funseekers’ guidebook series. Davenport started her journalism career at the Daily Hampshire Gazette in Northampton, Massachusetts, after graduating from Smith College with a degree in English literature. National Journal, 2/10/12, White House Budget to Expand Clean-Energy Programs Through Pentagon, ProQuest

The White House believes it has figured out how to get more money for clean-energy programs touted by President Obama without having it become political roadkill in the wake of the Solyndra controversy: **Put it in the Pentagon**. While details are thin on the ground, lawmakers who work on both energy- and defense-spending policy believe the fiscal 2013 budget request to be delivered to Congress on Monday probably won't include big increases for wind and solar power through the Energy Department, a major target for Republicans since solar-panel maker Solyndra defaulted last year on a $535 million loan guarantee. But they do expect to see increases in spending on alternative energy in the Defense Department, such as programs to replace traditional jet fuel with biofuels, supply troops on the front lines with solar-powered electronic equipment, build hybrid-engine tanks and aircraft carriers, and increase renewable-energy use on military bases. While Republicans will instantly shoot down requests for fresh spending on Energy Department programs that could be likened to the one that funded Solyndra, many support alternative-energy programs for the military. "I do expect to see the spending," said Rep. Jack Kingston, R-Ga., a member of the House Defense Appropriations Subcommittee, when asked about increased investment in alternative-energy programs at the Pentagon. "I think in the past three to five years this has been going on, but that it has grown as a culture and a practice - and it's a good thing." "If Israel attacks Iran, and we have to go to war - and the Straits of Hormuz are closed for a week or a month and the price of fuel is going to be high," Kingston said, "the question is, in the military, what do you replace it with? It's not something you just do for the ozone. It's strategic." Sen. Lindsey Graham, R-S.C., who sits on both the Senate Armed Services Committee and the Defense Appropriations Subcommittee, said, "I don't see what they're doing in DOD as being Solyndra." "We're not talking about putting $500 million into a goofy idea," Graham told National Journal . "We're talking about taking applications of technologies that work and expanding them. I wouldn't be for DOD having a bunch of money to play around with renewable technologies that have no hope. But from what I understand, there are renewables out there that already work." A senior House Democrat noted that this wouldn't be the first time that the **Pentagon has been utilized to advance policies that wouldn't otherwise be supported**. "They did it in the '90s with medical research," said Rep. Henry Waxman, D-Calif., ranking member of the House Energy and Commerce Committee. In 1993, when funding was frozen for breast-cancer research programs in the National Institutes of Health, Congress boosted the Pentagon's budget for breast-cancer research - to more than double that of the health agency's funding in that area. **Politically, the strategy makes sense**. Republicans are ready to fire at the first sign of any pet Obama program, and renewable programs at the Energy Department are an exceptionally ripe target. That's because of Solyndra, but also because, in the last two years, the Energy Department received a massive $40 billion infusion in funding for clean-energy programs from the stimulus law, a signature Obama policy. When that money runs out this year, a request for more on top of it would be met with flat-out derision from most congressional Republicans. Increasing renewable-energy initiatives at the Pentagon can also help Obama advance his broader, national goals for transitioning the U.S. economy from fossil fuels to alternative sources. As the largest industrial consumer of energy in the world, the U.S. military can have a significant impact on energy markets - if it demands significant amounts of energy from alternative sources, it could help scale up production and ramp down prices for clean energy on the commercial market. Obama acknowledged those impacts in a speech last month at the Buckley Air Force Base in Colorado. "The Navy is going to purchase enough clean-energy capacity to power a quarter of a million homes a year. And it won't cost taxpayers a dime," Obama said. "What does it mean? It means that the world's largest consumer of energy - the Department of Defense - is making one of the largest commitments to clean energy in history," the president added. "That will grow this market, it will strengthen our energy security." Experts also hope that Pentagon engagement in clean-energy technology could help yield breakthroughs with commercial applications. Kingston acknowledged that the upfront costs for alternative fuels are higher than for conventional oil and gasoline. For example, the Air Force has pursued contracts to purchase biofuels made from algae and camelina, a grass-like plant, but those fuels can cost up to $150 a barrel, compared to oil, which is lately going for around $100 a barrel. Fuel-efficient hybrid tanks can cost $1 million more than conventional tanks - although in the long run they can help lessen the military's oil dependence, Kingston said Republicans recognize that the up-front cost can yield a payoff later. "It wouldn't be dead on arrival. But we'd need to see a two- to three-year payoff on the investment," Kingston said. Military officials - particularly Navy Secretary Ray Mabus, who has made alternative energy a cornerstone of his tenure - have been telling Congress for years that the military's dependence on fossil fuels puts the troops - and the nation's security - at risk. Mabus has focused on meeting an ambitious mandate from a 2007 law to supply 25 percent of the military's electricity from renewable power sources by 2025. (Obama has tried and failed to pass a similar national mandate.) Last June, the DOD rolled out its first department-wide energy policy to coalesce alternative and energy-efficient initiatives across the military services. In January, the department announced that a study of military installations in the western United States found four California desert bases suitable to produce enough solar energy - 7,000 megawatts - to match seven nuclear power plants. And so far, those **moves have met with approval from congressional Republicans**. Even so, any request for new Pentagon spending will be met with greater scrutiny this year. The Pentagon's budget is already under a microscope, due to $500 billion in automatic cuts to defense spending slated to take effect in 2013. But even with those challenges, clean-energy spending probably won't stand out as much in the military budget as it would in the Energy Department budget. Despite its name, the Energy Department has traditionally had little to do with energy policy - its chief portfolio is maintaining the nation's nuclear weapons arsenal. Without the stimulus money, last year only $1.9 billion of Energy's $32 billion budget went to clean-energy programs. A spending increase of just $1 billion would make a big difference in the agency's bottom line. But it would probably be easier to tuck another $1 billion or $2 billion on clean-energy spending into the Pentagon's $518 billion budget. Last year, the Pentagon spent about $1 billion on renewable energy and energy-efficiency programs across its departments.

# Heidegger

### Framework

#### Framework: the affirmative must defend a topical plan, the negative must defend the status quo or a competing policy option.

#### a) Best for real world education – our fw most closely resembles how policymakers decide on advocacy.

#### b) Fairness – our interp provides a clear way to compare two advocacies by weighing impacts which is essential to fairness. Their fw makes opportunity cost impossible and invites judge intervention.

#### c) Predictability – our fw ensures predictable aff ground because we predict args based upon our aff literature.

#### d) Infinitely regressive – there are an infinite number of philosophical perspectives from which they can argue

### Extinction O/W

#### Life should be valued as apriori – it precedes the ability to value anything else

Amien Kacou. 2008. WHY EVEN MIND? On The A Priori Value Of “Life”, Cosmos and History: The Journal of Natural and Social Philosophy, Vol 4, No 1-2 (2008) cosmosandhistory.org/index.php/journal/article/view/92/184

Furthermore, that manner of finding things good that is in pleasure can certainly not exist in any world without consciousness (i.e., without “life,” as we now understand the word)—slight analogies put aside. In fact, we can begin to develop a more sophisticated definition of the concept of “pleasure,” in the broadest possible sense of the word, as follows: it is the common psychological element in all psychological experience of goodness (be it in joy, admiration, or whatever else). In this sense, pleasure can always be pictured to “mediate” all awareness or perception or judgment of goodness: there is pleasure in all consciousness of things good; pleasure is the common element of all conscious satisfaction. In short, it is simply the very experience of liking things, or the liking of experience, in general. In this sense, pleasure is, not only uniquely characteristic of life but also, the core expression of goodness in life—the most general sign or phenomenon for favorable conscious valuation, in other words. This does not mean that “good” is absolutely synonymous with “pleasant”—what we value may well go beyond pleasure. (The fact that we value things needs not be reduced to the experience of liking things.) However, what we value beyond pleasure remains a matter of speculation or theory. Moreover, we note that a variety of things that may seem otherwise unrelated are correlated with pleasure—some more strongly than others. In other words, there are many things the experience of which we like. For example: the admiration of others; sex; or rock-paper-scissors. But, again, what they are is irrelevant in an inquiry on a priori value—what gives us pleasure is a matter for empirical investigation. Thus, we can see now that, in general, something primitively valuable is attainable in living—that is, pleasure itself. And it seems equally clear that we have a priori logical reason to pay attention to the world in any world where pleasure exists. Moreover, we can now also articulate a foundation for a security interest in our life: since the good of pleasure can be found in living (to the extent pleasure remains attainable),[17] and only in living, therefore, a priori, life ought to be continuously (and indefinitely) pursued at least for the sake of preserving the possibility of finding that good. However, this platitude about the value that can be found in life turns out to be, at this point, insufficient for our purposes. It seems to amount to very little more than recognizing that our subjective desire for life in and of itself shows that life has some objective value. For what difference is there between saying, “living is unique in benefiting something I value (namely, my pleasure); therefore, I should desire to go on living,” and saying, “I have a unique desire to go on living; therefore I should have a desire to go on living,” whereas the latter proposition immediately seems senseless? In other words, “life gives me pleasure,” says little more than, “I like life.” Thus, we seem to have arrived at the conclusion that the fact that we already have some (subjective) desire for life shows life to have some (objective) value. But, if that is the most we can say, then it seems our enterprise of justification was quite superficial, and the subjective/objective distinction was useless—for all we have really done is highlight the correspondence between value and desire. Perhaps, our inquiry should be a bit more complex.

### Threats are Real

#### Threats are not socially constructed- decision makers use the most objective, rational, and accurate assessments possible- there are no bureaucratic or ideological motivations to invent threats.

Ravenal ‘9

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Quite expectedly, the more doctrinaire of the non-interventionists take pains to deny any straightforward, and therefore legitimate, security motive in American foreign and military policy. In fact, this denial leads to a more sweeping rejection of any recognizably rational basis for American foreign policy, and, even, sometimes (among the more theoretical of the non-interventionists), a preference for non-rational accounts, or “models,” of virtually any nation’s foreign policy-making.4 One could call this tendency among anti-imperialists “motive displacement.” More specifically, in the cases under review here, one notes a receptivity to any reworking of history, and any current analysis of geopolitics, that denigrates “the threat”; and, along with this, a positing of “imperialism” (the almost self-referential and primitive impulse) as a sufficient explanation for the often strenuous and risky actions of great powers such as the United States. Thus, not only is “empire” taken to be a sufficient and, in some cases, a necessary condition in bringing about foreign “threats”; but, by minimizing the extent and seriousness of these threats, the anti-imperialists put themselves into the position of lacking a rational explanation for the derivation of the (pointless at best, counter-productive at worst) policies that they designate as imperialistic. A pungent example of this threat denigration and motive displacement is Eland’s account of American intervention in the Korean and Vietnam wars: After North Korea invaded, the Truman administration intervened merely for the purpose of a demonstration to friends and foes alike. Likewise, according to eminent cold war historians, the United States did not inter- vene in Vietnam because it feared communism, which was fragmented, or the Soviet Union, which wanted détente with the West, or China, which was weak, but because it did not want to appear timid to the world. The behavior of the United States in both Korea and Vietnam is typical of imperial powers, which are always concerned about their reputation, pres- tige, and perceived resolve. (Eland 2004, 64) Of course, the motive of “reputation,” to the extent that it exists in any particular instance, is a part of the complex of motives that characterize a great power that is drawn toward the role of hegemon (not the same thing as “empire”). Reputation is also a component of the power projec- tion that is designed to serve the interest of national security. Rummaging through the concomitants of “imperialism,” Eland (2004, 65) discovers the thesis of “threat inflation” (in this case, virtual threat invention): Obviously, much higher spending for the military, homeland security, and foreign aid are required for a policy of global intervention than for a policy of merely defending the republic. For example, after the cold war, the security bureaucracies began looking for new enemies to justify keeping defense and intelligence budgets high. Similarly, Eland (ibid., 183), in a section entitled “Imperial Wars Spike Corporate Welfare,” attributes a large portion of the U.S. defense budget—particularly the procurement of major weapons systems, such as “Virginia-class submarines . . . aircraft carriers . . . F-22 fighters . . . [and] Osprey tilt-rotor transport aircraft”—not to the systemically derived requirement for certain kinds of military capabilities, but, rather, to the imperatives of corporate pork. He opines that such weapons have no stra- tegic or operational justification; that “the American empire, militarily more dominant than any empire in world history, can fight brushfire wars against terrorists and their ‘rogue’ state sponsors without those gold- plated white elephants.” The underlying notion of “the security bureaucracies . . . looking for new enemies” is a threadbare concept that has somehow taken hold across the political spectrum, from the radical left (viz. Michael Klare [1981], who refers to a “threat bank”), to the liberal center (viz. Robert H. Johnson [1997], who dismisses most alleged “threats” as “improbable dangers”), to libertarians (viz. Ted Galen Carpenter [1992], Vice President for Foreign and Defense Policy of the Cato Institute, who wrote a book entitled A Search for Enemies). What is missing from most analysts’ claims of “threat inflation,” however, is a convincing theory of why, say, the American government significantly (not merely in excusable rhetoric) might magnify and even invent threats (and, more seriously, act on such inflated threat estimates). In a few places, Eland (2004, 185) suggests that such behavior might stem from military or national security bureaucrats’ attempts to enhance their personal status and organizational budgets, or even from the influence and dominance of “the military-industrial complex”; viz.: “Maintaining the empire and retaliating for the blowback from that empire keeps what President Eisenhower called the military-industrial complex fat and happy.” Or, in the same section: In the nation’s capital, vested interests, such as the law enforcement bureaucracies . . . routinely take advantage of “crises”to satisfy parochial desires. Similarly, many corporations use crises to get pet projects— a.k.a. pork—funded by the government. And national security crises, because of people’s fears, are especially ripe opportunities to grab largesse. (Ibid., 182) Thus, “bureaucratic-politics” theory, which once made several reputa- tions (such as those of Richard Neustadt, Morton Halperin, and Graham Allison) in defense-intellectual circles, and spawned an entire sub-industry within the field of international relations,5 is put into the service of dismissing putative security threats as imaginary. So, too, can a surprisingly cognate theory, “public choice,”6 which can be considered the right-wing analog of the “bureaucratic-politics” model, and is a preferred interpretation of governmental decision- making among libertarian observers. As Eland (2004, 203) summarizes: Public-choice theory argues [that] the government itself can develop sepa- rate interests from its citizens. The government reflects the interests of powerful pressure groups and the interests of the bureaucracies and the bureaucrats in them. Although this problem occurs in both foreign and domestic policy, it may be more severe in foreign policy because citizens pay less attention to policies that affect them less directly. There is, in this statement of public-choice theory, a certain ambiguity, and a certain degree of contradiction: Bureaucrats are supposedly, at the same time, subservient to societal interest groups and autonomous from society in general. This journal has pioneered the argument that state autonomy is a likely consequence of the public’s ignorance of most areas of state activity (e.g., Somin 1998; DeCanio 2000a, 2000b, 2006, 2007; Ravenal 2000a). But state autonomy does not necessarily mean that bureaucrats substitute their own interests for those of what could be called the “national society” that they ostensibly serve. I have argued (Ravenal 2000a) that, precisely because of the public-ignorance and elite-expertise factors, and especially because the opportunities—at least for bureaucrats (a few notable post-government lobbyist cases nonwithstanding)—for lucrative self-dealing are stringently fewer in the defense and diplomatic areas of government than they are in some of the contract-dispensing and more under-the-radar-screen agencies of government, the “public-choice” imputation of self-dealing, rather than working toward the national interest (which, however may not be synonymous with the interests, perceived or expressed, of citizens!) is less likely to hold. In short, state autonomy is likely to mean, in the derivation of foreign policy, that “state elites” are using rational judgment, in insulation from self-promoting interest groups—about what strategies, forces, and weapons are required for national defense. Ironically, “public choice”—not even a species of economics, but rather a kind of political interpretation—is not even about “public” choice, since, like the bureaucratic-politics model, it repudiates the very notion that bureaucrats make truly “public” choices; rather, they are held, axiomatically, to exhibit “rent-seeking” behavior, wherein they abuse their public positions in order to amass private gains, or at least to build personal empires within their ostensibly official niches. Such sub- rational models actually explain very little of what they purport to observe. Of course, there is some truth in them, regarding the “behavior” of some people, at some times, in some circumstances, under some conditions of incentive and motivation. But the factors that they posit operate mostly as constraints on the otherwise rational optimization of objectives that, if for no other reason than the playing out of official roles, transcends merely personal or parochial imperatives. My treatment of “role” differs from that of the bureaucratic-politics theorists, whose model of the derivation of foreign policy depends heavily, and acknowledgedly, on a narrow and specific identification of the role- playing of organizationally situated individuals in a partly conflictual “pulling and hauling” process that “results in” some policy outcome. Even here, bureaucratic-politics theorists Graham Allison and Philip Zelikow (1999, 311) allow that “some players are not able to articulate [sic] the governmental politics game because their conception of their job does not legitimate such activity.” This is a crucial admission, and one that points— empirically—to the need for a broader and generic treatment of role. Roles (all theorists state) give rise to “expectations” of performance. My point is that virtually every governmental role, and especially national-security roles, and particularly the roles of the uniformed mili- tary, embody expectations of devotion to the “national interest”; rational- ity in the derivation of policy at every functional level; and objectivity in the treatment of parameters, especially external parameters such as “threats” and the power and capabilities of other nations. Sub-rational models (such as “public choice”) fail to take into account even a partial dedication to the “national” interest (or even the possibility that the national interest may be honestly misconceived in more paro- chial terms). In contrast, an official’s role connects the individual to the (state-level) process, and moderates the (perhaps otherwise) self-seeking impulses of the individual. Role-derived behavior tends to be formalized and codified; relatively transparent and at least peer-reviewed, so as to be consistent with expectations; surviving the particular individual and trans- mitted to successors and ancillaries; measured against a standard and thus corrigible; defined in terms of the performed function and therefore derived from the state function; and uncorrrupt, because personal cheating and even egregious aggrandizement are conspicuously discouraged. My own direct observation suggests that defense decision-makers attempt to “frame” the structure of the problems that they try to solve on the basis of the most accurate intelligence. They make it their business to know where the threats come from. Thus, threats are not “socially constructed” (even though, of course, some values are). A major reason for the rationality, and the objectivity, of the process is that much security planning is done, not in vaguely undefined circum- stances that offer scope for idiosyncratic, subjective behavior, but rather in structured and reviewed organizational frameworks. Non-rationalities (which are bad for understanding and prediction) tend to get filtered out. People are fired for presenting skewed analysis and for making bad predictions. This is because something important is riding on the causal analysis and the contingent prediction. For these reasons, “public choice” does not have the “feel” of reality to many critics who have participated in the structure of defense decision-making. In that structure, obvious, and even not-so-obvious, “rent-seeking” would not only be shameful; it would present a severe risk of career termination. § Marked 07:37 § And, as mentioned, the defense bureaucracy is hardly a productive place for truly talented rent-seekers to operate, compared to opportunities for personal profit in the commercial world. A bureaucrat’s very self-placement in these reaches of government testi- fies either to a sincere commitment to the national interest or to a lack of sufficient imagination to exploit opportunities for personal profit.

### Permutation

#### Perm: do both.

#### Only by combining methods can we avoid fragmentation and facilitate real political change to prevent planetary extinction – even if the perm risks cooption the apocalyptic imagery of the aff is rejuvenating to ecocriticism

JL Schatz. 2012. Professor of English and Feminist Evolutionary Studies & Director of Debate at Binghamton University. The Importance of Apocalypse: The Value of End-Of-The-World Politics While Advancing Ecocriticism. Journal of Ecocriticism: A New Journal of Nature, Society and Literature. 4(2)

There are three things ecocriticism must keep in mind to retain its effectiveness in the poststructuralist era. First and foremost ecocritics must not allow their infighting over tactics and academic maneuvers to become debilitating. Ecocritics have enough on their plate fighting dominant political institutions. To never directly take up arms against ecologically destructive practices will merely cede potential avenues of resistance while we fight amongst ourselves. We must take from those ecocritics we partially disagree with what we can and then operate from a different platform so as to always be spectral in our resistance. Adopting varied tactics enables an ecological coalition centered on the connectedness that arises from the belief that we all have a shared stake in the planet. Awakening to our collective stake in the environment can overcome the illusionary boundaries of the nation-­‐state, species, or even sentience. Every molecule of the Earth’s ecology is interconnected. When one part dies we all stand on the brink of extinction. For ecocriticism to embrace this interconnection it must not erect borders between different approaches so long as the foundation of the struggle is premised upon the commons of our universe. Unfortunately, “what characterizes much campus left discourse is a substitution of moral rhetoric about evil policies[, leaving] ... absent ... a sober reckoning with the preoccupations and opinions of the vast majority of Americans ... who do not believe that the discourse of ‘anti-­‐imperialism’ speaks to their lives” (Isaac). As a result, there is a need for ecocritics to not just speak to the choir that mostly already agrees with them. They must also speak to the populations who don’t intuitively see the link between imperialism, technology, and capitalism with environmental destruction. Apocalyptic rhetoric can do precisely that because of its underlying tenant of self-­preservation. The above point is absolutely crucial because ecocriticism cannot be effective if its focus never goes beyond the individual alone. No single person is the entire ecology so no individual can save it. While each individual undoubtedly impacts the environment and can cause change, no large scale transformation can take place if we never inspire collective action. In evolutionary terms, ideas, thoughts, and actions must be passed on in order to survive. For that to happen it takes a combined effort, even though it can start by a single mutation. Luke reminds us that the typical consumer does not control the critical aspects of his or her existence[.] ... The absurd claim that average consumers only need to shop, bicycle, or garden their way to an ecological future merely moves most of the responsibility and much of the blame away from the institutional centers of power whose decisions actually maintain the wasteful, careless ways of material exchange[. It also] ... ignores how corporate capital, big government, and professional experts pushed the practices of ... affluent society ... as a political strategy to sustain economic growth, forestall mass discontent, and empower scientific authority. People did choose to live this way, but their choices were made from a very narrow array of alternatives presented to them as rigidly structured, prepackaged menus of very limited options. (Luke, 1997: 127-­‐128) In turn, ecocritics must not displace the blame away from current hegemonic structures by calling on individuals to act alone. Instead ecocriticism must articulate its arguments to influence change in both institutions of power and the very people whose mindsets make up the current collective. Many environmental groups have been able to do precisely that. For instance, “NGOs and social movements active in global civil society have ... introduce[ed] ... dystopian scenarios ... as rhetorical devices that act as ‘wake-­up calls’... to jolt citizens out of their complacency and ... foster ... public deliberation about the potential cataclysms facing humankind” (Kurasawa 464). Ecocritics must not cut down such NGOs for adopting end-­of-­the-­world tactics even though their rhetoric might get co-opted when specific policies get enacted. Secondly, ecocriticism must never forget that what they do is politics. There are two implications to this. On the one hand it means that activists who directly lobby the government should not denounce the academically-oriented ecocritic for struggling within the academy. On the other hand it means that those who denounce the managerial tendencies that come along with governmental policies shouldn’t condemn activists who operate within the system. Instead of attacking one another, ecocritics should understand opposing discourses and ontologies as part of a spectral strategy that works against the environmental imperialism of the status-quo. We should take each opportunity for its fullest even in the face of failure. Once we acknowledge the virtual inevitability of co-optation the emphasis should be on creating successive struggles from a variety of standpoints. Captain Paul Watson, for instance, does not merely pack up his flagship the Steve Irwin and head home after the Japanese whaling season ends. He goes on to fight for seals, dolphins, and a number of other animals all the while participating within a larger discourse surrounding planetary ecology. Not all of Watson’s tactics have been successful. Neither has anyone else’s. However, that doesn’t mean we should give up. Quite the opposite. For example, just because revolutionaries like Che Guevara have been turned into trendy t-­‐shirts, fueling the industries of capitalism, doesn’t mean he shouldn’t have fought against imperialism in the first place. In the same way, just because environmental activists are inevitably going to fall victim to constructing an image of the planet on the brink of extinction, it doesn’t mean that we should discount their battles against such destruction. Their counter constructions enable a contestation over what it means to be human in relationship to the rest of the world. Absent these counter narratives only a singular construction of anthropocentric managerial domination would exist. A consequence to this second point is that the willingness to continually deploy different tactics is more powerful for ecocriticism than coming up with the perfect strategy. That way even when we become co-opted in one place we are already struggling from somewhere else. In turn, ecocriticism should focus on the underlying motivations that compel others to act in order to determine which ecocritics to be allies with. Through this way human beings can repair the willed manipulation inherent in calculative thinking and realize a patient equanimity toward Life. It is only in the context of this reawakened sense of the unity of life that revolutionary action gains an authentic basis. It is the engagement with “the Other” that shows the ELF actions are truly about defense of plant and animal life, and they demonstrate genuine liberation concerns that typically are trapped within Enframing. That is to say, ELF (and similar) actions, show themselves as part of a ... profound solidarity ... [that] serves as a general basis for a post-­‐Enframing, post-­‐capitalist order, an ecological, not a capitalist society. (Best and Nocella 83) This shift allows ecocriticism to formulate ever-­‐greater coalitions while at the same time preventing a descent into moral relativism. We can still utilize political action by eco-activists and NGOs such as PETA and Greenpeace productively, even if they result in reformist managerialism, so long as the sole focus doesn’t fall upon a singular tactic. Only a profound orientation of solidarity will ever have the hopes of succeeding. Everything we do is deeply political and we must understand that in acting or in thinking we necessarily impact the world. Uniting behind images of planetary omnicide holds the potential to collectively bring us together by awakening humanity to its shared stake in the global environment. Third, and most importantly, ecocritics must adopt tactics that can most effectively influence other people without proscribing end goals. By this I mean that ecocritics must use those tools that can appeal to the masses while simultaneously making their appeals in such a way as not to force a choice upon them. Apocalyptic imagery is ideal for this task. It appeals to notions of shared planetary concerns that serve as motivation for others to act, even without fully knowing how the apocalypse can truly be averted. By creating a compelling urge to do something that arises out of the image of planetary annihilation ecocriticism can influence a variety of people to take up arms through a multitude of techniques. Society as a whole will never mobilize to halt the very practices that threaten life without such compelling inspiration. When ecocriticism helps other people see how certain actions risk their very survival it will enable our planet to evolve differently. So long as ecocriticism never gives up on the struggle, even if this different direction may bring new scenarios of apocalypse, humanity as a species can continually evolve its patterns and behaviors to advert extinction. This is not to say we will live forever. Rather it is to say that as a species we can continue to exist in harmony with the lives all around us and give our deaths meaning. Ultimately, it is through imagining the end of the world that we will be able to envision how to save it.

#### Perm: do the affirmative and the alternative in all other instances.

### Ontology Bad

#### Debates about ontology are irrelevant to real world policy debates – pragmatism is more effective at facilitating social change

David McClean. 2001. philosopher, writer and business consultant, conducted graduate work in philosophy at NYU. “The cultural left and the limits of social hope” http://www.american-philosophy.org/archives/past\_conference\_programs/pc2001/Discussion%20papers/david\_mcclean.htm

There is a lot of philosophical prose on the general subject of social justice. Some of this is quite good, and some of it is quite bad. What distinguishes the good from the bad is not merely the level of erudition. Displays of high erudition are gratuitously reflected in much of the writing by those, for example, still clinging to Marxian ontology and is often just a useful smokescreen which shrouds a near total disconnect from empirical reality. This kind of political writing likes to make a lot of references to other obscure, jargon-laden essays and tedious books written by other true believers - the crowd that takes the fusion of Marxian and Freudian private fantasies seriously. Nor is it the lack of scholarship that makes this prose bad. Much of it is well "supported" by footnotes referencing a lode of other works, some of which are actually quite good. Rather, what makes this prose bad is its utter lack of relevance to extant and critical policy debates, the passage of actual laws, and the amendment of existing regulations that might actually do some good for someone else. The writers of this bad prose are too interested in our arrival at some social place wherein we will finally emerge from our "inauthentic" state into something called "reality." Most of this stuff, of course, comes from those steeped in the Continental tradition (particularly post-Kant). While that tradition has much to offer and has helped shape my own philosophical sensibilities, it is anything but useful when it comes to truly relevant philosophical analysis, and no self-respecting Pragmatist can really take seriously the strong poetry of formations like "authenticity looming on the ever remote horizons of fetishization." What Pragmatists see instead is the hope that we can fix some of the social ills that face us if we treat policy and reform as more important than Spirit and Utopia.

### Managerialism/Enviro Securitization Good

#### Managerialism is necessary to prevent global extinction –processes of environmental destruction are unstoppable without intervention

Dr Neil Levy 1999. Fellow of the Centre for Applied Philosophy and Public Ethics at Charles Sturt University. “Discourses of the Environment” p. 215

If the ‘technological fix’ is unlikely to be more successful than strategies of limitation of our uses of resources, we are nevertheless unable to simply leave the environment as it is. There is a real and pressing need for more, and more accurate, technical and scientific information about the non-human world. For we are faced with a situation in which the processes we have already set in train will continue to impact upon that world, and therefore us, for centuries. It is therefore necessary, not only to stop cutting down the rain forests, but to develop real, concrete proposals for action, to reverse, or at least limit, the effects of our previous interventions. More over, there is another reason why our behaviour towards the non-human cannot simply be a matter of leaving it as it is, at least in so far as our goals are not only environmental but also involve social justice. For if we simply preserve what remains to us of wilderness, of the countryside and of park land, we also preserve patterns of very unequal access to their resources and their consolations (Soper 1995: 207). In fact, we risk exacerbating these inequalities. It is no us, but the poor of Brazil, who will bear the brunt of the misery which would result form a strictly enforced policy of leaving the Amazonian rain forest untouched, in the absence of alternative means of providing for their livelihood. It is the development of policies to provide such ecologically sustainable alternative which we require, as well as the development of technical means for replacing our current greenhouse gas-emitting sources of energy. Such policies and proposals for concrete action must be formulated by ecologists, environmentalist, people with expertise concerning the functioning of ecosystems and the impacts which our actions have upon them. Such proposals are, therefore, very much the province for Foucault’s specific intellectual, the one who works ‘within specific sectors, at the precise points where their won conditions of life or work situate them’ (Foucault 1980g: 126). For who could be more fittingly described as ‘the strategists of life and death’ than these environmentalists? After the end of the Cold War, it is in this sphere, more than any other, that man’s ‘politics places his existence as a living being in question’ (Foucault 1976: 143). For it is in facing the consequences of our intervention in the non-human world that the fate of our species, and of those with whom we share this planet, will be decided.

# 1AR

### Ontology First Bad

**Epistemology focus causes endless paradigm wars.**

**Wendt**,**1998**. professor of international security – Ohio State University, (Alexander, “On Constitution and Causation in International Relations,” British International Studies Association)

As a community, we in the academic study of international politics spend too much time worrying about the kind of issues addressed in this essay. The central point of IR scholarship is to increase our knowledge of how the world works, not to worry about how (or whether) we can know how the world works. What matters for IR is ontology, not epistemology. This doesn’t mean that there are no interesting epistemological questions in IR, and even less does it mean that there are no important political or sociological aspects to those questions. Indeed there are, as I have suggested above, and as a discipline IR should have more awareness of these aspects. At the same time, however, these are questions best addressed by philosophers and sociologists of knowledge, not political scientists. Let’s face it: most IR scholars, including this one, have little or no proper training in epistemology, and as such **the attempt to solve epistemological problems anyway will inevitably lead to confusion** (after all, **after 2000 years, even the specialists are still having a hard time**). Moreover, **as long as we let our research be driven in an open-minded fashion by substantive questions and problems rather than by epistemologies and methods, there is little need to answer epistemological questions** either. **It is simply not the case that we have to undertake an epistemological analysis of how we can know something before we can know it, a fact amply attested to by the success of the natural sciences, whose practitioners are only rarely forced by the results of their inquiries to consider epistemological questions. In important respects we do know how international politics works, and it doesn’t much matter how we came to that knowledge**. In that light, **going into the epistemology business will distract us from the real business of IR, which is international politics. Our great debates should be about first-order issues of substance**, like the ‘first debate’ between Realists and Idealists, **not second-order issues of method.** Unfortunately, it is no longer a simple matter for IR scholars to ‘just say no’ to **epistemological discourse**. The problem is that this discourse **has** already **contaminated our thinking about international politics, helping to polarize the discipline into ‘paradigm wars’**. Although the resurgence of these wars in the 1980s and 90s is due in large part to the rise of post-positivism, its roots lie in the epistemological anxiety of positivists, who since the 1950s have been very concerned to establish the authority of their work as Science. This is an important goal, one that I share, but its implementation has been marred by an overly narrow conception of science as being concerned only with causal questions that can be answered using the methods of natural science. The effect has been to marginalize historical and interpretive work that does not fit this mould, and to encourage scholars interested in that kind of work to see themselves as somehow not engaged in science. One has to wonder whether the two sides should be happy with the result. Do positivists really mean to suggest that it is not part of science to ask questions about how things are constituted, questions which if those things happen to be made of ideas might only be answerable by interpretive methods? If so, then they seem to be saying that the double-helix model of DNA, and perhaps much of rational choice theory, is not science. And **do post-positivists really** mean to **suggest that students** of social life **should not ask causal questions or** attempt to **test their claims against empirical evidence? If so, then it is not clear by what criteria their work should be judged, or how it differs from art or revelation**. On both sides, in other words, the result of **the** Third Debate’s **sparring over epistemology is often one-sided, intolerant caricatures of science.**

### Predictions Good

**Scenario planning solves their impacts**

Tom **Flaherty, et al.** Michael Bagale, Christopher Dann, Owen Ward, Partners at Booz & Co. Global Management Consulting, 8/7/20**12** (http://www.booz.com/media/uploads/BoozCo\_After-Fukushima-Nuclear-Power.pdf)

It is still not fully clear how the new NRC recommendations will affect the U.S. nuclear fleet. One thing is certain, however: The way the industry has historically evaluated risk will have to change. In particular, the assessment of low-probability, high-consequence risks, such as events that trigger worst-case accident conditions, will need to be revisited. Owner resiliency and responsiveness will need to increase. Probabilistic risk assessment, common in the industry since the 1979 accident at Three Mile Island in Pennsylvania, will assume an even greater role in ensuring nuclear safety in the future. Operators will have to develop enhanced risk analysis methodologies that can adequately address not only the full range of “traditional” postulated design-basis accident scenarios, but also the much more improbable black swan events. Finally, investment decisions will need to evolve to reflect this new risk environment. The greatest degree of regulatory uncertainty surrounds the interpretation of the first recommendation of the NRC’s Near-Term Task Force, which the commission’s staff will consider over the next year. Its goal is to incorporate “beyond design basis” requirements within the definition of what is required to provide “adequate protection”: balancing considerations of defense and risk, without taking cost into account as a deterrent to action. The task force has pointed out that this move is analogous to regulatory changes enacted following the September 11, 2001, terrorist attacks. But it is potentially more far-reaching, given the wide range of possible black swan scenarios. Indeed, it is likely that the broadening of the underlying principle of adequate protection will markedly reshape the regulatory environment. Traditional risk management approaches rely on estimating the likely consequences of potential events; they are not well suited for dealing with extremely lowprobability, high-consequence risks. Black swan risks challenge the traditional approach because even when the events are anticipated, their impact falls outside the expected range of predictability. In the case of the tragic events in northeast Japan in March 2011, the black swan was not the earthquake and tsunami, which were foreseeable, but their sheer size. Another earthquake, the one that struck the East Coast of the U.S. in August 2011, was significantly stronger than what was thought possible in the region. The terrorist attacks on 9/11 represented another black swan event, not because terrorist attacks had never happened on U.S. soil—they had—but because of their scale, their means, and their enormous impact. The U.S. nuclear industry must enhance its risk management capabilities in two ways. First, it must strengthen existing risk assessment methodologies to address extremely low-probability, high-consequence risks. This will involve improving existing processes and tools to identify potential risks from a much wider range of uncertainties than the industry has used in the past (see Exhibit 2). Traditional thinking about “known unknowns” must be expanded to include “unknown unknowns.” Scenario planning that includes situations that are themselves unimaginable can be a useful tool in expanding leaders’ range of thinking about identifying risks and assessing vulnerabilities. In these exercises, management is challenged to begin with the premise of an unforeseeable situation—like the apocryphal story of a wanderer in a desert who finds a Civil War battleship stuck in the sand there—and then to explore the potential vulnerabilities the situation may create. Often, when managers are required to construct a chain of causal events that could explain a seemingly inexplicable situation, a previously unthinkable scenario becomes plausible, even if still highly improbable. Another methodology used for expanding management’s thinking about the future involves wargaming and other simulations of real-world challenges; the games mimic the complexity of genuine events, in which seemingly rational interactions among players or actions can result in unanticipated outcomes. A deeper examination of the interdependencies and correlations among various risk factors can also help unearth additional exposures and potential systemic effects. Nuclear plant owners should be encouraged to build this risk identification capability in a **collaborative manner**. Utility peer groups, technical experts, and industry support entities should work together to develop analytical risk assessment tools and methodologies that individual plant owners and operators can use to quantify the probability and effect of plant-specific worst-case events. The techniques developed through this approach should be tailored to the culture and practices of the companies involved. They can also provide plant owners with best-in-class, cost-effective solutions to regulatory mandates, potentially streamlining the overall NRC review and concurrence cycle with respect to providing “reasonable assurance” regarding operating safety. The end goal of this next generation of risk management is to develop an industry-wide approach to defining and quantifying Fukushimalevel improbable events that will both satisfy any regulatory safety requirements and assuage public concerns, while being implementable and cost-effective. Since the concepts of reasonable assurance and adequate protection do not contemplate direct cost-benefit trade-offs, anything short of this goal may hurt the future of nuclear power.

### Threat Construction Good

**Threat construction doesn’t result in war**

Stuart J. **Kaufman, 2009**. Prof Poli Sci and IR – U Delaware, “Narratives and Symbols in Violent Mobilization: The Palestinian-Israeli Case,” Security Studies 18:3, 400 – 434

**Even when hostile narratives, group fears, and opportunity are strongly present, war occurs only if these factors are harnessed. Ethnic narratives and fears must combine to create significant ethnic hostility among mass publics. Politicians must also seize the opportunity to manipulate that hostility**, evoking hostile narratives and symbols to gain or hold power by riding a wave of chauvinist mobilization. Such mobilization is often spurred by prominent events (for example, episodes of violence) that increase feelings of hostility and make chauvinist appeals seem timely. **If the other group also mobilizes and if each side's felt security needs threaten the security of the other side, the result is a security dilemma spiral of rising fear, hostility, and mutual threat that results in violence**. A virtue of this symbolist theory is that symbolist logic explains why **ethnic peace is more common than ethnonationalist war. Even if hostile narratives, fears, and opportunity exist, severe violence usually can still be avoided if ethnic elites skillfully define group needs in moderate ways and collaborate across group lines to prevent violence**: this is consociationalism.17 **War is likely only if hostile narratives, fears, and opportunity spur hostile attitudes, chauvinist mobilization, and a security dilemma**.

#### Images of nuclear apocalypse are necessary to problematize their usage

James Foard. 1997. Associate Professor of Religion, Arizona State, “Imagining Nuclear Weapons: Hiroshima, Armageddon, and the Annihilation of the Students of Ichijo School,” Journal of the American Academy of Religion, http://jaar.oxfordjournals.org/cgi/reprint/LXV/1/1.pdf TBC 7/1/10)

This ambivalence about Hiroshima has been partially ameliorated by displacing it with Armageddon in our imagination of nuclear weapons In America the images of the atomic bomb, particularly after the Soviet Union's successful test in 1949 (Boyer.341), were pressed into the service of apocalyptic speculations, both scientific and otherwise, a process which has until recently assigned the horror that Hiroshima represented to a superpower war in an imagined future (cf. Pease'562). Specifically, images of a nuclear Armageddon have helped us perform two sorts of cultural tasks fundamental for imagining nuclear weapons: those involving difference and those involving representation. By "difference" I mean both the articulation of what makes nuclear weapons different from other weapons and the consequent reflection on the different human situation engendered by them. By "representation" I mean the expressions which seek to describe the use of nuclear weapons and incorporate that description into structures of meaning Armageddon permits us to define the difference of nuclear weapons by their capacity to destroy the human species in a war that no one will win. It also has suggested to many, particularly literary critics but also some nuclear strategists, that nuclear war is but an imaginary event, divorced from reality, such that all representations are, to use the most famous phrase, "fabulously textual" (Derrida'23).

### Prolif K

**Our concern with proliferation is not a fear of the non-western other but rather a security policy about further horizontal prolif. Causes instability.**

Hugh **Gusterson 1999** “nuclear weapons and the other in the western imagination”, cultural anthropology 14(1), 111-143

**The strategy of exclusion is based pragmatically in the conventions of realpolitik. It involves the candid declaration that, while nuclear weapons may be no more dangerous in the hands of Muslims or Hindus than in those of Christians, they are a prerogative of power,** and the powerful have no intention of allowing the powerless to acquire them. **This is a position that**, **in its rejection of easy racism and phony moralism, is at least honorable in its frankness**. It is the position of New York Times columnist Flora Lewis in her remark that "the 'rights' of nations are limited, and the limits must be imposed by those who can. They may not be more virtuous, but they must strive for it. **That is the reason to keep insisting on nonproliferation**" (1990:23).

### Intervention Good

#### The world without human intervention is not closer to post-Chernobyl than pristine utopia – the environment has already adapted to human presence. And, their notion of nature separate from humanity prevents alt solvency.

Slavoj Zizek 2007. Philosopher and Abercrombie & Fitch Magazine Contributor. Ecology as a New Opium for the Masses, 11/26, http://kasamaproject.org/2008/12/28/zizek-ecology-as-a-new-opium-for-the-masse/)

The lesson to be fully endorsed is thus that of another environmental scientist who came to the result that, while one cannot be sure what the ultimate result of humanity’s interventions into geo-sphere will be, one thing is sure: if humanity were to stop abruptly its immense industrial activity and let nature on Earth take its balanced course, the result would have been a total breakdown, an imaginable catastrophe. “Nature” on Earth is already to such an extent “adapted” to human interventions, the human “pollutions” are already to such an extent included into the shaky and fragile balance of the “natural” reproduction on Earth, that its cessation would cause a catastrophic imbalance. This is what it means that humanity has nowhere to retreat: not only “there is no big Other” (self-contained symbolic order as the ultimate guarantee of Meaning); there is also no Nature qua balanced order of self-reproduction whose homeostasis is disturbed, thrown off the rails, by the imbalanced human interventions. Indeed, what we need is ecology without nature: the ultimate obstacle to protecting nature is the very notion of nature we rely on. Alan Weisman’s The World Without Us is a vision of what would have happened if humanity (and ONLY humanity) were suddenly to disappear from the earth – natural diversity blooming again, nature gradually regaining human artefacts. We, humans, are reduced to a pure disembodied gaze observing our own absence. (As Lacan pointed out, this is the fundamental subjective position of fantasy: to be reduced to a, the gaze which observes the world in the condition of the subject’s non-existence – like the fantasy of witnessing the act of one’s own conception, the parental copulation, or the act of witnessing one’s own burial, like Tom Sawyer and Huck Finn. A jealous child likes to indulge in the fantasy of imagining how his parents would react to his own death, putting at stake his own absence.) “The world without us” is thus fantasy at its purest: witnessing the Earth itself retaining its pre-castrated state of innocence, before we humans spoiled it with our hubris. The irony is that the most prominent example comes from the catastrophe of Chernobyl: the exuberant nature taking over the disintegrating debris of the nearby city Pripyat which was abandoned, left the way it was.

We’ve gone too far, we have to keep managing to maintain the earth

Atkisson 2k

[Alan AtKisson is President and CEO of The AtKisson Group, an international sustainability consultancy to business and government, “Sustainability is Dead— Long Live Sustainability, ” http://www.rrcap.unep.org/uneptg06/course/Robert/SustainabilityManifesto2001.pdf]

At the dawn of the third milennium human civilization finds itself in a seeming paradox of gargantuan proportions. On the one hand, industrial and technological growth is destroying much of nature, endangering ourselves, and threatening our descendants. On the other hand, we must accelerate our industrial and technological development, **or the forces we have already unleashed** will wreak even greater havoc on the world for generations to come. We cannot go on, and we cannot stop. We must transform. Facing a Great Paradox At precisely the moment when humanity’s science, technology, and economy has grown to the point that we can monitor and evaluate all the major systems that support life, all over the Earth, we have discovered that most of these systems are being systematically degraded and destroyed . . . by our science, technology, and economy. The evidence that we are beyond the limits to growth is by now overwhelming: the alarms include climatic change, disappearing biodiversity, falling human sperm counts, troubling slow-downs in food production after decades of rapid expansion, the beginning of serious international tensions over basic needs like water. Wild storms and floods and eerie changes in weather patterns are but a first visible harbinger of more serious trouble to come, trouble for which we are not adequately prepared. Indeed, change of all kinds—in the Biosphere (nature as a whole), the Technosphere (the entirety of human manipulation of nature), and the Noösphere (the collective field of human consciousness)—is happening so rapidly that it exceeds our capacity to understand it, control it, or respond to it adequately in corrective ways. Humanity is simultaneously entranced by its own power, overwhelmed by the problems created by progress, and continuing to steer itself over a cliff. Our economies and technologies are changing certain basic structures of planetary life, such as the balance of carbon in the atmosphere, genetic codes, the amount of forest cover, species variety and distribution, and the foundations of cultural identity. Unless we make technological advances of the highest order, **many of the destructive changes we are causing to nature are irreversible**. Extinct species cannot (yet) be brought back to life. No credible strategy for controlling or reducing carbon dioxide levels in the atmosphere has been put forward. We do not know how to fix what we’re breaking. At the same time, some of the very products of our technology— creations. In the case of certain creations, like nuclear materials and some artificially constructed or genetically modified organisms, our secure custodianship must be maintained for thousands of years. We are, in effect, committed to a high-technology future. **Any slip in our mastery over the forces now under our command could doom our descendants**—including not just human descendants, but also those wild species still remaining in the oceans and wilderness areas—to unspeakable suffering. We must continue down an intensely scientific and technological path, and we can never stop. Sustaining such high levels of complex civilization and continuous development has never before happened in the history of humanity, so far as we know. From the evidence in hand, ancient civilizations have generally done no better than a few hundred years of highly variable progress and regress, at comparatively low levels of technology, with relatively minor risks to the greater whole associated with their inevitable collapse. The only institutions that have demonstrated continuity over millennia are religions and spiritual traditions and institutions. So, while we must be intensely scientific, our future is also in need of a renewed sense of spirituality and the sacred. Given our diversity and historic circumstances, no one religion is likely to be able, now or in the future, to sustain us or unite us.We need a new sense of spirituality that is inclusive of believers, nonbelievers, and those for whom belief itself is not the core of spiritual experience.We need a sense of the sacred that is inclusive of the scientific quest and the technological imperative. We need a common sense of high purpose that connects, bridges, and uplifts all of our religious traditions to their highest levels of wisdom and compassion, while sustaining and honoring their unique historical gifts. We need, especially, all the inspiration and solace they can offer, because the task ahead of us is enormous beyond compare. Our generation is charged with an unprecedented responsibility: to lay secure foundations for a global civilization that can last for thousands of years. To accomplish this task, we must, in the coming decades, maintain and greatly enhance our technical capacities and cultural stability, while simultaneously changing almost every technological system on which we now depend so that it causes no harm to people or the natural world, now or in the future. Our situation is not only without precedent; it is virtually impossible to comprehend. Those who, in the waning decades of the Second Millennium, have been able to comprehend this Great Paradox to some degree often feel themselves emotionally overwhelmed and powerless to effect change—the situation I have elsewhere called “Cassandra’s Dilemma,” after the mythical Trojan prophet whose accurate foresight went unheeded. Those in power, on the other hand, face stiff barriers to comprehension and action, including financial, political, and psychological disincentives. Denial and avoidance have been civilization’s predominant responses to the warnings coming from science and the signals coming from nature during the 1970s, 80s, and 90s. But the feedback from nature, as well as the growing global distress signals from those left behind in either relative or absolute poverty, are both becoming so strong that they can no longer be denied, even by those with the greatest vested interest in denial. These early decades of the Third Millennium—and especially this first decade, which philosopher Michael Zimmerman has said should be declared “the Oughts” to signify the urgency for addressing what ought to be done—are the decades of reckoning, the time for decisively changing course. Modest Changes are Not Enough Change is clearly possible. Modest changes in the direction of greater sustainability are now underway, and modest, incremental changes in both technology and habitual practice can ameliorate—indeed, have ameliorated—some dangerous trends in the short run. But overall, incremental change of this sort has proven exceedingly slow and difficult to effect, and most incremental change efforts fall far short of what is needed. Carbon emissions, which are now causing visible climate change, provide a good example: current global agreements for modest reductions are hard to reach, impossible to enforce, and virtually without effect; and even if they were successful, they would have a negligible impact on the critical trend. Far more dramatic changes are required. Dramatic, rapid change, in the form of extremely accelerated innovation in the Noösphere (conscious awareness and understanding) and the Technosphere (physical practice) is necessary both to prevent continuing and ever more catastrophic damage to the Biosphere, and to adapt to those irreversible changes to which the planet is already committed, such as some amount of climatic instability. The rapid evolution of many social, economic, and political institutions, which mediate between the Noösphere and the Technosphere, is obviously necessary as well. Without extraordinary and dramatic change, the most probable outcome of industrial civilization's current trajectory is convulsion and collapse. “Collapse” refers not to a sudden or apocalyptic ending, but to a process of accelerating social, economic, and ecological decay over the course of a generation or two, punctuated by ever-worsening episodes of crisis. The results would likely be devastating, in both human and ecological terms. The onset of collapse is probably not ahead of us in time, but behind us: in some places, such as storm-ravaged Orissa, Honduras, Bangladesh, Venezuela, even England and France, collapse-related entropy may already be apparent. Trend, of course, is probability, not destiny. It is still theoretically possible, albeit very unlikely, that civilization could continue straight ahead, without any conscious effort to direct technological development and the actions of markets in more environmentally benign and culturally constructive ways, and escape collapse through an unexpected (though currently unimaginable) technological breakthrough or improbable set of events. Some have called this the “Miracle Scenario.” But hoping for a miracle is by far the riskiest choice. The future may be fundamentally unknowable, but certain physical processes are predictable, given adequate knowledge about current trends, causal linkages, and systemic effects. Prediction based on extrapolation is not just the province of physics: much of our economy is focused on efforts to accurately predict the future based on past trends. The Internet economy, for example, relies upon Moore’s Law (that the speed and capacity of semiconductor chips doubles roughly every 18 months). Insurance companies base their entire portfolio of investments and fees on statistical assessments of past disasters and projected trends into the future. When it comes to the prospects for sustaining our civilization, we have to trust our species’ best judgment, which comes from the interpretations and extrapolations of our best experts. These experts—such as the respected Intergovernmental Panel on Climate Change—are reporting a disturbingly high degree of consensus about the level of threat to our future well-being. We are in trouble. We must transform our civilization. Transformation is Possible Dramatic civilizational change—transformation, in a word—is not so difficult to imagine. History is full of examples. Global history since the Renaissance, with all our remarkable transformations in technology, economics, and culture, is largely a product of humanity learning to take seriously the evidence of its senses, to reflect on that evidence carefully, and to make provisional conclusions that can be tested. This is the cornerstone of science. If we are to take seriously the evidence of our senses and our science, we must provisionally conclude that we are now largely responsible for living conditions on this planet. We have the power to fundamentally shape climate, manage ecosystems, design life-forms, and much more. The fact that we are currently doing these things very badly obscures the fact that we are doing them, and can therefore learn to do them better. Designing and managing the world is now our responsibility. That is the hypothesis that must now be tested by humanity as a whole, if we are to prevent collapse and succeed in restoration. To succeed, we must take our responsibility as world-shapers far more seriously than we currently do. History demonstrates that we, as a species, have the power to create the future we envision. If, therefore, we give in to despair, collapse will follow. If we cultivate a vision of ourselves as powerful and wise stewards of our planetary home, transformation becomes possible. Examples of cultural transformation occurring in a generation or less abound. The Meiji Restoration transformed Japan from a closed, agricultural society to an industrial one in just a few decades. The wholesale redirection of the North American and European economies during World War II took just a few years. The Apollo Program’s success in putting humans on the moon transpired, on schedule, within a decade. The fall of the Berlin Wall . . . the end of Apartheid . . . the change in China from a state-planned to a market economy . . . much of recent history suggests that transformation is not only possible, but a frequent occurrence in civilizational evolution. None of these events, however, remotely approaches the scale of global transformation we must now effect in technology, energy, transportation, agriculture, infrastructure, and economics, based on a new cultural understanding of our role as nature’s managers, the world's architects, the planet’s artists and engineers. But this testimony from history illustrates something profoundly important about transformation, in addition to its raw and indisputable possibility: no transformative change truly happens suddenly. Nor does transformation involve the magical or instantaneous creation of a new culture. “Transformation” is the name we give to the extremely accelerated adoption of existing innovations, together with the acceleration of innovation itself. Understanding transformation in these terms gives, to those who seek to create one, a reason for hope. An enormous amount of design work, preliminary to a transformation of the kind envisioned here, has already been done. Inventions, policies, models, scenarios, alternatives . . . innovations of all kinds have been developed by thoughtful and committed people over a generation, and the speed of innovation is increasing. Intense and focused commitment by a critical mass of talented, dedicated, and influential people—in business, government, religion, the arts, the civil sector, every walk of life—could accelerate the process by which innovation enters the mainstream of technical and social practice, and thereby turns humanity on a more hopeful course. By framing ambitious and visionary goals, and by highlighting the dangers and risks of inaction, this corps of skilled and forward-looking individuals in groups, organizations, corporations and governments could inspire others. The numbers involved could grow exponentially, and as institutions became thoroughly oriented toward achieving transformation, enormous resources could be mobilized, accelerating the transformation process still further. One generation of intensely focused investment, research, and redevelopment— redesigning our energy systems, overhauling our chemical industries, rebuilding our cities, finding substitutes for wood and replanting lost forests, and so much more—could transform the world as we know it into something far more beautiful, satisfying, and sustainable. This I believe: Sustainability is possible. Sustainability is desirable. Sustainability is a goal worthy of one’s life’s work. Sustainability is the great task of the next century. Sustainability is the next challenge on the road to our destiny. (1-8)