## Plan

#### The United States Federal Government should reduce restrictions on airborne wind energy systems in the United States.

## Contention 1: The Environment

Warming is real, anthropogenic, and by far the largest risk of extinction

Deibel ‘7 (Terry L. Deibel, professor of IR at National War College, Foreign Affairs Strategy, “Conclusion: American Foreign Affairs Strategy Today Anthropogenic – caused by CO2”)

Finally, **there is one major existential threat** to American security (as well as prosperity) of a nonviolent nature, which, though far in the future, demands urgent action. **It is the threat of global warming to the stability of the climate upon which all earthly life depends**. Scientists worldwide have been observing the gathering of this threat for three decades now, **and what was once a mere possibility has passed through probability to near certainty.** Indeed **not one of more than 900 articles** **on climate change published in refereed scientific journals** from 1993 to 2003 doubted that anthropogenic warming is occurring. “In legitimate scientific circles,” writes Elizabeth Kolbert, “it is virtually **impossible to find evidence of disagreement** over the fundamentals of global warming.” Evidence from a vast international scientific monitoring effort accumulates almost weekly, as this sample of newspaper reports shows: an international panel predicts “brutal droughts, floods and violent storms across the planet over the next century”; climate change could “literally alter ocean currents, wipe away huge portions of Alpine Snowcaps and aid the spread of cholera and malaria”; “glaciers in the Antarctic and in Greenland are melting much faster than expected, and…worldwide, plants are blooming several days earlier than a decade ago”; “rising sea temperatures have been accompanied by a significant global increase in the most destructive hurricanes”; “NASA scientists have concluded from direct temperature measurements that 2005 was the hottest year on record, with 1998 a close second”; “Earth’s warming climate is estimated to contribute to more than 150,000 deaths and 5 million illnesses each year” as disease spreads; “widespread bleaching from Texas to Trinidad…killed broad swaths of corals” due to a 2-degree rise in sea temperatures. “The world is slowly disintegrating,” concluded Inuit hunter Noah Metuq, who lives 30 miles from the Arctic Circle. “They call it climate change…but we just call it breaking up.” From the founding of the first cities some 6,000 years ago until the beginning of the industrial revolution, carbon dioxide levels in the atmosphere remained relatively constant at about 280 parts per million (ppm). At present they are accelerating toward 400 ppm, and by 2050 they will reach 500 ppm, about double pre-industrial levels. Unfortunately, atmospheric CO2 lasts about a century, so there is no way immediately to reduce levels, only to slow their increase, we are thus in for significant global warming; the only debate is how much and how serous the effects will be. As the newspaper stories quoted above show, we are already experiencing the effects of 1-2 degree warming in more violent storms, spread of disease, mass die offs of plants and animals, species extinction, and threatened inundation of low-lying countries like the Pacific nation of Kiribati and the Netherlands at a warming of 5 degrees or less the Greenland and West Antarctic ice sheets could disintegrate, leading to a sea level of rise of 20 feet that would cover North Carolina’s outer banks, swamp the southern third of Florida, and inundate Manhattan up to the middle of Greenwich Village. Another catastrophic effect would be the collapse of the Atlantic thermohaline circulation that keeps the winter weather in Europe far warmer than its latitude would otherwise allow. Economist William Cline once estimated the damage to the United States alone from moderate levels of warming at 1-6 percent of GDP annually; severe warming could cost 13-26 percent of GDP. But **the most frightening scenario is runaway greenhouse warming, based on positive feedback from the buildup of water** **vapor** in the atmosphere that is both caused by and causes hotter surface temperatures. Past ice age transitions, associated with only 5-10 degree changes in average global temperatures, took place in just decades, even though no one was then pouring ever-increasing amounts of carbon into the atmosphere. Faced with this specter, the best one can conclude is that “humankind’s continuing enhancement of the natural greenhouse effect is akin to playing Russian roulette with the earth’s climate and humanity’s life support system. At worst, says physics professor Marty Hoffert of New York University, “we’re just going to burn everything up; we’re going to het the atmosphere to the temperature it was in the Cretaceous when there were crocodiles at the poles, and then everything will collapse.” During the Cold War, astronomer Carl Sagan popularized a theory of nuclear winter to describe how a thermonuclear war between the Untied States and the Soviet Union would not only destroy both countries but possible end life on this planet. **Global warming is the post-Cold War era’s equivalent of nuclear winter at least as serious and considerably better supported scientifically. Over the long run it puts dangers form terrorism and traditional military challenges to shame**. It is a threat not only to the security and prosperity to the United States, but potentially to the continued existence of life on this planet.

#### CO2 kills ocean biodiversity – causes acidification and mass dieoff

Joe Romm is a Fellow at American Progress and is the editor of Climate Progress, “Science: Ocean Acidifying So Fast It Threatens Humanity’s Ability to Feed Itself,” 3/2/2012, http://thinkprogress.org/romm/2012/03/02/436193/science-ocean-acidifying-so-fast-it-threatens-humanity-ability-to-feed-itself/?utm\_source=feedburner&utm\_medium=email&utm\_campaign=Feed%3A+climateprogre

The world’s oceans may be turning acidic faster today from human carbon emissions than they did during four major extinctions in the last 300 million years, when natural pulses of carbon sent global temperatures soaring, says a new study in Science. The study is the first of its kind to survey the geologic record for evidence of ocean acidification over this vast time period. “What we’re doing today really stands out,” said lead author Bärbel Hönisch, a paleoceanographer at Columbia University’s Lamont-Doherty Earth Observatory. “We know that life during past ocean acidification events was not wiped out—new species evolved to replace those that died off. But if industrial carbon emissions continue at the current pace, we may lose organisms we care about—coral reefs, oysters, salmon.” That’s the news release from a major 21-author Science paper, “The Geological Record of Ocean Acidification” (subs. req’d). We knew from a 2010 Nature Geoscience study that the oceans are now acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred. But this study looked back over 300 million and found that “the unprecedented rapidity of CO2 release currently taking place” has put marine life at risk in a frighteningly unique way: … the current rate of (mainly fossil fuel) CO2 release stands out as capable of driving a combination and magnitude of ocean geochemical changes potentially unparalleled in at least the last ~300 My of Earth history, raising the possibility that we are entering an unknown territory of marine ecosystem change. That is to say, it’s not just that acidifying oceans spell marine biological meltdown “by end of century” as a 2010 Geological Society study put it. We are also warming the ocean and decreasing dissolved oxygen concentration. That is a recipe for mass extinction. A 2009 Nature Geoscience study found that ocean dead zones “devoid of fish and seafood” are poised to expand and “remain for thousands of years.“ And remember, we just learned from a 2012 new Nature Climate Change study that carbon dioxide is “driving fish crazy” and threatening their survival. Here’s more on the new study: The oceans act like a sponge to draw down excess carbon dioxide from the air; the gas reacts with seawater to form carbonic acid, which over time is neutralized by fossil carbonate shells on the seafloor. But if CO2 goes into the oceans too quickly, it can deplete the carbonate ions that corals, mollusks and some plankton need for reef and shell-building.

**Extinction**

Romm ‘10 (Dr. Joseph Romm is the editor of Climate Progress and a Senior Fellow at the American Progress, Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy during the Clinton Administration, PhD in Physics from MIT, “Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred” <http://climateprogress.org/2010/02/18/ocean-acidification-study-mass-extinction-of-marine-life-nature-geoscience/#more-19529>)

Marine life face some of the worst impacts. We now know that global warming is “capable of wrecking the marine ecosystem and depriving future generations of the harvest of the seas” (see 2009 Nature Geoscience study concludes ocean dead zones “devoid of fish and seafood” are poised to expand and “remain for thousands of years”). The acidification of the ocean in particular is a grave threat — for links to primary sources and recent studies, see “Imagine a World without Fish: Deadly ocean acidification — hard to deny, harder to geo-engineer, but not hard to stop” (and below). A new Nature Geoscience study, “Past constraints on the vulnerability of marine calcifiers to massive carbon dioxide release” (subs. req’d) provides a truly ominous warning. The release from the researchers at the University of Bristol is “Rate of ocean acidification the fastest in 65 million years.” I am reprinting below a piece by award-winning science journalist Carl Zimmer published this week by Yale environment360, which explains ocean acidification and what this important study says: The JOIDES Resolution looks like a bizarre hybrid of an oil rig and a cargo ship. It is, in fact, a research vessel that ocean scientists use to dig up sediment from the sea floor. In 2003, on a voyage to the southeastern Atlantic, scientists aboard the JOIDES Resolution brought up a particularly striking haul. They had drilled down into sediment that had formed on the sea floor over the course of millions of years. The oldest sediment in the drill was white. It had been formed by the calcium carbonate shells of single-celled organisms — the same kind of material that makes up the White Cliffs of Dover. But when the scientists examined the sediment that had formed 55 million years ago, the color changed in a geological blink of an eye. “In the middle of this white sediment, there’s this big plug of red clay,” says Andy Ridgwell, an earth scientist at the University of Bristol. In other words, the vast clouds of shelled creatures in the deep oceans had virtually disappeared. Many scientists now agree that this change was caused by a drastic drop of the ocean’s pH level. The seawater became so corrosive that it ate away at the shells, along with other species with calcium carbonate in their bodies. It took hundreds of thousands of years for the oceans to recover from this crisis, and for the sea floor to turn from red back to white. The clay that the crew of the JOIDES Resolution dredged up may be an ominous warning of what the future has in store. By spewing carbon dioxide into the air, we are now once again making the oceans more acidic. Today, Ridgwell and Daniela Schmidt, also of the University of Bristol, are publishing a study in the journal Nature Geoscience, comparing what happened in the oceans 55 million years ago to what the oceans are experiencing today. Their research supports what other researchers have long suspected: The acidification of the ocean today is bigger and faster than anything geologists can find in the fossil record over the past 65 million years. Indeed, its speed and strength — Ridgwell estimate that current ocean acidification is taking place at ten times the rate that preceded the mass extinction 55 million years ago — may spell doom for many marine species, particularly ones that live in the deep ocean. “This is an almost unprecedented geological event,” says Ridgwell. When we humans burn fossil fuels, we pump carbon dioxide into the atmosphere, where the gas traps heat. But much of that carbon dioxide does not stay in the air. Instead, it gets sucked into the oceans. If not for the oceans, climate scientists believe that the planet would be much warmer than it is today. Even with the oceans’ massive uptake of CO2, the past decade was still the warmest since modern record-keeping began. But storing carbon dioxide in the oceans may come at a steep cost: It changes the chemistry of seawater. At the ocean’s surface, seawater typically has a pH of about 8 to 8.3 pH units. For comparison, the pH of pure water is 7, and stomach acid is around 2. The pH level of a liquid is determined by how many positively charged hydrogen atoms are floating around in it. The more hydrogen ions, the lower the pH. When carbon dioxide enters the ocean, it lowers the pH by reacting with water. The carbon dioxide we have put into the atmosphere since the Industrial Revolution has lowered the ocean pH level by .1. That may seem tiny, but it’s not. The pH scale is logarithmic, meaning that there are 10 times more hydrogen ions in a pH 5 liquid than one at pH 6, and 100 times more than pH 7. As a result, a drop of just .1 pH units means that the concentration of hydrogen ions in the ocean has gone up by about 30 percent in the past two centuries. To see how ocean acidification is going to affect life in the ocean, scientists have run laboratory experiments in which they rear organisms at different pH levels. The results have been worrying — particularly for species that build skeletons out of calcium carbonate, such as corals and amoeba-like organisms called foraminifera. The extra hydrogen in low-pH seawater reacts with calcium carbonate, turning it into other compounds that animals can’t use to build their shells. These results are worrisome, not just for the particular species the scientists study, but for the ecosystems in which they live. Some of these vulnerable species are crucial for entire ecosystems in the ocean. Small shell-building organisms are food for invertebrates, such as mollusks and small fish, which in turn are food for larger predators. Coral reefs create an underwater rain forest, cradling a quarter of the ocean’s biodiversity. But on their own, lab experiments lasting for a few days or weeks may not tell scientists how ocean acidification will affect the entire planet. “It’s not obvious what these mean in the real world,” says Ridgwell. One way to get more information is to look at the history of the oceans themselves, which is what Ridgwell and Schmidt have done in their new study. At first glance, that history might suggest we have nothing to worry about. A hundred million years ago, there was over five times more carbon dioxide in the atmosphere and the ocean was .8 pH units lower. Yet there was plenty of calcium carbonate for foraminifera and other species. It was during this period, in fact, that shell-building marine organisms produced the limestone formations that would eventually become the White Cliffs of Dover. But there’s a crucial difference between the Earth 100 million years ago and today. Back then, carbon dioxide concentrations changed very slowly over millions of years. Those slow changes triggered other slow changes in the Earth’s chemistry. For example, as the planet warmed from more carbon dioxide, the increased rainfall carried more minerals from the mountains into the ocean, where they could alter the chemistry of the sea water. Even at low pH, the ocean contains enough dissolved calcium carbonate for corals and other species to survive. Today, however, we are flooding the atmosphere with carbon dioxide at a rate rarely seen in the history of our planet. The planet’s weathering feedbacks won’t be able to compensate for the sudden drop in pH for hundreds of thousands of years. Scientists have been scouring the fossil record for periods of history that might offer clues to how the planet will respond to the current carbon jolt. They’ve found that 55 million years ago, the Earth went through a similar change. Lee Kump of Penn State and his colleagues have estimated that roughly 6.8 trillion tons of carbon entered the Earth’s atmosphere over about 10,000 years. Nobody can say for sure what unleashed all that carbon, but it appeared to have had a drastic effect on the climate. Temperatures rose between 5 and 9 degrees Celsius (9 to 16 Fahrenheit). Many deep-water species became extinct, possibly as the pH of the deep ocean became too low for them to survive. But this ancient catastrophe (known as the Paleocene-Eocene thermal maximum, or PETM) was not a perfect prequel to what’s happening on Earth today. The temperature was warmer before the carbon bomb went off, and the pH of the oceans was lower. The arrangement of the continents was also different. The winds blew in different patterns as a result, driving the oceans in different directions. All these factors make a big difference on the effect of ocean acidification. For example, the effect that low pH has on skeleton-building organisms depends on the pressure and temperature of the ocean. Below a certain depth in the ocean, the water becomes so cold and the pressure so high that there’s no calcium carbonate left for shell-building organisms. That threshold is known as the saturation horizon. To make a meaningful comparison between the PETM and today, Ridgwell and Schmidt built large-scale simulations of the ocean at both points of time. They created a virtual version of the Earth 55 million years ago and let the simulation run until it reached a stable state. The pH level of their simulated ocean fell within the range of estimates of the pH of the actual ocean 55 millions years ago. They then built a version of the modern Earth, with today’s arrangements of continents, average temperature, and other variables. They let the modern world reach a stable state and then checked the pH of the ocean. Once again, it matched the real pH found in the oceans today. Ridgwell and Schmidt then jolted both of these simulated oceans with massive injections of carbon dioxide. They added 6.8 trillion tons of carbon over 10,000 years to their PETM world. Using conservative projections of future carbon emissions, they added 2.1 trillion tons of carbon over just a few centuries to their modern world. Ridgwell and Schmidt then used the model to estimate how easily carbonate would dissolve at different depths of the ocean. The results were strikingly different. Ridgwell and Schmidt found that ocean acidification is happening about ten times faster today than it did 55 million years ago. And while the saturation horizon rose to 1,500 meters 55 million years ago, it will lurch up to 550 meters on average by 2150, according to the model. The PETM was powerful enough to trigger widespread extinctions in the deep oceans. Today’s faster, bigger changes to the ocean may well bring a new wave of extinctions. Paleontologists haven’t found signs of major extinctions of corals or other carbonate-based species in surface waters around PETM. But since today’s ocean acidification is so much stronger, it may affect life in shallow water as well. “We can’t say things for sure about impacts on ecosystems, but there is a lot of cause for concern,” says Ridgwell. Ellen Thomas, a paleoceanographer at Yale University, says that the new paper “is highly significant to our ideas on ocean acidification.” But she points out that life in the ocean was buffeted by more than just a falling pH. “I’m not convinced it’s the whole answer,” she says. The ocean’s temperature rose and oxygen levels dropped. Together, all these changes had complex effects on the ocean’s biology 55 million years ago. Scientists now have to determine what sort of combined effect they will have on the ocean in the future. Our carbon-fueled civilization is affecting life everywhere on Earth, according to the work of scientists like Ridgwell — even life that dwells thousands of feet underwater. “The reach of our actions can really be quite global,” says Ridgwell. It’s entirely possible that the ocean sediments that form in the next few centuries will change from the white of calcium carbonate back to red clay, as ocean acidification wipes out deep-sea ecosystems. “It will give people hundreds of millions of years from now something to identify our civilization by,” says Ridgwell. And for completeness’ sake, here’s more background on ocean acidification (which regular CP readers can skip). You can watch NOAA administrator Lubchenco give a demonstration of the science of ocean acidification. Ocean acidification must be a core climate message, since it is hard to deny and impervious to the delusion that geoengineering is the silver bullet. Indeed, a major 2009 study GRL study, “Sensitivity of ocean acidification to geoengineered climate stabilization” (subs. req’d), concluded: The results of this paper support the view that climate engineering will not resolve the problem of ocean acidification, and that therefore deep and rapid cuts in CO2 emissions are likely to be the most effective strategy to avoid environmental damage from future ocean acidification. If you want to understand ocean acidification better, see this BBC story, which explains: Man-made pollution is raising ocean acidity at least 10 times faster than previously thought, a study says. Or see this Science magazine study, “Evidence for Upwelling of Corrosive “Acidified” Water onto the Continental Shelf” (subs. req’), which found Our results show for the first time that a large section of the North American continental shelf is impacted by ocean acidification. Other continental shelf regions may also be impacted where anthropogenic CO2-enriched water is being upwelled onto the shelf. Or listen to the Australia’s ARC Centre of Excellence for Coral Reef Studies, which warns: The world’s oceans are becoming more acid, with potentially devastating consequences for corals and the marine organisms that build reefs and provide much of the Earth’s breathable oxygen. The acidity is caused by the gradual buildup of carbon dioxide (CO2) in the atmosphere, dissolving into the oceans. Scientists fear it could be lethal for animals with chalky skeletons which make up more than a third of the planet’s marine life…. Corals and plankton with chalky skeletons are at the base of the marine food web. They rely on sea water saturated with calcium carbonate to form their skeletons. However, as acidity intensifies, the saturation declines, making it harder for the animals to form their skeletal structures (calcify). “Analysis of coral cores shows a steady drop in calcification over the last 20 years,” says Professor Ove Hoegh-Guldberg of CoECRS and the University of Queensland. “There’s not much debate about how it happens: put more CO2 into the air above and it dissolves into the oceans. “When CO2 levels in the atmosphere reach about 500 parts per million, you put calcification out of business in the oceans.” (Atmospheric CO2 levels are presently 385 ppm, up from 305 in 1960.) I’d like to see an analysis of what happens when you get to 850 to 1000+ ppm because that is where we’re headed (see U.S. media largely ignores latest warning from climate scientists: “Recent observations confirm … the worst-case IPCC scenario trajectories (or even worse) are being realised” — 1000 ppm). In June, dozens of Academies of Science, including ours and China’s, issued a joint statement on ocean acidification, warned “Marine food supplies are likely to be reduced with significant implications for food production and security in regions dependent on fish protein, and human health and wellbeing” and “Ocean acidification is irreversible on timescales of at least tens of thousands of years.” They conclude: Ocean acidification is a direct consequence of increasing atmospheric CO2 concentrations. To avoid substantial damage to ocean ecosystems, deep and rapid reductions of global CO2 emissions by at least 50% by 2050, and much more thereafter are needed. We, the academies of science working through the InterAcademy Panel on International Issues (IAP), call on world leaders to: • Acknowledge that ocean acidification is a direct and real consequence of increasing atmospheric CO2 concentrations, is already having an effect at current concentrations, and is likely to cause grave harm to important marine ecosystems as CO2 concentrations reach 450 ppm and above; • Recognise that reducing the build up of CO2 in the atmosphere is the only practicable solution to mitigating ocean acidification; • Within the context of the UNFCCC negotiations in the run up to Copenhagen 2009, recognise the direct threats posed by increasing atmospheric CO2 emissions to the oceans and therefore society, and take action to mitigate this threat; • Implement action to reduce global CO2 emissions by at least 50% of 1990 levels by 2050 and continue to reduce them thereafter. If we want to save life in the oceans — and save ourselves, since we depend on that life— the time to start slashing carbon dioxide emissions is now.

The science is settled - warming is real and anthropogenic - be highly skeptical of negative evidence

Costello et al ‘11(Anthony, Professor and Co-Director of the Institute for Global Health @ University College London, Mark Malsin, Professor in the Department of Geography @ UCL, Director of the UCL Institute for Human Health and Performance, Anne Johnson, Professor of Infectious Disease Epidemiology @ UCL, Paul Ekins, PhD in Economics from University of London and Professor of Energy and Environmental Policy @ UCL Energy Institute, "Global health and climate change: moving from denial and catastrophic fatalism to positive action," May, http://rsta.royalsocietypublishing.org/content/369/1942/1866.full)

Advocacy about the health consequences will ensure that climate change is a high priority. The United Nations Convention on Climate Change was set up in 1992 to ensure that nations worked together to minimize the adverse effects, but McMichael and Neira noted that, in preparation for the Copenhagen conference in December 2009, only four of 47 nations mentioned human health as a consideration [1]. With business as usual, global warming caused by rising greenhouse gas (GHG) emissions will threaten mass populations through increased transmission of some infections, heat stress, food and water insecurity, increased deaths from more frequent and extreme climate events, threats to shelter and security, and through population migration [2]. On the one hand it is necessary in the media to counter climate change sceptics and denialists, but on the other it is also important not to allow climate catastrophists, who tell us it is all too late, to deflect us from pragmatic and positive action. Catastrophic scenarios are possible in the longer term, and effective action will be formidably difficult, but evidence suggests that we do have the tools, the time and the resources to bring about the changes needed for climate stability. Previous Section Next Section 2. Climate change evidence and denial Given the current body of evidence, it is surprising that global warming and its causal relationship with atmospheric GHG pollution is disputed any more than the relationship between acquired immune deficiency syndrome (AIDS) and human immunodeficiency virus (HIV) infection, or lung cancer and cigarette smoking. The basic principles that determine the Earth’s temperature are, of course, relatively simple. Some of the short-wave solar radiation that strikes the Earth is reflected back into space and some is absorbed by the land and emitted as long-wave radiation (heat). Some of the long-wave radiation is trapped in the atmosphere by ‘greenhouse gases’, which include water vapour, carbon dioxide and methane. Without GHGs the Earth would be on average 33°C colder. Over the last 150 years, since the Industrial Revolution, humans have been adding more carbon dioxide and methane into the atmosphere. The result is that the Earth’s atmosphere, ocean and land are indeed warming—due to increased atmospheric ‘greenhouse gas’ concentrations [3]. Gleick et al. [4], from the US National Academy of Sciences, wrote a letter to Science stating ‘There is compelling, comprehensive, and consistent objective evidence that humans are changing the climate in ways that threaten our societies and the ecosystems on which we depend’. The most recent report by the Intergovernmental Panel on Climate Change (IPCC) [5], amounting to nearly 3000 pages of detailed review and analysis of published research, also declares that the scientific uncertainties of global warming are essentially resolved. This report states that there is clear evidence for a 0.75°C rise in global temperatures and 22 cm rise in sea level during the twentieth century. The IPCC synthesis also predicts that global temperatures could rise further by between 1.1°C and 6.4°C by 2100, and sea level could rise by between 28 and 79 cm, or more if the melting of Greenland and Antarctica accelerates. In addition, weather patterns will become less predictable and the occurrence of extreme climate events, such as storms, floods, heat waves and droughts, will increase. There is also strong evidence for ocean acidification driven by more carbon dioxide dissolving in the oceans [6]. Given the current failure of international negotiations to address carbon emission reductions, and that atmospheric warming lags behind rises in CO2 concentration, there is concern that global surface temperature will rise above the supposedly ‘safe limit’ of 2°C within this century. Each doubling of atmospheric carbon dioxide concentration alone is expected to produce 1.9–4.5°C of warming at equilibrium [7]. Of course, climate modelling is an extremely complex process, and uncertainty with projections relating to future emissions trajectories means that the time scale and magnitude of future climate change cannot be predicted with certainty [8]. These uncertainties are magnified when future climate predictions are used to estimate potential impacts. For example, the environmental impacts of climate change are also uncertain, but could underestimate such impacts because they detrimentally interact with habitat loss, pollution and loss of biodiversity due to other causes. There is also the additional problem that switching from biome to biome may not be directly reversible. For example, rainforest recycles a huge amount of water so it can survive a significant amount of aridification before it burns and is replaced by savannah. But the region then has to get much wetter before rainforest can return, as there is greatly reduced water cycling in savannah [9]. In the policy arena, further uncertainty surrounds the desire for international agreements on emission cuts, and the possible routes to such agreement and implementation. The feasible speed of technological innovation in carbon capture and provision of renewable/low-carbon energy resources is also uncertain. Denying the causes or the current weight of evidence for anthropogenic climate change is irrational, just as the existence of ‘uncertainties’ should not be used to deny the need for proportionate action, when such uncertainties could underestimate the risks and impact of climate change. There is no reason for inaction and there are many ways we can use our current knowledge of climate change to improve health provision for current and future generations. Previous Section Next Section 3. Catastrophism At the other end of the scale are doom-mongers who predict catastrophic population collapse and the end of civilization. In the early nineteenth century, the French palaeontologist Georges Cuvier first addressed catastrophism and explained patterns of extinction observed in the fossil record through catastrophic natural events [10]. We know now of five major extinctions: the Ordovician–Silurian extinction (439 million years ago), the Late Devonian extinction (about 364 million years ago), the Permian–Triassic extinction (about 251 million years ago), the End Triassic extinction (roughly 199 million to 214 million years ago) and the Cretaceous–Tertiary extinction (about 65 million years ago). These mass extinctions were caused by a combination of plate tectonics, supervolcanism and asteroid impacts. The understanding of the mass extinctions led Gould & Eldredge [11] to update Darwin’s theory of evolution with their own theory of punctuated equilibrium. Many scientists have suggested that the current human-induced extinction rates could be as fast as those during these mass extinctions [12,13]. For example, one study predicted that 58 per cent of species may be committed to extinction by 2050 due to climate change alone [14], though this paper has been criticized [15,16]. Some people have even suggested that human extinction may not be a remote risk [17–19]. Sherwood & Huber [7] point to continued heating effects that could make the world largely uninhabitable by humans and mammals within 300 years. Peak heat stress, quantified by the wet-bulb temperature (used because it reflects both the ambient temperature and relative humidity of the site), is surprisingly similar across diverse climates and never exceeds 31°C. They suggest that if it rose to 35°C, which never happens now but would at a warming of 7°C, hyperthermia in humans and other mammals would occur as dissipation of metabolic heat becomes impossible, therefore making many environments uninhabitable.

#### Fulfilling domestic commitments to reduce emissions spills over internationally

Eilperin 2/6 (Juliety Eilperin, McGraw Professor of Journalism at Princeton University, magna cum laude from Princeton University, where she received a bachelor's in Politics, Reporter for the Washington Times, “U.S. could fall short of 2020 climate goal, new study says, but target remains in reach”, <http://www.washingtonpost.com/national/health-science/us-could-fall-short-of-2020-climate-goal-new-study-says-but-target-remains-in-reach/2013/02/06/128f8f82-6f08-11e2-ac36-3d8d9dcaa2e2_story_1.html>, February 6, 2013)

The United States is not on track to meet its international commitment to cut greenhouse gas emissions by 2020, according to an analysis released Wednesday by the World Resources Institute. The new findings examine the impact of the U.S. energy and transportation sectors as well as sources such as methane releases from landfills. The economic recession and a turn to natural gas for electricity production have caused a dip in greenhouse gas emissions, but the temporary decline isn’t enough for the United States to meet its pledged reduction of 17 percent by 2020, according to the World Resources Institute, which recommends an ambitious approach to tackling emissions. The economic recession and a turn to natural gas for electricity production have caused a dip in greenhouse gas emissions, but the temporary decline isn’t enough for the United States to meet its pledged reduction of 17 percent by 2020, according to the World Resources Institute, which recommends an ambitious approach to tackling emissions. The study gives a pessimistic view of the future even though carbon emissions have fallen in recent years because of the economic downturn and increased use of natural gas to produce electricity. While the Obama administration has taken several steps to curb greenhouse gas emissions, such as imposing the first carbon limits on vehicles and new power plants, the analysis suggests that non-carbon emissions from the U.S. natural gas boom and from chemicals used as refrigerants are on the rise. The U.S. target is to cut greenhouse gas emissions 17 percent by 2020 compared with 2005 levels. Energy-related carbon dioxide emissions have fallen 8.7 percent compared with 2005 levels and are projected to stay near that level through 2035. But greenhouse gas emissions from other sources are expected to increase 18 percent by 2020 compared with the 2005 baseline and 36 percent by 2035. Imposing greenhouse gas emission limits on existing power plants — a policy the White House is considering — could halve the gap between the current trajectory and the country’s 2020 climate target. Phasing out hydrofluorocarbons (HFCs), used in cooling equipment from soda machines to many car air conditioners, would make up 23 percent of the gap, according to the report, while stricter federal rules for natural-gas methane emissions and energy efficiency standards would make up 11 percent and 8 percent, respectively, of the difference. “The U.S. is not yet on track to hit its 17 percent target, but we have the tools to get there,” said Nicholas Bianco, a senior associate at World Resources Institute and the report’s lead author. Michael A. Levi, a senior fellow for energy and the environment at the Council on Foreign Relations, praised the report as “the first serious attempt to show what it would take to slash emissions over the next two decades without new legislation.” Facing stiff congressional opposition, President Obama has made clear that he plans to undertake more ambitious action on climate change in his second term by using existing regulatory authority. Durwood Zaelke, president of the Institute for Governance and Sustainable Development, noted that the car sector accounts for roughly half of U.S. HFC use, “making this the biggest opportunity for getting rid of this super greenhouse gas.” “The last time we changed the coolant in our cars, it only took three years to change the fleet in the U.S. and most of the world,” he added. Without setting these and other climate polices in motion, the WRI analysts warn, the United States will find itself falling short of the pledge it made in 2009 as part of U.N. climate negotiations. While the commitment is more modest than many scientists and other world leaders have called for, the United States’ ability to meet it could influence whether more than 190 nations can broker a new climate pact over the next three years that would take effect in 2020. Neil Morisetti, Britain’s climate and energy security envoy, said in a phone interview that the United States and other industrialized nations need to fulfill their climate pledges both to build trust among negotiators and to ensure that any global warming agreement delivers results. “It is important, having made that commitment, that you deliver against it,” Morisetti said of the current U.S. climate pledge. He added that when it comes to any future treaty, “it’s important not only that we sign bits of paper, but we have a plan to get there. It is that action by national governments that is the wind beneath the sails.” Jake Schmidt, international climate policy director for the Natural Resources Defense Council, an advocacy group, said that the rest of the world “will be looking to see what the U.S. does in the next few months,” given the signal that Obama has sent about tackling global warming. “It will show the U.S. can follow through, even after the climate bill demise” of 2010, Schmidt added. Still, Levi warned, the report “also emphasizes how unlikely we are to achieve deep emissions cuts without meaningful congressional action, particularly beyond 2020.” Ultimately, Levi said, the critical climate question is how the United States and the rest of the world will cut greenhouse gas emissions through 2030 and 2050, since that will have a much bigger impact on future warming. “Steps between now and 2020 should be evaluated primarily based on how they set the U.S. up for the longer term, not on the exact number of tons that get cut in the next eight years,” he said.

#### It’s not too late—emissions reductions can avoid and delay catastrophic impacts.

Chestney 1/13/13 (Nina, senior environmental correspondent, “Climate Change Study: Emissions Limits Could Avoid Damage By Two-Thirds,” <http://www.huffingtonpost.com/2013/01/13/climate-change-study-emissions-limits_n_2467995.html>)

The world could avoid much of the damaging effects of climate change this century if greenhouse gas emissions are curbed more sharply, research showed on Sunday. The study, published in the journal Nature Climate Change, is the first comprehensive assessment of the benefits of cutting emissions to keep the global temperature rise to within 2 degrees Celsius by 2100, a level which scientists say would avoid the worst effects of climate change. It found 20 to 65 percent of the adverse impacts by the end of this century could be avoided. "Our research clearly identifies the benefits of reducing greenhouse gas emissions - less severe impacts on flooding and crops are two areas of particular benefit," said Nigel Arnell, director of the University of Reading's Walker Institute, which led the study. In 2010, governments agreed to curb emissions to keep temperatures from rising above 2 degrees C, but current emissions reduction targets are on track to lead to a temperature rise of 4 degrees or more by 2100. The World Bank has warned more extreme weather will become the "new normal" if global temperature rises by 4 degrees. Extreme heatwaves could devastate areas from the Middle East to the United States, while sea levels could rise by up to 91 cm (3 feet), flooding cities in countries such as Vietnam and Bangladesh, the bank has said. The latest research involved scientists from British institutions including the University of Reading, the Met Office Hadley Centre and the Tyndall Centre for Climate Change, as well as Germany's Potsdam Institute for Climate Impact Research. It examined a range of emissions-cut scenarios and their impact on factors including flooding, drought, water availability and crop productivity. The strictest scenario kept global temperature rise to 2 degrees C with emissions peaking in 2016 and declining by 5 percent a year to 2050. FLOODING Adverse effects such as declining crop productivity and exposure to river flooding could be reduced by 40 to 65 percent by 2100 if warming is limited to 2 degrees, the study said. Global average sea level rise could be reduced to 30cm (12 inches) by 2100, compared to 47-55cm (18-22 inches) if no action to cut emissions is taken, it said. Some adverse climate impacts could also be delayed by many decades. The global productivity of spring wheat could drop by 20 percent by the 2050s, but the fall in yield could be delayed until 2100 if strict emissions curbs were enforced. "Reducing greenhouse gas emissions won't avoid the impacts of climate change altogether of course, but our research shows it will buy timeto make things like buildings, transport systems and agriculture more resilient to climate change," Arnell said.

#### Adaptation is impossible

**Romm ‘10**

(Joe, PhD in Physics from MIT, senior fellow at American progress, editor of Climate Progress, “Real adaptation is as politically tough as real mitigation, but much more expensive and not as effective in reducing future misery,” Climate Progress, August 27, 2010, PM)

Rhetorical adaptation, however, is a political winner. Too bad it means preventable suffering for billions. We basically have three choices: mitigation, adaptation and suffering. We’re going to do some of each. The question is what the mix is going to be. The more mitigation we do, the less adaptation will be required and the less suffering there will be. That’s the pithiest expression I’ve seen on the subject of adaptation, via John Holdren, now science advisor. Sometimes he uses “misery,” rather than “suffering.” I’m going to start a multipart series on adaptation — in honor of the fifth anniversary of Katrina. That disaster provides many lessons we continue to ignore, such as Global warming “adaptation” is a cruel euphemism “” and prevention is far, far cheaper. I draw a distinction between real adaptation, where one seriously proposes trying to prepare for what’s to come if we don’t do real mitigation (i.e. an 800 to 1000+ ppm world aka Hell and High Water) and rhetorical adaptation, which is a messaging strategy used by those who really don’t take global warming seriously — those who oppose serious mitigation and who don’t want to do bloody much of anything, but who don’t want to seem indifferent to the plight of humanity (aka poor people in other countries, who they think will be the only victims at some distant point in the future). In practice, rhetorical adaptation really means “buck up, fend for yourself, walk it off.” Let’s call the folks who push that “maladapters.” Typically, people don’t spell out specifically where they stand on the scale from real to rhetorical. I do understand that because mitigation is so politically difficult, people are naturally looking at other “strategies.” But most of the discussion of adaptation in the media and blogosphere misses the key points: Real adaptation is substantially more expensive than mitigation (see Scientists find “net present value of climate change impacts” of $1240 TRILLION on current emissions path, making mitigation to under 450 ppm a must, reprinted below). Real adaptation without very substantial mitigation is just a cruel euphemism (see An introduction to global warming impacts: Hell and High Water). Real adaptation requires much bigger and far more intrusive government than mitigation. Indeed, if the anti-science ideologues get their way and stop serious mitigation, then the government will inevitably get into the business of telling people where they can and can’t live (can’t let people keep rebuilding in the ever-spreading flood plains or the ever-enlarging areas threatened by sea level rise and DustBowlification) and how they can live (sharp water curtailment in the SW DustBowl, for instance) and possibly what they can eat. Conservative action against climate action now will force big government in coming decades to triage our major coastal cities — Key West and Galveston and probably New Orleans would be unsavable, but what about Miami and Houston? I’ll do a separate post on this and would love suggestions for what kinds of things government would have to decide and spend money on if we listen to the maladapters and stay anywhere near our current emissions path. Real adaptation is so expensive (and endless) that it is essentially impossible to imagine how a real adaptation bill could pass Congress — unless of course you paid for it with a high and rising price for CO2. Hmm. Why didn’t somebody think of that? The only people who will pursue real adaptation are those who understand the latest science and are prepared to take serious political action based on that understanding. Unfortunately, that doesn’t include any of the people people who helped kill the climate bill. There isn’t really much point in spending tens of billions of dollars to plan for, say, a sea level rise of one foot if that isn’t what’s coming. The point is, you can’t even imagine doing the planning and bill-writing and then actually investing in real adaptation — unless you accept the science and do serious worst-case planning. But if you accepted the science, you’d obviously pursue mitigation as your primary strategy, while using some of the proceeds from the climate bill to support adaptation. So real adaptation is not more politically viability than real mitigation — and what really is the point of pursuing something that is not more politically viable than mitigation when it won’t actually prevent misery and suffering for billions of people? Sure, we must pursue adaptation for Americans — and we are ethically bound to help developing countries adapt to the climate change that we helped create — but real mitigation is the sine qua non. Real mitigation is an effort to keep emissions as far below 450 ppm as is possible — and if we go above 450 ppm, to get back to 350 as fast as possible (see How the world can stabilize at 350 to 450 ppm: The full global warming solution). Let me expand on #1 and #2 below. What is the cost of “adaptation”? It is almost incalculable. The word is a virtually meaningless euphemism in the context of catastrophic global warming. Here is what we now understand we may very well face on our current emissions path: M.I.T. doubles its 2095 warming projection to 10°F “” with 866 ppm and Arctic warming of 20°F Our hellish future: Definitive NOAA-led report on U.S. climate impacts warns of scorching 9 to 11°F warming over most of inland U.S. by 2090 with Kansas above 90°F some 120 days a year “” and that isn’t the worst case, it’s business as usual!“ Ocean dead zones to expand, “remain for thousands of years” Sea levels may rise 3 times faster than IPCC estimated, could hit 6 feet by 2100 Science: CO2 levels haven’t been this high for 15 million years, when it was 5° to 10°F warmer and seas were 75 to 120 feet higher “” “We have shown that this dramatic rise in sea level is associated with an increase in CO2 levels of about 100 ppm.” Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred And that isn’t the worst case: UK Met Office: Catastrophic climate change, 13-18°F over most of U.S. and 27°F in the Arctic, could happen in 50 years, but “we do have time to stop it if we cut greenhouse gas emissions soon.” NOAA: Climate change “largely irreversible for 1000 years,” with permanent Dust Bowls in Southwest and around the globe How exactly do you adapt to that? What precisely do you plan for in your adaptation strategy? You need to determine at some point whether you can save Miami, say, because you wouldn’t want to waste $100 billion trying only to find out you planned for the wrong scenario and it was hopeless. Then again, who is going to get people out of their cities as long as one political party is devoted to shouting down anybody who claims humans are actually warming the planet. And how exactly do Muscovites “adapt” to the possibility of 20°F Arctic warming? What would a 1000-year heat-wave look like in 2100 if the planet is 9°F warmer? How exactly would the world adapt to see levels 4 to 6 feet high in 2100 and then rising 1 foot a decade? Fundamentally, massive prevention plus lots of adaptation (and some misery) is much, much, much cheaper than not bloody much prevention and incomprehensible amounts of adaptation and suffering and misery. And as the IIED reported a year ago, the study Assessing the costs of adaptation to climate change: a review of the UNFCCC and other recent estimates concludes costs will be even more when the full range of climate impacts on human activities is considered. Scientists led by a former co-chair of the Intergovernmental Panel on Climate Change [warn] that the UN negotiations aimed at tackling climate change are based on substantial underestimates of what it will cost to adapt to its impacts. The real costs of adaptation are likely to be 2-3 times greater than estimates made by the UN Framework Convention on Climate Change (UNFCCC), say Professor Martin Parry and colleagues in a new report published by the International Institute for Environment and Development [IIED]. The study finds that the mean “Net present value of climate change impacts” in the A2 scenario is $1240 TRILLION with no adaptation, but “only” $890 trillion with adaptation. The mean [annual] impacts in 2060 are about $1.5 trillion”¦. As usual, there is a long right tail, with a small probability of impacts as large as $20 trillion. Don’t worry folks, it’s only a “small probability” (in their analysis) “” but that “fat tail” by itself is enough to render all traditional economic analyses useless (see Harvard economist: Climate cost-benefit analyses are “unusually misleading,” warns colleagues “we may be deluding ourselves and others”). Let’s put aside the fact we are on pace to exceed the A2 scenario (which is “only” about 850 ppm atmospheric concentrations of CO2 in 2100): See U.S. media largely ignores latest warning from climate scientists: “Recent observations confirm “¦ the worst-case IPCC scenario trajectories (or even worse) are being realised” “” 1000 ppm. For this country, the A2 scenario means 9 to 11°F warming over most of inland U.S. by 2090 with Kansas above 90°F some 120 days a year. But here’s the key point the media and the authors failed to convey. In the “aggressive abatement” case (450 ppm), the mean “Net present value [NPV] of climate change impacts” is only $410 trillion “” or $275 trillion with adaptation. So stabilizing at 450 ppm reduces NPV impacts by $615 to $830 trillion. But the abatement NPV cost is only $110 trillion “” a 6-to-1 savings or better. Bizarrely, the authors never point this out directly. They are adaptation experts, so rather than focusing on the immense economic benefits of preventing catastrophic global warming in the first place, they offer up this secondary conclusion as their primary finding: Parry and colleagues warn that this underestimate of the cost of adaptation threatens to weaken the outcome of UNFCCC negotiations, which are due to culminate in Copenhagen in December with a global deal aimed at tackling climate change. “The amount of money on the table at Copenhagen is one of the key factors that will determine whether we achieve a climate change agreement,” says Professor Parry, visiting research fellow at the Grantham Institute for Climate Change at Imperial College London. “But previous estimates of adaptation costs have substantially misjudged the scale of funds needed.” Uhhh, not quite. What actually weakened the outcome of the Copenhagen negotiations is that the overwhelming majority of politicians, opinion makers, and journalists in this country (and around the world, I think) don’t get that 1) the cost of inaction is catastrophically high [and potentially beyond calculation] and 2) the cost of action is far, far lower [see also "Intro to climate economics: Why even strong climate action has such a low total cost -- one tenth of a penny on the dollar"]. Oh well. If you’re interested in why the IPCC underestimated adaptation costs, the study focuses on several areas: Water: The UNFCCC estimate of US$11 billion excluded costs of adapting to floods and assumes no costs for transferring water within nations from areas of surplus to areas of deficit. The underestimate could be substantial, according to the new report. Health: The UNFCCC estimate of US$5 billion excluded developed nations, and assessed only malaria, diarrhoea and malnutrition. This could cover only 30-50% of the global total disease burden, according to the new report. Infrastructure: The UNFCCC estimate of US$8-130 billion assumed that low levels of investment in infrastructure will continue to characterise development in Africa and other relatively poor parts of the world. But the new report points out that such investment must increase in order to reduce poverty and thus avoid continuing high levels of vulnerability to climate change. It says the costs of adapting this upgraded infrastructure to climate change could be eight times more costly than the higher estimates predicted by the UNFCCC. Coastal zones: The UNFCCC estimate of US$11 billion excluded increased storm intensity and used low IPCC predictions of sea level rise. Considering research on sea level rise published since the 2007 IPCC report, and including storms, the new report suggests costs could be about three times greater than predicted. Ecosystems: The UNFCCC excluded from its estimates the costs of protecting ecosystems and the services they can provide for human society. The new report concludes that that this is an important source of under-estimation, which could cost over US$350 billion, including both protected and non-protected areas. No surprise, really, given that the IPCC lowballs amplifying feedbacks and climate impacts, too. In fact, even this study lowballs the potential impacts of our current maladapter-driven climate policy, especially the very fat tail or the plausible worst-case scenario. Anyway, if you’re interested in the important stuff “” the enormous benefit of stabilizing at 450 ppm “” just jump to Chapter 8, page 103, here. The bottom line on adaptation: I’m all for it. That’s precisely why I support a comprehensive climate bill, since it is the only plausible way to 1) pay for domestic adaptation [and the share of developing country adaptation that we are ethically bound to provide] and 2) have a serious possibility of limiting future climate impacts to a level that one could actually adapt to.

#### Airborne Wind revolutionizes energy production and goes global, squo renewables will fail

Fagiano ‘9 (Lorenzo, Marie Curie fellow at Politecnico di Torino and a visiting researcher at the University of California, Santa Barbara, co-author of 50 papers published in international journals, conference proceedings and book chapters. He is recipient of the ENI award "Debut in Research" prize 2010, of the Maffezzoni prize 2009 and of a Marie Curie International Outgoing Fellowship, “High-altitude wind power generation for renewable energy cheaper than oil,” http://ec.europa.eu/research/sd/conference/2009/papers/15/lorenzo\_fagiano,\_mario\_milanese\_and\_dario\_piga\_-\_high\_altitude\_wind\_power\_generation\_for\_renewable\_energy\_cheaper\_than\_oil.pdf)

The dependance of the global energy system on fossil sources owned by few producer countries leads to economical instability, prevents millions of people from having access to energy and gives rise to delicate geopolitical equilibria. Non–OECD countries growing at fast rates like China and India will account for a 50% increase of energy demand in the next two decades. Such an increment has to be covered by an increase of energy supply: considering the current situation, fossil sources are the ﬁrst candidates to fuel the growth of non–OECD world. As a consequence, the present problems of high concentration of fossil sources in few countries will be more acute, energy costs will continuously increase on average and pronounced short–term swings of oil price will remain the norm in the next 20 years.

The issue of climate change due to excessive concentration of greenhouse gases in the atmosphere, that is clearly related to the predominance of fossil sources in the global energy mix, may be even more serious than geopolitics. In fact, if no measure is undertaken to contain the emissions of carbon dioxide, a doubling of CO2 concentration is expected to be reached by 2100, with a consequent global average temperature increase of up to 6 ± C [1, 21, 22, 23]. Almost all of the increase of emissions in the next twenty years is accounted for by non–OECD countries. In [1], two alternative climate–policy scenarios are considered (in addition to the reference one), in which the undertaking of political measures and investments aimed at reducing CO2 emissions is assumed. Both scenarios lead to a long–term stabilization of carbon– dioxide emissions and they differ on the basis of the amount of efforts and investments employed to reach such a goal. Without entering into details (the interested reader is referred to [1]), the alternative scenarios clearly indicate two key points: ² power generation is a critical sector since it is the less expensive ﬁeld for CO2 reduction. As showed in Section 1.1, power generation accounts for 45% of energy– related CO2 emissions. A shift to carbon–free electricity and heat generation would signiﬁcantly contribute to reduce the emissions of greenhouse gases with relatively low costs and timings as compared to those needed to renew the transportation system, which is heavily oil dependent and would require expensive and slow transformation. Moreover, electricity is the most reﬁned form of energy and it can be used to replace the use of fossil sources in every sector.

Given the actual situation, policy intervention will be necessary, through appropriate ﬁnancial incentives and regulatory frameworks, to foster the development of renewable and carbon–free electricity generation. One of the key points to reduce the dependance on fossil fuels is the use of a suitable combination of alternative energy sources. Nuclear energy actually represents the fourth contribution to the world’s power generation sector (with a 15% share, see Section 1.1) and it avoids the problems related to carbon dioxide emissions. However, the issues related to safe nuclear waste management have not been solved yet, despite the employed strong efforts. Moreover, the cost of nuclear energy is likely to increase, due to massive investments of emerging countries [35, 36] and uranium shortage [37]. Renewable energy sources like hydropower, biomass, wind, solar and geothermal actually cover 19% of global electricity generation (with hydro alone accounting for 16%), but they could meet the whole global needs, without the issues related to pollution and global warming. However, the present cost of renewable energies is not competitive without incentives, mainly due to the high costs of the related technologies, their discontinuous and non–uniform availability and the low generated power density per km2 . The use of hydroelectric power is not likely to increase substantially in the future, because most major sites are already being exploited or are unavailable for technological and/or environmental reasons. Biomass and geothermal power have to be managed carefully to avoid local depletion, so they are not able to meet a high percentage of the global consumption. Solar energy has been growing fast during the last years (35% average growth in the U.S. in the last few years, [38]), however it has high costs and requires large land occupation.

Focusing the attention on wind energy, in Section 1.2 it has been noted that there is enough potential in global wind power to sustain the world needs [6]. However, the technical and economical limitations to build larger turbines and to deploy wind towers in “good” sites, that are often difﬁcult to reach, the low average power density per km2 and the environmental impact of large wind farms hinder the potential of the actual technology to increase its share of global electric energy generation above the actual 1%. The expected technological improvements in the next decade are not enough to make the cost of wind energy competitive against that of fossil energy, without the need of incentives. As is is stated in [7], “There is no “big breakthrough” on the horizon for wind technology”. The major contribution of Part I of this dissertation is to demonstrate that **a real revolution of wind energy can be achieved with the innovative KiteGen technology.** It will be showed that high–altitude wind power generation using controlled airfoils has the potential to overcome most of the main limits of the present wind energy technology, thus providing renewable energy, available in large quantities everywhere in the world, at lower costs with respect to fossil energy and without the need for ad–hoc policies and incentives. Moreover, it will be showed that such a breakthrough can be realized in a relatively short time, of the order of **few years**, with relatively small efforts in research and development. Indeed, the idea of harvesting high–altitude wind energy introduced in the early ’80s (see [8]) can be fully developed nowadays thanks to recent advances in several engineering ﬁelds like aerodynamics, materials, mechatronics and control theory. In particular, the advanced control techniques investigated in Part II of this dissertation play a role of fundamental importance, since they allow to control and maximize the performance of complex systems like KiteGen, while satisfying demanding operational constraints, at the relatively fast adopted sampling rate. In order to support these claims, the original results of the research activity performed in the last three years are organized in the next Chapters as follows.

#### Baseload power is the key source of emissions

AP ‘12 (DINA CAPPIELLO, “EPA: Power Plants Main Global Warming Culprits,” Associated Press, January 11, 2012)

**The most detailed data** yet on emissions of heat-trapping gases show that U.S. power plants are responsible for the bulk of the pollution blamed for global warming. Power plants released 72 percent of the **g**reen**h**ouse **g**ase**s** reported to the Environmental Protection Agency for 2010, according to information released Wednesday that was the first catalog of global warming pollution by facility. The data include more than 6,700 of the largest industrial sources of greenhouse gases, or about 80 percent of total U.S. emissions. According to an Associated Press analysis of the data, 20 mostly coal-fired power plants in 15 states account for the top-releasing facilities. Gina McCarthy, the top air official at the EPA, said the database marked "a major milestone" in the agency's work to address climate change. She said it would help industry, states and the federal government identify ways to reduce greenhouse gases.

#### High Altitude Wind promotes decentralized local energy production

Valentine ‘11 (Harry Valentine holds a degree in engineering and has worked for several years in energy and transportation research organizations. He undertakes transportation and energy-related research for several clients and publishes internationally on commercial transportation energy matters as well as other energy related issues, “The Survival of and Potential for Decentralized Power Generation”, 3/24/11, *Electric Energy Online*)

Wind Power

Ongoing developments in the aeronautical field and in the development of innovative designs of kites along with advances in mass-production technology form the basis upon which to develop cost competitive wind power technology. Several companies offer vertical-axis wind turbines that can be fitted on to the roofs of buildings. Other developments revolve around the ongoing development of airborne wind turbines by groups such as Magenn, Skywindpower and Makani Power whose technology carries airborne electrical generation equipment. The greater energy in winds at higher elevation can provide more power at more competitive costs. Competing designs combine ground-based electrical generation equipment with various forms or airborne technologies that include wings and kites. A research group based at Delft University in the Netherlands has developed a LadderMill (Insert: Laddermill) that involves a series of kites that form the rungs of a giant ladder. A design from Italy and New Zealand proposes to coordinate the drag of kites via multiple control lines to drive a vertical drive shaft connected to generation equipment (Insert: Kite-Driven-Wheel). Various wind power technologies are well suited to serving localized markets through distributed generation. Conclusions Distributed or decentralized generation is a power generation option awaiting application on a mass scale. Most of the expense of developing the technology was focused on other applications, except that the technology could easily and be adapted to distributed generation at low cost. An increased demand for electric power could see and increased number of smaller power plants supplying that electric power. Advances in the efficiency, reliability and durability along with low cost make distributed generation a competitive option. Multiple small power stations can be monitored and managed remotely using computer control and modern telecommunications technology. The technology has perhaps unexpectedly advanced to the point where it challenges the economy of scale of mega-scale power stations.

#### That’s key to boost small farms

NEO ‘4 (Nebraska Energy Online, Electricity from the Wind...Economic Development for Rural Communities, Special to the Nebraska Energy Quarterly, http://www.neo.ne.gov/neq\_online/april2004/apr2004.01.htm)

It may seem hard to believe, but according to the U.S. Department of Agriculture’s 2003 farm income forecast, 94 percent of total farm household income comes from off-farm sources. Many rural families work off-farm jobs in addition to farming to make ends meet. ¶ Dan McGuire, chief executive officer of the American Corn Growers Foundation, said that low commodity prices combined with high production costs are responsible for this. McGuire said that the farm income forecast is a compelling reason for farmers and ranchers to support wind energy because it provides a source of income and fosters economic development in rural communities. “Wind farming does pay,” he said.¶ Renewable Energy Wind Farm in Minnesota¶ Minnesota Pioneers¶ McGuire cites a Minnesota project that demonstrates why farmers, ranchers and rural communities should get involved with wind energy as a new source of income. The Kas Brothers’ wind farm at Pipestone, completed in 2001, is the first farmer-owned commercial wind farm in the United States. Developer Dan Juhl installed two NEG Micon 750-kilowatt turbines with an estimated annual electricity production of 4.5 million kilowatt-hours. That wind farm now yields $30,000-$40,000 annually for the first 10 years of operation and is expected to yield $110,000-$130,000 annually thereafter, depending on the level of electricity production. ¶ McGuire said this project is an excellent example of community-based economic development. Local contractors Olsen Electric and K-Wind participated. Xcel Energy contracted to purchase the electricity. Local banks provided the financing. The wind turbine, the power contract, the maintenance agreement and insurance allow the banks to make the loans with little risk. Local ownership also keeps the electricity revenue circulating in the community. This wind farm model is so successful that Juhl has several new projects in the works.¶ Texas Too ¶ Although Minnesota has emerged as a leader in implementing wind energy in rural communities, Texas is also setting an example for states to follow. After the Texas legislature passed a renewable energy requirement, utilities and wind companies invested $1 billion in 2001 to build 912 megawatts of new wind power projects. The results? According to a report published by the SEED Coalition and Public Citizen’s Texas office, “The completed plants created 2,500 quality jobs with a payroll of $75 million, will deliver $13.3 million in tax revenue for schools and counties and pay landowners $2.5 million in royalty income in 2002 alone. ¶ Wind generators under construction at Combine Hills Turbine Ranch, Oregon¶ The multiplier effect of this new investment activity will stimulate another 2,900 indirect jobs in Texas. Wind power is bringing relief to rural Texas and creating jobs statewide.”¶ Wind power also is providing “a nice kick” to the local economy of Milton-Freewater, Oregon, according to Mayor Lewis Keys. The new 41 megawatt Combine Hills Turbine Ranch wind farm in his district will provide wind power for area residents, who also will benefit from the infusion of construction dollars. “Having been a farmer of wheat, barley and peas for 35 years, it was hard to imagine the surrounding land being used for anything other than farming, but now I can see the diversity of its uses,” Keys said. Leroy Ratzlaff, a third-generation landowner and farmer in Hyde County, South Dakota, agrees. Ratzlaff and his family used a homemade wind generator in the 1930s before rural electrification reached their farm. In 2003, he leased his land to a wind developer that installed seven wind turbines, providing a much-needed economic boost. “It’s not as risky as farming,” Ratzlaff said. ¶ Because much of the nation’s wind energy potential is found in rural areas, wind energy offers an unprecedented opportunity for rural economic development. Wind energy can offer:¶ U.S. Corn Growers Support Wind Energy¶ In April of 2003, the American Corn Growers Foundation commissioned a nationwide, random and scientific survey of more than 500 corn farmers in the 14 states representing nearly 90 percent of the nation's corn production. The poll found that 93.3 percent of the nation's corn producers support wind energy; 88.8 percent want farmers, industry and public institutions to promote wind power as an alternative energy source; and 87.5 percent want utility companies to accept electricity from wind turbines in their power mix.

Benefits to Rural Landowners

Rural landowners who lease their land to wind developers typically receive about 2-4 percent of the gross annual turbine revenue — $2,000 to $4,000 for each turbine — which can help compensate for a downturn in commodity prices. The Union of Concerned Scientists estimates that typical farmers or ranchers with good wind resources could increase the economic yield of their land by 30-100 percent. Wind turbines have a small footprint and do not occupy much land, so farming and ranching operations can continue. “It’s almost like renting out my farm and still having it,” Ratzlaff said. “And the cows don’t seem to mind a bit.”

#### High Altitude Wind uniquely benefits rural communities

Casey ’12 (Tina, Wind Farm in the Sky Created by Donut-Shaped Blimp, 3/2/12, <http://cleantechnica.com/2012/04/02/wind-farm-in-the-sky-created-by-donut-shaped-blimp/>)

The Airborne Wind Turbine has also received funding from the U.S. Department of Agriculture, which is interested in the technology for its potential for bringing clean, low cost energy to underserved rural areas. In a project statement for USDA, the company noted that “85 percent of rural communities cannot utilize wind power today due to community concerns or poor wind resources at ground level that make projects uneconomical.”

#### Independently, small farms preserve biodiversity, the environment and human survival

Boyce ‘4

[James. Prof of Ag @ UMass. “A Future for Small Farms?” <http://www.peri.umass.edu/fileadmin/pdf/Boyce_paper_griffin_conference.pdf> 2004//JVOSS]

There is a future for small farms. Or more precisely, there can be and should be a future for them. Given the dependence of ‘modern’ low-diversity agriculture on ‘traditional’ high-diversity agriculture, the long-term food security of humankind will depend on small farms and their continued provision of the environmental service of in situ conservation of crop genetic diversity. Policies to support small farms can be advocated, therefore, not merely as a matter of sympathy, or nostalgia, or equity. Such policies are also a matter of human survival. The diversity that underpins the sustainability of world agriculture did not fall from the sky. It was bequeathed to us by the 400 generations of farmers who have carried on the process of artificial selection since plants were first domesticated. Until recently, we took this diversity for granted. The ancient reservoirs of crop genetic diversity, plant geneticist Jack Harlan (1975, p. 619) wrote three decades ago, ‘seemed to most people as inexhaustible as oil in Arabia.’ Yet, Harlan warned, ‘the speed which enormous crop diversity can be essentially wiped out is astonishing.’ 26 The central thesis of this essay is that efforts to conserve in situ diversity must go handin- hand with efforts to support the small farmers around the world who sustain this diversity. Economists and environmentalists alike by and large have neglected this issue. In thrall to a myopic notion of efficiency, many economists fail to appreciate that diversity is the sine qua non of resilience and sustainability. In thrall to a romantic notion of ‘wilderness,’ many environmentalists fail to appreciate that agricultural biodiversity is just as valuable – indeed, arguably more valuable from the standpoint of human wellbeing – as the diversity found in tropical rainforests or the spotted owls found in the ancient forests of the northwestern United States.

## Contention 2: Decision-making

#### Despite technical progress restrictions undermine High Altitude Wind development

Leggett ’12 (Nickolaus E. Leggett, Masters degree in political science from Johns Hopkins, licensed pilot for hot-air balloons, gliders, and single-engine airplanes, certified electronics technician, testimony to the FAA, “To the Federal Aviation Administration: Formal Comments of Nickolaus E. Leggett” 1/29/12)

Near-Term Experimental Operation of AWES Prototypes

The first AWES prototypes should be operated in large but restricted airspace currently used for military practice work and/or for unmanned aircraft operations. The use of these areas is quite structured and disciplined which would be a useful starting point for learning to live with AWES installations.

**The** proposed **limit of testing to 499 feet** AGL is totally inadequate **for research and development**. This low height can be easily reached with a child’s classical hand-held kite. I have done it myself as a child. Such a low altitude does not represent the full physical situation of a commercial AWES installation. At this low altitude, the wind will often be too low to support a kite-type AWES installation.

A limit of near 2000 feet AGL is more appropriate for tests of actual deployed AWES installations. This would allow industrial-sized AWES to be tested in a realistic manner where a heavy structure is supported by the air and is exposed to the weather changes. Limiting AWES tests to daylight hours is also inadequate for realistic testing. An important part of any testing program is to expose the AWES to the variations of the weather over long periods of time (at least months). Any commercial AWES will have to survive and produce power continuously for long periods of time just as commercial terrestrial wind farms do. They will not be deploying these rather complex devices every morning. Think of an AWES as being more like a suspension bridge. You set it up and you leave it for long periods of time. Some mobile AWES installations will be used in the future. For example, specifically designed AWES could be used to provide electric power to ships at sea while they are in motion. This type of power could be used to recharge navy ships that are equipped with electric rail gun systems. Other mobile AWES could be used to resupply energy to fuel-cell propelled ships at sea via the electrolysis of water. Some mobile AWES will be used over land for large open-pit mining operations, prospecting efforts, and large agricultural properties. As a result of this, some controlled testing of mobile and portable AWES prototypes should be allowed by the FAA. Some testing of multiple-unit AWES is also needed to understand the aerodynamics of operating several units in close proximity to each other in various weather conditions and climates. It is important to realize that a whole new family of devices is being developed here and so a fairly liberal testing environment is needed.

#### **The plan is key to stimulate investment**

Kozubek ’11 (Jim, 11/4/11, Airborne Wind Energy Industry Struggles To Fly,

<http://idealab.talkingpointsmemo.com/2011/11/airborne-wind-energy-industry-struggles-to-take-off.php>)

To date Google.org has invested $15 million, and the Department of Energy’s the Advanced Research Projects Agency-Energy has invested $3 million. Over the summer, Makani Power made news with the maiden flight of its Wing 7 prototype, an airborne glider capable of generating 20 kW with a wingspan of eight meters, or just over 26 feet. The glider is designed to capture wind energy with its propeller at altitudes exceeding 1,000 feet and relay it by tether to the ground. “It is important to the overall U.S. airborne wind energy effort that Makani Power is successful in carrying out the work for the grant awarded” says PJ Shepard, secretary for industry group Airborne Wind Energy Consortium, and a spokesperson for California-based Sky WindPower, another company developing such a glider. One hurdle the nascent industry has to surmount, as most emerging technologies and industries do, is regulation. The Federal Aviation Administration is currently weighing a decision as to whether to allow such tethered gliders to operate. So far a ruling appears at least a year away, Shepard said. For its part, Makani to date has burned through most of its working capital, and is nearing completion of its 18-month ARPA-E grant-funded pilot project. And while the nascent industry awaits an FAA ruling, investors have been skittish of sinking capital into technology. Sky WindPower was named by TIME Magazine as one of the top 50 top inventions of 2008, but has yet to land investment capital; Dmitri Cherny, founder of energy glider developer Highest Wind, was the darling of New Hampshire’s Speed Venture Summit in 2009, only to come away empty-handed from scores of meetings in venture capital circuits in New Hampshire and South Carolina.

#### Extinction level impacts come first

BOSTROM ’12 - Professor, Faculty of Philosophy & Oxford Martin School Director, Future of Humanity Institute Director, Programme on the Impacts of Future Technology University of Oxford (Nick, “We're Underestimating the Risk of Human Extinction”, Mar 6, http://www.theatlantic.com/technology/archive/2012/03/were-underestimating-the-risk-of-human-extinction/253821/)

Some have argued that we ought to be directing our resources toward humanity's existing problems, rather than future existential risks, because many of the latter are highly improbable. You have responded by suggesting that existential risk mitigation may in fact be a dominant moral priority over the alleviation of present suffering. Can you explain why?

Bostrom: Well suppose you have a moral view that counts future people as being worth as much as present people. You might say that fundamentally it doesn't matter whether someone exists at the current time or at some future time, just as many people think that from a fundamental moral point of view, it doesn't matter where somebody is spatially---somebody isn't automatically worth less because you move them to the moon or to Africa or something. A human life is a human life. If you have that moral point of view that future generations matter in proportion to their population numbers, then you get this very stark implication that existential risk mitigation has a much higher utility than pretty much anything else that you could do. There are **so many people** that could come into existence in the future if humanity survives this critical period of time---we might live for billions of years, our descendants might colonize billions of solar systems, and there could be billions and billions times more people than exist currently. Therefore, even a very small reduction in the probability of realizing this enormous good will tend to outweigh even immense benefits like eliminating poverty or curing malaria, which would be tremendous under ordinary standards.

#### **Environmental education concerning specific action-based policies is best – critical to sparking debate and accessibility**

Mogensen and Schnak 10 – Prof at University College West, Denmark, Associate Professor in the Research of Environmental and Health Education, PhD in Biology; Professor Emeritus of Education at Laererhoejskolen, Danish university of Education, DPU, and Aarhus University(Finn and Karsten, Feb 2010, “The action competence approach and the ‘new’ discourses of education for sustainable development, competence and quality criteria,” Environmental Education Research, Volume 16, Issue 1, 2010, pg 59-74, http://www.tandfonline.com/doi/abs/10.1080/13504620903504032)

Seen from a philosophical point of view, the main point of action competence is the idea of action. Inspired by analytic philosophy concerning explanation and understanding (Taylor 1966; von Wright 1971) and philosophical psychology (Kenny 1963; Peters 1958; White 1968) as well as pragmatist analyses (Bernstein 1971) and critical theory (Habermas 1968), the point can be made that human action differs from, or is a special kind of, mere behaviour and activity. Not only are actions intentional, the intentions, motives and reasons all have an intrinsic relation to the actions. So it will be a different action if the intention turns out to be different (Schnack 1977). In this sense, it is our forte as human beings to be able to act, given the links to associated humanistic concepts such as personhood, experience, responsibility, democracy, and education – insofar as we take education to be more than schooling, training or manipulation. In relation to problem-oriented environmental and health education, the notion of action is qualified by the criterion that **actions should be addressed to solutions of the problem and should not just be activities as a counterweight to academic tuition**. Not that activity is a bad thing or not good enough in certain situations, but the action competence approach emphasises the epistemological point that action-oriented teaching–learning has specific, important learning potentials. In this way, the notion of action in action competence is heavily loaded, philosophically and educationally. Actions are a special kind of behaviour: (a) qualified by the intentions of the agent, and in principle, not by someone else (which again challenges current discussions of participation in education discussed elsewhere in this collection; see Læssøe this issue); (b) qualified by being conscious and purposive, seen from the point of view of the agent, which also challenges the discussion of success criteria in education (see later). This latter perspective on the notion of action also means that the action must be addressed to solving the problem or changing the conditions or circumstances that created the problem in the first place. In adding this aspect to the action concept, this can be qualified in relation to the concept of activity. Hence, actions can be seen as specific activity. The status of action competence as an educational ideal and its utopian goals means that it will never be possible to say: ‘now it is not possible to be more action competent’. In this sense there is a parallel to the notion of sustainable development in that an objective reachable stage does not exist. In relation to sustainable development it is evident that you cannot satisfy the needs of people who live now without radically changing the conditions for the people to come for a number of reasons, not least that the satisfaction of human needs in specific (cultural) ways develops and changes the needs themselves. In the same way is it not possible to become the ultimate action competent individual because human actions will always produce intended and unintended changes and conditions that give rise to a quest for new capabilities. In this sense, the striving for qualifying one’s action competence is a never-ending process. The action competence approach seen in this Bildung perspective will be discussed further in a later section. However, a central element of the approach is to be critical of moralistic tendencies, preconceived ideas and hidden agendas when working with environmental education, health education, ESD or other teaching– learning sequences that deal with societal issues involving conflicting interests. Rather, the action competence approach points to democratic, participatory and action-oriented teaching–learning that can help students develop their ability, motivation and desire to play an active role in finding democratic solutions to problems and issues connected to sustainable development that may even consist of the aforementioned tendencies, ideas and agendas. From the very beginning, the action competence approach has been critical towards any reductionistic tendency in what has been called the first generation of environmental education (Breiting 1993), where the goal of many of its campaigns and programmes is to change people’s, including pupils’, behaviour (Jensen and Schnack 1997). But the newcomer to the international agenda, ‘education for sustainable development’, must also be critically discussed when seen from the philosophical perspective of the action competence approach. **The notion of sustainable development**, as introduced in the Brundtland Report, ‘Our Common Future’ (World Commission on Environment and Development 1987), and in ESD in particular, does not solve any questions. On the contrary, it **leads to a lot of dilemmas**. As the dilemmas are sound, **this is a good thing**, though you need to be on your guard: the more politically correct the rhetoric around sustainable development becomes, the more we may see a tendency to (mis)use ESD as a means to spread specific (political) viewpoints and interests. The point is then that in democratic education, as in taking an action competence approach, this should be analysed as part of the ideological criticism that continuously runs through the teaching–learning process. Thus, we can start by observing that the whole idea behind ESD seems to be very much in line with the action competence approach. To treat environmental issues and health issues as not only interrelated, but also fundamentally connected to economic, social, cultural and political aspects (as happens in ESD) is in full harmony with the action competence approach, and aligns well with its broader insistence of understanding environmental problems as societal issues constituted by conflicting interests. At the same time, **ESD without a democratic action competence perspective very easily becomes dogmatic and moralistic.** How, then, does the action competence approach developed within the field of environmental education fit into the pedagogy of ESD? This, of course, depends on the interpretation of the two concepts and the relationship between them. The research literature advocates highly different perspectives regarding the relationship between ESD and environmental education. Some claim that ESD is a different discipline to environmental education (Hopkins and McKeown 2003), some argue that ESD is replacing environmental education (Tilbury and Cooke 2005; Fien 2001), while others that ESD is considered a new paradigm on education (Sterling 2001). The different conceptualisations are in some situations, perhaps, used interchangeably to describe similar work, while in other situations they are expressions of more profound differences in focus and approach. Some commentators find this not only acceptable but actually stimulating (Scott and Oulton; in Summer, Corney, and Childs 2004) – and of course it is, even if it does complicate complex matters further. In some studies in Sweden, for example, a democratic approach to environmental education is sometimes called ‘pluralistic environmental education’ and sometimes simply ‘education for sustainable development’ (Sandell, Öhman, and Östman 2004; Öhman 2004). This may, of course, be a terminological problem in some respects, but at the same time it illustrates, redolent of with Arjen Wals’ (2006) arguments, among others, that the central point in the action competence approach is that it is the ‘education’ that matters the most. Environmental education, health education, and ESD are not the same, as they differ in their main substantive foci. More important, though, is the distinction between dogmatic, manipulative, and moralistic forms of these ‘educations’ on the one hand, and critical, open-ended, pluralistic and democratic forms on the other. As mentioned previously, **the action component is the most important part of the conception of action competence.** However, not least because of the increasing international use of the word ‘competence’ in the past decade, the competence component of the notion has a new controversial status that must be explored in connection to the action competence approach.

#### Discussion of energy policymaking is uniquely critical to positively engage the debate space

Kuzemko ’12[Caroline Kuzemko, CSGR University of Warwick, Security, the State and Political Agency: Putting ‘Politics’ back into UK Energy, <http://www.psa.ac.uk/journals/pdf/5/2012/381_61.pdf>]

This observation brings us on to the way in which debates and narratives within political circles, particularly within parliament and amongst policymakers, started to shift. A plethora of new papers, debates and policy documents on energy emerged over this time, despite the round of energy reviews and the new White Paper that had been produced immediately prior to this period (see in particular Havard 2004; Ofgem 2004; DTI 2005a, 2005b, 2006a, 2006b and 2006c; JESS 2006). The energy sector became increasingly referenced in these proliferating policy and other government documents in terms of potential supply insecurity (FCO 2004; Straw in Plesch et al 2004). Echoing media, academic and think-tank narratives, direct links can be found between fears of supply insecurity and Russia (FAC 2008; see also House of Commons 2007; Ofgem 2009: 1). In particular, in 2007 the Foreign Affairs Committee (FAC) produced a report entitled ‘Global Security: Russia’ (FAC 2008). This is where we see how assumptions about resource nationalism and energy ‘politicisation’ as wrong affect perceptions (Straw in Plesch et al 2004; DTI 2007: 19). The FAC report focuses on certain political frameworks in non-OECD producer countries, particularly Russia, which may not allow new reserves to be developed properly making them ‘unstable’ suppliers (Havard 2004; FCO 2004). This in turn had negative implications for energy prices (Straw in Plesch et al 2004; DTI 2007: 19). What was also evident over this time, however, was the rising amount of reports produced by political institutions **outside of those directly responsible for policymaking**, the Energy Directorate of the DTI and the independent regulator, Ofgem. The Foreign Office, House of Commons committees and parliamentary offices, such as that of Science and Technology, all started to produce reports on energy focused on energy security (FCO 2004; POST 2004; Fox 2006; House of Lords 2006; House of Commons 2007; FAC 2007). Energy security was added, by the UK, to formal forums for international negotiation. In 2005, during the October EU Summit at Hampton Court, the issue of ‘energy security’ was added to the agenda (Offerdahl 2007). In a paper prepared for conference delegates energy is characterised as a sector which was by then becoming an issue of national security (Helm 2005b: 2). Increasing dependence on Russia for supplies of, particularly gas, is seen as a source of threat to the security of EU, and by extension UK, energy supply. Likewise, energy security was made top of the agenda in the G8 Summit of 2006 (G8 2006). In 2006 Prime Minister Tony Blair used his annual Lord Mayor’s speech to highlight energy security concerns (DTI 2006c: 4). Growing political interest in energy, outside of those institutions formally responsible for energy policymaking, indicates the extent to which energy was becoming subject, once more, to political debate and deliberation. What is also interesting to note at this time is the degree to which the deliberation of energy becomes formalised through various new institutions. In July 2004, in the immediate aftermath of the Yukos affair, the new Energy Act had conferred on the Secretary of State for Trade and Industry a fixed duty to report annually on energy security matters to Parliament (DTI 2005a). Thus a specific political process was put in place to revisit energy security at least annually. Changes related to the need to deliberate more formally had also started to take place within the DTI and FCO in that new resources were allocated to energy analysis (Interview 5). The 2007 White Paper acknowledged that energy had not up until the mid 2000s existed as a discrete area of foreign policy. Again, as such, it had less dedicated capacity assigned to it. The paper announced that, for the first time, the UK would have ...an integrated international energy strategy which describes the action we are taking to help deliver secure energy supplies and tackle climate change. (DTI 2007: 8) Concurrent with the degree to which **energy was re-entering elite political debates at both the national and international levels, which in itself indicates a degree of deliberative repoliticisation , there were a number of policy alterations made** relating to changing interpretations of energy and international markets. It could be argued that energy security had, in 2003, been assumed to exist, especially given the degree to which energy governance was still understood to be heading in a promarket direction (Thomas 2006: 583; Jegen 2009: 1; Lesage et al 2010: 6; EC 2011: 14). For example the energy supply objective had been worded such that the UK should continue to “maintain the reliability of… supplies” (DTI 2003: 11). Energy security, although still an objective, had been an assumed outcome of marketisation which explains why competitive markets had been the principal objective of energy policy at that time (cf. Helm 2005). By contrast, however, by 2007 energy security is understood to be something that needs to be established, as one of the ‘immense’ challenges facing the UK as a nation, and furthermore, to require further political action to achieve (DTI 2006c: Introduction and 4). This refocus of objectives onto achieving energy security, over time, **added to the political pressures being brought to bear on energy policymakers** given the degree to which supplies continued to be considered ‘insecure’ (Kuzemko 2012b: ). These changes in policy objectives, political institutions, and the addition of political capacity to deliberate energy are understood have taken place partly in response to political pressures to change emanating from outside energy policy circles, i.e. the DTI and Ofgem. Ofgem officials report a higher degree of ‘outside’ political interference in their practices (Interview 15), and it has been widely claimed that both the 2006 Energy Review and 2007 White Paper were researched and compiled specifically because the DTI and Ofgem understood the political need to respond to the crisis (CEPMLP 2006; House of Commons 2007a). As these processes of deliberation intensified it started also to become clear that the state had lost considerable capacity to understand the complexities of energy. Government was considered to be more responsible, given that the narrative was of national energy supply security, but lacking in information and knowledge both about what was happening and what to do about it. Ultimately this resulted in the formation of a new government institution, the Department of Energy and Climate Change (DECC), with specific mandates to deliver on energy and climate security.

#### Our methodology is credible – sustainable tech is necessary to reduce emissions –total critiques of development backfire and undermine political freedom

Sneddon ‘6 (Chris Geography @ Dartmouth, “Sustainable development in a Post-Brundtland World” *Ecological Economics* 57 p. 259-263)

Mainstream SD has proceeded apace since the advent of the Brundtland Report. While the risk of cooptation and abuse of SD, often entailing a watering down of its more radical prescriptions for enhancing sustainability, has been repeatedly noted (see Le´le´, 1991; Luke, 1995; Sneddon, 2000; Fernando, 2003), the concept is now **firmly entrenched** within many government offices, corporate boardrooms, and the hallways of international NGOs and financial institutions. At the very least, the staying power of SD can be explained by its propensity for providing some **common ground** for discussion among a range of developmental and environmental actors who are frequently at odds (Pezzoli, 1997). Its strongest boosters–for example, those in international environmental NGOs and intergovernmental agencies– thus feel fairly comfortable advancing a concept that is most effective in bringing former adversaries to the table even while accomplishing precious little in the way of concrete outcomes. Supporters of SD at these levels continue to advocate reform of existing institutions to better accommodate SD principles. Conversely, critics of the mainstream position advocate more radical societal changes, and have comprehensively and incisively deconstructed SD’s [sustainable development’s] basic contradictions (e.g., Redclift, 1987; J. O’Connor, 1994) and its power-laden, problematic assumptions (e.g., Escobar, 1995). However, they have **left little more than ashes** in its place. We can agree with Escobar, that the bBrundtland Report, and much of the sustainable development discourse, is a tale that a disenchanted (modern) world tells itself about its sad condition (Escobar, 1996, pp. 53–54). At the same time, we argue as well for a resurrection of SD into a more conceptually potent and politically effective set of ideas and practices that comprise an empowering tale. We advocate a middle and pragmatic path, one that takes seriously calls for radical changes in our ideas and institutions dealing with sustainable development, while also holding out the possibility that genuine reform of current institutions may be possible. Partial reform may pre-empt necessary radical change, but it may also make it easier in the future7. Our first intervention is to declare a truce among the epistemological and methodological schisms that separate the defenders of sustainable development from critics of the concept. For its advocates–identified most closely with development practitioners situated in a variety of United Nations offices (e.g., Untied Nations Development Program), government agencies (e.g., ministries and departments of natural resources and environment), and corporate boardrooms (e.g., the Business Council for Sustainable Development)–sustainable development as laid out by the WCED (broadly) remains the **most tenable principle** of **collective action** for resolving the twin crises of environment and development. For many academics–particularly those associated with ecological economics and related fields (see Soderbaum, 2000; Daly and Farley, 2004)–sustainable development offers an attractive, perhaps the only, alternative to conventional growth-oriented development thinking. However, for some of its socio-cultural critics (e.g., Escobar, 1995; Sachs, 1999; Fernando, 2003), mainstream SD is a ruse, yet another attempt to discount the aspirations and needs of marginalized populations across the planet in the name of green development. Other critics, while broadly sympathetic towards its goals, point out SD’s fundamental lack of attention to the powerful political and economic structures of the international system that constrain and shape even the most well-intentioned policies (e.g., Redclift, 1987, 1997)8. For critics grounded in the ecological sciences (e.g., Frazier, 1997; Dawe and Ryan, 2003), SD is unforgivably anthropocentric and thus unable to dissolve the false barriers between the human sphere of economic and social activities and the ecological sphere that sustains these activities9. These divisions reflect more than simply different value positions and attendant political goals. Proponents of a mainstream version of SD tend to see knowledge production (epistemology) and research design (methodology) in very specific terms. At the risk of caricature, this position demonstrates tendencies towards individualism, economism and technological optimism in assessing how knowledge about the social world is brought into being (Faber et al., 2002; Robinson, 2004). SD advocates also place a great deal of faith in quantitative representations of complex human-environment relations, in part because of a desire to present generalizable knowledge to policy makers. Conversely, critics of SD are for the most part social constructivist in perspective, arguing that knowledge of the world always represents a series of mediations among human social relations and individual identities (see Robinson, 2004, pp. 379–380; Demeritt, 2002). Critics are also more apt to stress the historical contingency of development processes, and undertake qualitative studies grounded in a case study methodology. Perhaps most importantly, while advocates of a conventional SD continue to perceive the policy process as a genuine pathway towards reform, critics have largely given up on state-dominated institutions as a means of change. Despite these substantial differences in perspective, our intimation is that both advocates and critics would agree that a socially just and ecologically sustainable world, or even an approximation, would be a desirable end. 3.2. Embracing pluralism: ecological economics, political ecology and freedom-oriented development We argue that we can move beyond the **ideological and epistemological straightjackets** that deter **more cohesive** and politically effective interpretations of SD, in order to operationalize the aforementioned **truce**, by embracing pluralism. We argue that ecological economics, as an explicitly transdisciplinary enterprise, in tandem with political ecology, freedom oriented development, and deliberative democracy, offer important means for advancing our understandings of the local–global politics of sustainability. Recent discussions within ecological economics have highlighted the need for the field to expand its methodological and epistemological purview (Gale, 1998; Peterson, 2000; Nelson, 2001; Muradian and MartinezAlier, 2001; Martinez-Alier, 2002) to engage more directly with a wide variety of non-academic political actors (Meppem, 2000; Shi, 2004; Norgaard, 2004) and to confront its future direction as either a more specialized, if somewhat narrow normal science or a more integrative, creative bpost-normalQ science (Mu ller, 2003). Ecological economics has also introduced a series of innovative methodological approaches for interpreting and assessing sustainability. Some of these include calculations of intergenerational equity (Howarth, 1997, 2003; Padilla, 2002), differentiations of bweakQ versus bstrongQ sustainability (in essence debates over the substitutability of ecosystem-derived resources) (Norton and Toman, 1997; Neumayer, 2003), the valuation of ecosystem services (Costanza et al., 1997; Spash, 2000), broadening our interpretation of environmental bvaluesQ (Bukett, 2003) and the burgeoning work on sustainability indicators (e.g., Bell and Morse, 1999). Taken as a whole, ecological economics may be understood as an attempt to refine and implement the broad vision of SD advanced by Brundtland. It has done so, largely thus far, by providing a bridge between economics and ecology (see Norton and Toman, 1997). We contend that additional bridges need further development. For example, the role of power, from local to global scales, needs to be more consistently incorporated into ecological economics. The analysis of power relationships is a central concern of political ecology, particularly power as expressed through the discourse and practices of multiple actors (including households, nongovernmental organizations [NGOs], social movements, communities, capitalist enterprises, and state agents and institutional networks) who cooperate and come into conflict over specific development projects or other state-and market-mediated activities (Peluso and Watts, 2001, p. 25). Key contributors to political ecology including Joan Martinez-Alier (2002), Martin O’Connor (1994a,b), and Ramachandra Guha (Guha and Martinez-Alier, 1999; Guha, 2000) have provided leadership and intellectual fuel to ecological economics, yet the vast majority of articles in the journal Ecological Economics do not address the social and ecological implications of power relations. The field of political ecology has also attracted an array of anthropologists, geographers, environmental historians and associated social scientists united by efforts to clarify the ways in which resource degradation and conflicts are derived from particular political and economic processes (Emel and Peet, 1989). Political ecologists also stress the need to take seriously recent insights from ecological theory, particularly those associated with nonlinearity and complexity (Zimmerer, 1994), and undertake research that seeks to link a rigorous characterization of ecological transformation to the local, national and global processes (cultural, political– economic) that are driving such changes (see Zimmerer and Bassett, 2003). The result has been a series of case studies–mostly but not exclusively focused on third-world contexts (see McCarthy, 2001; Walker, 2003)–detailing the varying ways that environmental conflicts (over forests, water, fisheries, agroecosystems, biodiversity and other socioecological entities) are constituted through struggles over access to resources and the benefits accruing from resource exploitation (Peluso, 1992; Bryant and Bailey, 1997). Additionally, both ecological economics and political ecology have offered potent critiques of development theory and practice (see M. O’Connor, 1994a; Peet and Watts, 1996). At a general level, these are by now well-rehearsed. Indeed, anti-development narratives have progressed to the point where a fairly welldefined field–post-development studies–is emergent (see Rahnema and Bawtree, 1997). In spite of, and in some ways because of, the numerous and varied deconstructions of ddevelopmentT (see Ekins and Max-Neef, 1992; Crush, 1995; Sachs et al., 1998), we argue that the linkage of dsustainabilityT with the vilified concept of ddevelopmentT need not be the death-knell of sustainable development that many have taken it to be. Again, in the interests of reconstructing the conceptual landscape of sustainable development, we argue that some politically savvy and ethically defensible semblance of development is salvageable. And a useful place to start is found in the work of Amartya Sen (1999). Development as Freedom is an incisive and comprehensive analysis of the myriad ways in which economic and social debates about bdevelopmentQ have failed to struggle with fundamental issues regarding ethics, human rights and individual freedoms. These are issues that concerned the political economists of the 18th and 19th centuries. Recovering these concerns, Sen uses freedom as a lens to interrogate the traditional foci of development studies and practice such as poverty, food production, women’s role in development, market versus state institutions, welfare and culture. We contend that Sen’s approach peels back a great deal of the posturing, reification and instrumentalism found in the development literature. It does so by making the normative claim that development is ultimately about freedom (e.g., political rights and responsibilities, economic and social opportunities, transparency guarantees in social interactions), in contrast to a narrowly defined yet widely adopted identification of development with aggregate economic growth. If there is one noticeable gap in Sen’s analysis, it is a lack of concern with the environment and ecological changes. One of Sen’s most important contributions is the way he uses a freedom-based understanding of development to confront narrower versions focused solely on aggregate levels of economic growth. In a related work, Anand and Sen (2000; see also Brekke and Howarth, 2002) provide a trenchant critique of what they call the opulence-oriented approach to development10. As they put it, the bfundamental difficulty with the approach of wealth maximization and with the tradition of judging success by overall opulence of a society is a deep-seated failure to come to terms with the universalist unbiasedness needed for an adequate understanding of social justice and human developmentQ (Anand and Sen, 2000, p. 2031). In Sen we can begin to see a way to radically alter the general orientation of development, away from its obsession with an aggregate, ill-defined wealth towards a rigorously defined notion of freedom that builds on ideals of social justice and human dignity. Taken together, the three approaches sketched above offer a wide range of methodologies, normative positions, and ways of understanding human-environment relations from which to approach sustainable development discourses and practices in the postBrundtland era. Table 1 summarizes the contributions of these approaches to a pluralistic, transdisciplinary strategy for confronting sustainability11. We argue that such an approach can begin a conversation about critical aspects of sustainability that hitherto have been overlooked in the numerous debates about the subject. It is our sense that the normative underpinnings of sustainable development (e.g., ethical commitments across generations, development as enhanced freedoms) and the political programs that might follow have received some treatment in the context of SD debates, but have never been satisfactorily used together. It is our hope that the socio-theoretical and normative tools sketched above be used to (1) continue the ongoing interrogation of sustainable development as a policy discourse and development practice, and (2) reconstruct a normative vision of sustainable development that is simultaneously attuned to the danger of cooptation on the part of powerful actors hoping to give unsustainable activities a bsustainableQ veneer and the need for a sustainability politics that transcends calls for the **overhaul of everything**. In a postBrundtland world, decisions over environmental governance (e.g., the deployment of ecologically deleterious technologies, economic development pathways and human consumption patterns) are a function of both fragmenting and integrating forces occurring at multiple scales. Our vision of pluralistic sustainability research and praxis calls for recognition of the inherently political nature of the conflicts that arise from such forces, for example, over Third World states’ desire to construct massive hydroelectric schemes or industrialized countries’ relative **inaction on climate change**. Advocates of sustainable development might wrestle with these conflicts in any number of ways–by inserting oneself as facilitator, advocate or witness into discussions over **specific projects**, or by researching and calling for a decision-making process that incorporates multiple perspectives–but it is our sense that this is how we must proceed for any advancement of SD policies and politics.

#### Catastrophic warming reps are good – mobilizes political consciousness

Romm ‘12

(Joe Romm is a Fellow at American Progress and is the editor of Climate Progress, which New York Times columnist Tom Friedman called "the indispensable blog" and Time magazine named one of the 25 “Best Blogs of 2010.″ In 2009, Rolling Stone put Romm #88 on its list of 100 “people who are reinventing America.” Time named him a “Hero of the Environment″ and “The Web’s most influential climate-change blogger.” Romm was acting assistant secretary of energy for energy efficiency and renewable energy in 1997, where he oversaw $1 billion in R&D, demonstration, and deployment of low-carbon technology. He is a Senior Fellow at American Progress and holds a Ph.D. in physics from MIT., 2/26/2012, “Apocalypse Not: The Oscars, The Media And The Myth of ‘Constant Repetition of Doomsday Messages’ on Climate”, http://thinkprogress.org/romm/2012/02/26/432546/apocalypse-not-oscars-media-myth-of-repetition-of-doomsday-messages-on-climate/#more-432546)

The two greatest myths about global warming communications are 1) constant repetition of doomsday messages has been a major, ongoing strategy and 2) that strategy doesn’t work and indeed is actually counterproductive! These myths are so deeply ingrained in the environmental and progressive political community that when we finally had a serious shot at a climate bill, the powers that be decided not to focus on the threat posed by climate change in any serious fashion in their $200 million communications effort (see my 6/10 post “Can you solve global warming without talking about global warming?“). These myths are so deeply ingrained in the mainstream media that such messaging, when it is tried, is routinely attacked and denounced — and the flimsiest studies are interpreted exactly backwards to drive the erroneous message home (see “Dire straits: Media blows the story of UC Berkeley study on climate messaging“) The only time anything approximating this kind of messaging — not “doomsday” but what I’d call blunt, science-based messaging that also makes clear the problem is solvable — was in 2006 and 2007 with the release of An Inconvenient Truth (and the 4 assessment reports of the Intergovernmental Panel on Climate Change and media coverage like the April 2006 cover of Time). The data suggest that strategy measurably moved the public to become more concerned about the threat posed by global warming (see recent study here). You’d think it would be pretty obvious that the public is not going to be concerned about an issue unless one explains why they should be concerned about an issue. And the social science literature, including the vast literature on advertising and marketing, could not be clearer that only repeated messages have any chance of sinking in and moving the needle. Because I doubt any serious movement of public opinion or mobilization of political action could possibly occur until these myths are shattered, I’ll do a multipart series on this subject, featuring public opinion analysis, quotes by leading experts, and the latest social science research. Since this is Oscar night, though, it seems appropriate to start by looking at what messages the public are exposed to in popular culture and the media. It ain’t doomsday. Quite the reverse, climate change has been mostly an invisible issue for several years and the message of conspicuous consumption and business-as-usual reigns supreme. The motivation for this post actually came up because I received an e-mail from a journalist commenting that the “constant repetition of doomsday messages” doesn’t work as a messaging strategy. I had to demur, for the reasons noted above. But it did get me thinking about what messages the public are exposed to, especially as I’ve been rushing to see the movies nominated for Best Picture this year. I am a huge movie buff, but as parents of 5-year-olds know, it isn’t easy to stay up with the latest movies. That said, good luck finding a popular movie in recent years that even touches on climate change, let alone one a popular one that would pass for doomsday messaging. Best Picture nominee The Tree of Life has been billed as an environmental movie — and even shown at environmental film festivals — but while it is certainly depressing, climate-related it ain’t. In fact, if that is truly someone’s idea of environmental movie, count me out. The closest to a genuine popular climate movie was the dreadfully unscientific The Day After Tomorrow, which is from 2004 (and arguably set back the messaging effort by putting the absurd “global cooling” notion in people’s heads! Even Avatar, the most successful movie of all time and “the most epic piece of environmental advocacy ever captured on celluloid,” as one producer put it, omits the climate doomsday message. One of my favorite eco-movies, “Wall-E, is an eco-dystopian gem and an anti-consumption movie,” but it isn’t a climate movie. I will be interested to see The Hunger Games, but I’ve read all 3 of the bestselling post-apocalyptic young adult novels — hey, that’s my job! — and they don’t qualify as climate change doomsday messaging (more on that later). So, no, the movies certainly don’t expose the public to constant doomsday messages on climate. Here are the key points about what repeated messages the American public is exposed to: The broad American public is exposed to virtually no doomsday messages, let alone constant ones, on climate change in popular culture (TV and the movies and even online). There is not one single TV show on any network devoted to this subject, which is, arguably, more consequential than any other preventable issue we face. The same goes for the news media, whose coverage of climate change has collapsed (see “Network News Coverage of Climate Change Collapsed in 2011“). When the media do cover climate change in recent years, the overwhelming majority of coverage is devoid of any doomsday messages — and many outlets still feature hard-core deniers. Just imagine what the public’s view of climate would be if it got the same coverage as, say, unemployment, the housing crisis or even the deficit? When was the last time you saw an “employment denier” quoted on TV or in a newspaper? The public is exposed to constant messages promoting business as usual and indeed idolizing conspicuous consumption. See, for instance, “Breaking: The earth is breaking … but how about that Royal Wedding? Our political elite and intelligentsia, including MSM pundits and the supposedly “liberal media” like, say, MSNBC, hardly even talk about climate change and when they do, it isn’t doomsday. Indeed, there isn’t even a single national columnist for a major media outlet who writes primarily on climate. Most “liberal” columnists rarely mention it. At least a quarter of the public chooses media that devote a vast amount of time to the notion that global warming is a hoax and that environmentalists are extremists and that clean energy is a joke. In the MSM, conservative pundits routinely trash climate science and mock clean energy. Just listen to, say, Joe Scarborough on MSNBC’s Morning Joe mock clean energy sometime. The major energy companies bombard the airwaves with millions and millions of dollars of repetitious pro-fossil-fuel ads. The environmentalists spend far, far less money. As noted above, the one time they did run a major campaign to push a climate bill, they and their political allies including the president explicitly did NOT talk much about climate change, particularly doomsday messaging Environmentalists when they do appear in popular culture, especially TV, are routinely mocked. There is very little mass communication of doomsday messages online. Check out the most popular websites. General silence on the subject, and again, what coverage there is ain’t doomsday messaging. Go to the front page of the (moderately trafficked) environmental websites. Where is the doomsday? If you want to find anything approximating even modest, blunt, science-based messaging built around the scientific literature, interviews with actual climate scientists and a clear statement that we can solve this problem — well, you’ve all found it, of course, but the only people who see it are those who go looking for it. Of course, this blog is not even aimed at the general public. Probably 99% of Americans haven’t even seen one of my headlines and 99.7% haven’t read one of my climate science posts. And Climate Progress is probably the most widely read, quoted, and reposted climate science blog in the world. Anyone dropping into America from another country or another planet who started following popular culture and the news the way the overwhelming majority of Americans do would get the distinct impression that nobody who matters is terribly worried about climate change. And, of course, they’d be right — see “The failed presidency of Barack Obama, Part 2.” It is total BS that somehow the American public has been scared and overwhelmed by repeated doomsday messaging into some sort of climate fatigue. If the public’s concern has dropped — and public opinion analysis suggests it has dropped several percent (though is bouncing back a tad) — that is primarily due to the conservative media’s disinformation campaign impact on Tea Party conservatives and to the treatment of this as a nonissue by most of the rest of the media, intelligentsia and popular culture.

#### Economics is critical to ethical solutions for environmental protection

Barton H. Thompson, Professor of Natural Resources Law @ Stanford, Fall, ‘3 (27 Environs Envtl. L. & Pol'y J. 175, Lexis)

Economics can play a variety of roles in environmental policy. Some uses of economics may conflict with the ethical precepts of environmental moralists and perhaps even threaten their strategic goals. [\*177] In other contexts, however, economics may provide the environmental moralist with a valuable strategic or practical tool. Environmental moralists who reject all forms of economic analysis because some uses of economics conflict with their ethical beliefs risk undermining their goals of improving and protecting the environment and changing our relationship with the environment. Far from being inherently inconsistent with environmental ethics, **economics may** actually **be essential to accomplishing ethical ends**. Economics can be used in at least four partially overlapping ways. First, it can be used as a normative tool to determine the appropriate type and level of environmental protection. This is the realm of cost-benefit analysis, where the economic benefits of various environmental proposals in the form of avoided health injuries, increased recreational opportunities, species value, and the like are balanced against the economic costs of lost jobs, new equipment, and reduced consumer choices. Much of the criticism of economic analysis in the environmental context has focused on this normative use of economics. To the environmental moralist, cost-benefit analysis errs at the outset by focusing on the Heaven-rejected "lore of nicely-calculated less or more" n2 rather than the ethical importance of a healthy and sustainable environment. Beyond the question of whether cost-benefit analysis uses the correct criteria, critics also object to how the government makes cost-benefit comparisons. Critics, for example, have challenged the methods used to measure the benefits of environmental programs, the decision to measure benefits based on individuals' current preferences, the comparison of benefits and costs that environmental moralists find economically "incommensurable," and the decision to discount future benefits (such as lives saved many decades from now due to current environmental protection measures). n3 Economics, however, can be used for purposes other than normative evaluations of potential environmental measures. A second use to which economics is frequently put, for example, is as a diagnostic tool to determine why society is not achieving the desired type and level of environmental protection (regardless of how the desired types and levels of protection are determined). Garrett Hardin's famous discussion of the [\*178] "tragedy of the commons" is a good example of this diagnostic use of economics: when a common resource is free, users enjoy all of the benefits of use but share the losses and thus tend to overutilize the resource. n4 Used as a diagnostic tool, economics can help point to the reasons for, and thus the most effective solutions to, a wide variety of environmental problems. Third, environmental advocates can use economics as a strategic political tool to help **overcome** opposition to environmental measures and increase the chances of successful adoption. Economic concerns often generate opposition to environmental measures, and opponents frequently cite economic concerns as a rationale for not enacting the measures. Although proponents might view many of these economic concerns as normatively irrelevant or misconceived, the concerns are nonetheless a political reality. Economic analysis can sometimes disprove the basis for these concerns and thus hopefully eliminate them as a source of political opposition. Studies of a particular measure, for example, may demonstrate that the measure will not reduce employment as unions fear. In other cases, environmental proponents can use economic analysis to find means of minimizing economic impacts on key political stakeholders while still achieving environmental goals. Finally, economics can be used as a design tool to evaluate and devise approaches or techniques for achieving various environmental goals. Economics lies behind the market concepts that have been much in vogue over the last several decades -- pollution taxes, tradable pollution permits, water markets, individual tradable quotas (ITQs) for fisheries, mitigation banks for wetlands and species habitat. Economic theory suggests that such measures can protect the environment in a more effective and less costly manner than purely directive measures. n5 Beyond the identification and creation of market-based approaches, economic analysis can help determine the effect of various other regulatory alternatives on technological innovation, compliance, and other relevant measures, and thus guide policymakers. Most interestingly, psychological research suggests that, while some forms of economic incentives may undermine altruistic behavior, other forms of economic rewards may actually sustain and encourage ethical action.

### **2AC – Roll of the Ballot**

**Contention One: We believe that we are all participating in a cross examination intercollegiate policy debate. We believe that the Wikipedia definition of this activity is simple enough:**

(http://en.wikipedia.org/wiki/Policy\_debate)

Policy debate is a form of speech competition in which teams of two advocate for and against a resolution that typically calls for policy change by the United States federal government or security discourse. It is also referred to as cross-examination debate (sometimes shortened to Cross-X, CX, or C-X) because of the 3-minute questioning period following each constructive speech and the physical examination proceeding the first rebuttals. Affirmative teams generally present a plan as a proposal for implementation of the resolution. The negative will generally prove that it would be better not to do the plan or that the opportunity costs to the plan are so great that it should not be implemented.

**First, Debate is a structural competition referred to in the education literature as Mutually Exclusive Goal Attainment which makes it by definition different from a classroom environment where the goal is to maximize rewards for everyone.**

**Kohn,** Education Guru that Time Magazine labeled"perhaps the country's most outspoken critic of education's fixation on grades [and] test scores,” **1986**

(No Contest: The Case Against Competition) p. 3-5

Let us begin with a more precise formulation of the topic. I think it is useful to distinguish between what might be called structural competition and intentional competition. The former refers to a situation; the latter, to an attitude. Whereas structural competition has to do with the win/lose framework, which is external, intentional competition is internal; it concerns the desire on the part of an individual to be number one. To say that an activity is structurally competitive is to say that it is characterized by what I will call mutually exclusive goal attainment ("MEGA," for short). This means, very simply, that my success requires your failure. Our fates are negatively linked. If one of us must lose exactly as much as the other wins, as in poker, then we are talking about a "zero-sum game." But in any MEGA arrangement, two or more individuals are trying to achieve a goal that cannot be achieved by all of them. This is the essence of competition, as several social scientists have observed.' The same phenomenon sometimes has been described as a situation of scarcity. This does not explain competition but simply restates it: If I must try to defeat you in order to get what I want, then what I want is scarce by definition. We need to be careful not to confuse this sort of scarcity with the kind that refers to an objective shortage of some commodity. It is possible, of course, for two hungry people to compete for a single bowl of stew. But in most contests, the goal is simply a prized status. Structural competition usually involves the comparison of several individuals in such a way that only one of them can be the best. The competition itself sets the goal, which is to win; scarcity is thereby created out of nothing. Structural competitions can be distinguished according to several criteria. Competitions vary, for instance, with respect to how many winners there will be. Not everyone who applies for admission to a given college will be accepted, but my acceptance does not necessarily preclude yours (although it will make it somewhat less likely). On the other hand, only one woman in a bathing suit will be crowned Miss America each year, and if Miss Montana wins, Miss New Jersey cannot. In both of these competitions, notice that winning is the result of someone's subjective judgment. In other cases, such as arm wrestling, pre-established and reasonably straightforward criteria determine who wins. Beauty contests and college admissions also share another feature: neither requires any direct interaction among the contestants. The success of one simply rules out or reduces the chances for success of another. There is a stronger version of structural competition in which one contestant must make the other(s) fail in order to succeed himself. War is one example. Tennis is another. Whereas two bowlers competing for a trophy take turns doing the same thing and do not interfere with each other, two tennis players actively work at defeating each other. Which of these postures is in evidence depends on the rules of the game, the type of structural competition that is involved. Intentional competition is much easier to define - although its nuances are quite complex indeed, as we shall see later. Here we are simply talking about an individual's competitiveness, his or her proclivity for besting others. This can take place in the absence of structural competition, as all of us have observed: someone may arrive at a party and be concerned to prove he is the most intelligent or attractive person in the room even though no prizes are offered and no one else has given any thought to the matter. The psychoanalyst Karen Horney described as neurotic someone who "constantly measures himself against others, even in situations which do not call for it."' The reverse situation - structural competition without intentional competition - is also possible. You may be concerned simply to do the best you can (without any special interest in being better than others), yet find yourself in a situation where this entails competing. Here it is the structure rather than your intention that defines success as victory. Perhaps you are even averse to competing but find yourself unable to avoid it - an unhappy and stressful state of affairs known to many of us. The most extreme case of structural competition without intentional competition is a circumstance in which individuals are ranked and rewarded without even being aware of it. Students may be sorted on the basis of their grades even if they are not trying to defeat each other. (The distinction between the two varieties of competition is especially useful in allowing us to make sense of such a scenario.) Finally, let us take note of the rather obvious fact that competition can exist among individuals or among groups. The latter does not rule out the former: even as two corporations or nations or basketball teams are competing with each other, it is possible that the people within these groups can be vying for money or status. Competition among groups is known as intergroup competition, while competition among individuals within a group is called intragroup competition. These distinctions will prove important in later chapters.

**Creativity requires limitations to channel innovation – it’s more challenging to paint on a previously marked canvas than one entirely blank**

Mayer, ‘6 (Marissa Ann, vice-president for search products and user experience at Google, February 13, 2006, “Creativity Loves Constraints,” http://www.businessweek.com/print/magazine/content/06\_07/b3971144.htm?chan=gl)

When people think about creativity, they think about artistic work -- unbridled, unguided effort that leads to beautiful effect. But if you look deeper, you'll find that some of the most inspiring art forms, such as haikus, sonatas, and religious paintings, are fraught with constraints. They are beautiful because creativity triumphed over the "rules." Constraints shape and focus problems and provide clear challenges to overcome. Creativity thrives best when constrained.

But constraints must be balanced with a healthy disregard for the impossible. Too many curbs can lead to pessimism and despair. Disregarding the bounds of what we know or accept gives rise to ideas that are non-obvious, unconventional, or unexplored. The creativity realized in this balance between constraint and disregard for the impossible is fueled by passion and leads to revolutionary change.

A few years ago, I met Paul Beckett, a talented designer who makes sculptural clocks. When I asked him why not do just sculptures, Paul said he liked the challenge of making something artistically beautiful that also had to perform as a clock. Framing the task in that way freed his creative force. Paul reflected that he also found it easier to paint on a canvas that had a mark on it rather than starting with one that was entirely clean and white. This resonated with me. It is often easier to direct your energy when you start with constrained challenges (a sculpture that must be a clock) or constrained possibilities (a canvas that is marked).

Public deliberation focused on policy outcomes is necessary for authentic democratic practices. The US invasion of Iraq demonstrates that the privileging of personal politics enables hegemonic domination at the expense of oppressed groups.

Boor Tonn 2005 – Associate Professor of Communication at the University of Maryland (Mari Boor Tonn, “Taking Conversation, Dialogue, and Therapy Public” Rhetoric& Public Affairs Vol. 8, No. 3)

This widespread recognition that access to public deliberative processes and the ballot is a baseline of any genuine democracy points to the most curious irony of the conversation movement: portions of its constituency. Numbering among the most fervid dialogic loyalists have been some feminists and multiculturalists who represent groups historically denied both the right to speak in public and the ballot. Oddly, some feminists who championed the slogan "The Personal Is Political" to emphasize ways relational power can oppress tend to ignore similar dangers lurking in the appropriation of conversation and dialogue in public deliberation. Yet the conversational model's emphasis on empowerment through intimacy can duplicate the power networks that traditionally excluded females and nonwhites and gave rise to numerous, sometimes necessarily uncivil, demands for democratic inclusion. Formalized participation structures in deliberative processes obviously cannot ensure the elimination of relational power blocs, but, as Freeman pointed out, the absence of formal rules leaves relational power unchecked and potentially capricious. Moreover, the privileging of the self, personal experiences, and individual perspectives of reality intrinsic in the conversational paradigm mirrors justifications once used by dominant groups who used their own lives, beliefs, and interests as templates for hegemonic social premises to oppress women, the lower class, and people of color. Paradigms infused with the therapeutic language of emotional healing and coping likewise flirt with the type of psychological diagnoses once ascribed to disaffected women. But as Betty Friedan's landmark 1963 The Feminist Mystique argued, the cure for female alienation was neither tranquilizers nor attitude adjustments fostered through psychotherapy but, rather, unrestricted opportunities.102 The price exacted by promoting approaches to complex public issues- models that cast conventional deliberative processes, including the marshaling of evidence beyond individual subjectivity, as "elitist" or "monologic"-can be steep. Consider comments of an aide to President George W. Bush made before reports concluding Iraq harbored no weapons of mass destruction, the primary justification for a U.S.-led war costing thousands of lives. Investigative reporters and other persons sleuthing for hard facts, he claimed, operate "in what we call the reality-based community." Such people "believe that solutions emerge from [the] judicious study of discernible reality." Then baldly flexing the muscle afforded by increasingly popular social-constructionist and poststructuralist models for conflict resolution, he added: "That's not the way the world really works anymore . . . We're an empire now, and when we act, we create our own reality. And while you're studying that reality- judiciously, as you will-we'll act again, creating other new realities."103 The recent fascination with public conversation and dialogue most likely is a product of frustration with the tone of much public, political discourse. Such concerns are neither new nor completely without merit. Yet, as Burke insightfully pointed out nearly six decades ago, "A perennial embarrassment in liberal apologetics has arisen from its 'surgical' proclivity: its attempt to outlaw a malfunction by outlawing the function." The attempt to eliminate flaws in a process by eliminating the entire process, he writes, "is like trying to eliminate heart disease by eliminating hearts."104 Because public argument and deliberative processes are the "heart" of true democracy, supplanting those models with social and therapeutic conversation and dialogue jeopardizes the very pulse and lifeblood of democracy itself.

**Forecloses agonism and justifies endless violence against those that don’t agree with them, turns case**

**Michaels, 2k** (Walter Benti, Prof English @ U Illinois-Chicago, "Political Science Fictions", New Literary History, 31.4)

In texts like Xenogenesis and Xenocide, then, the fundamental differences are between humans and aliens, and the fundamental questions are not about how society should be organized but about whether the different species {or, alternatively and inconsequentially, different cultures) can survive. 9 indeed, one might say that the replacement of ideology by bodies and cultures makes it inevitable that the only relevant question be the question of survival, which is why texts like Xenogenesis and Xenocide are called Xenogenesis and Xenocide. Because the transformation of ideological differences into cultural differences makes the differences themselves valuable, the politics of a world divided into cultures (a world where difference is understood as cultural") must be the politics of survival—a politics, in other words, where the worst thing that can happen will be a cultured death. Victory over the enemy on the cold war model may be understood as the victory of good over evil-this [End Page 655] is what the victory of the humans over the insect-like aliens called "buggers" looks like at the end of Ender's Game, the first volume of Card's series. But insofar as the enemy is redescribed not as people who disagree with us as to how society should be organized (communists) but as people who occupy different subject positions (aliens), the happy ending of their destruction must be redescribed too. By the beginning of the second novel in the Ender series (Speaker for the Dead), the very thing that made Ender a hero (destroying the enemy) has made him a villain (destroying an entire species). The ideological enemy has been rewritten as the physiocultural other; all conflict has been reimagined on the model of the conflict between self and other.

And this is true whether the texts in question understand difference as essentially -physical or as essentially cultural. It is for this reason that the essentialist/antiessentialist debate in contemporary theory is so fundamental--not because the disagreements between the two positions are so fundamental but because their agreement is. What they agree on is the value of difference itself, a value created bv turning disagreement into otherness. The dispute, in other words, between essentialism and antiessentialism is only secondarily the expression of a dispute about whether difference is physical or cultural: it is primarily the expression of a consensus about the desirability of maintaining difference, of making sure that differences survive. If difference is physical, then what must survive are different species: if difference is cultural then it is cultural survival that matters. The point of both stories is that the happy end cannot be the victory of one species/culture over another. The idea here is not merely that survival as such-whether it is the survival of this species or the survival of the culture—is valued. What the interchangeability of species and culture makes clear is rather the value of identities-it is identities that must survive-which is to sav that it is not death but extinction that must be avoided. On Earth, this distinction is made vivid in contemporary imaginations of what are, in effect, nonviolent genocides, as in, for example, the idea that current rates of intermarriage and assimilation doom American Jewry to destruction and thus constitute a second Holocaust. Intermarriage poses no threat to the people who intermarry, which is just to say that when someone like Alan Dershowitz worries about The Vanishing American Jew, he is worried not about people who are Jewish but about the identity that is their Jewishness. It is the identity, not the people, that is in danger of disappearing. 10

### 2AC – Liberate the Oppressed

#### Pollution increase food insecurity in minority communities

NAACP 2011, National Association for the Advancement of Colored People, *Coal Blooded: Putting Profits Before People*, <http://naacp.3cdn.net/343432b6ba7601f0c3_45m6bp9tn.pdf>

Availability and affordability of nutritious foods are linked to agriculture production and markets, which are impacted by climate change which negatively impacts weather pattern dependent agricultural yields. In the US, already many African American and Latino children live in “food deserts” According to a 2008 study, availability of supermarkets in African American neighborhoods was 52% of their prevalence in white neighborhoods. 22 Another study found that in census tracks where African Americans live within a mile of a supermarket, their intake of food and vegetables increases by 32%. 23 According to a study based on data from the USDA and the Nielson Company, over a third of the 44 counties in the US that fall into the highest category of food insecurity have majority African American populations. One in 4 African American households is food insecure. 24 African American and Latino children are also more likely to suffer from obesity, according to the American Obesity Association. 25 Childhood hunger and obesity can limit children’s growth, restrict brain development and reduce immune function (thereby increasing illness rates). 26 Later in life, obesity is well known to lead to diabetes, high blood pressure, heart disease, etc. The Food Research and Action Center reports that food-insecure children are more likely to be tardy or absent from school. They further state that insufficient food also negatively impacts children’s ability to interact with others and his/her surroundings. 27 Hunger and obesity are linked to lack of access to affordable, nutritious foods and will be exacerbated by the shifts in agricultural yields that result from climate change. The disproportionate impact of climate change on communities of color is a secondary result of the emissions from coal fired power plants on top of the direct assault through the pollution that communities ingest daily.

#### Centralized energy systems cause exclusionary systems and structural violence

**Hendriks ‘09** [Carolyn, The Crawford School of Economics and Government – The Australia National University, Securing Public Legitimacy for Long-Term Energy Reform, Public Policy Network Conference – The Australian National University, Canberra, 29-30 January 2009]

Beyond securing legitimacy, policy design that takes its democratic context seriously, for ¶ example by exposing issues to public deliberation, may shift people preferences towards ¶ more just, moral and even greener outcomes (Dryzek 1987:Ch 9; Miller 1992:61; Rawls ¶ 1971). Meaningful citizen **engagement in** long term **policy** development can also **help to ¶ address systemic inequalities, and support active citizenship** (Schneider & Ingram 1997). In ¶ the long term such policies have the potential to improve human dignity, justice, and ¶ ultimately democratic practice (Lasswell 1951, 1965). 6¶ While there are strong normative arguments for designing long-term policies with ¶ democracy in mind, their currency tends to be weak in highly complex and technical fields ¶ such as energy policy. The conventional approach to energy policy has been a mix of ¶ technocracy and elite decision making, where the focus has been on ensuring that ¶ procedures include those with the relevant technical and economic background (Lovins & ¶ Lovins 1982; Orr 1979). The political (and hence democratic) problem with this approach ¶ however is that technological systems such as energy are embedded in the social, and **are ¶ masters at (re)producing exclusion and inequality** (Barry 2001; Latour 2004; Wajcman ¶ 2004). Energy is especially vulnerable in this respect, given its increasing scarcity and ¶ political relevance. In a modern world energy issues are a central feature of our everyday ¶ existence affecting our mobility, the way we produce and distribute food, and how and ¶ where we live. The significance of democratic issues for energy policy is likely to increase as ¶ resources become scarcer and inequities worsen. Differentiations between ‘energy haves ¶ and have-nots’ will also sharpen as energy demand continues to increase. The beginnings of ¶ such energy divisions are already evident as increasing prices for fuel and electricity tend to ¶ hit the poor the hardest (see ACF et al. no date). ¶ Many of these arguments on democratic implications of energy reform are not new. In ¶ response to the energy crisis of the 1970s, some scholars warned of the dangers of ¶ developing energy policy in the absence of public input (Dahl 1985; Orr 1979). They called ¶ for greater public involvement in energy policy to countervail the influence of elites, ¶ bolster accountability and to prevent special interests dominating decisions on significant ¶ public infrastructure. They also stressed that given the complexities and uncertainties ¶ involved in steering energy futures, public involvement is one sure way to promote societal ¶ resilience, and foster the cooperation of citizens in policies that might involve ¶ uncomfortable changes (Orr 1979). Similar arguments can also be found in more recent ¶ debates on ecological modernisation,¶ 2¶ where open participatory decision making is said to ¶ facilitate greener outcomes (Gibbs 2000; Vigar & Healy 2002). ¶ Democratic concerns have also surfaced in relation to particular areas of energy politics. ¶ Especially significant here are energy matters which intersect with military policy such as ¶ nuclear and oil resources (Holden 2006). We have seen, for example, widespread public ¶ concern over nuclear arms (Dahl 1985) and the invasion of countries for their energy ¶ resources. The siting of energy infrastructure also provokes considerable public interest, ¶ **primarily because the social costs and benefits of** centralised energy infrastructure **such as ¶ power plants, sub-stations and transmission lines are often borne by different populations** ¶ (Lovins & Lovins 1982). The obvious example here is nuclear reactors and hydro-electricity dams, but even seemingly benign infrastructures such as powerlines (Casper & Wellstone ¶ 1981; Gerlach 1978) and wind turbines (Hindmarsh & Matthews 2008; Wolsink 2007) have ¶ been the subject of social conflict and in some cases violence. There are also numerous ¶ practical examples that suggest that when the public are meaningfully engaged in the ¶ design and implementation of energy policies, they are more accepting of new or ¶ controversial technologies, such as wind farms (Gross 2007; Wüstenhagen et al. 2007), and ¶ nuclear waste disposal sites (Dawson & Darst 2006).

#### **Metro-centric focus on society leads to structural forms of discrimination called ruralism – The neg method exacerbates rural poverty and complicates all forms of discrimination**

Jerke in 2010

Bud W. Jerke. University of Pennsylvania Law School. “Queer ruralism” from the Harvard Journal of Law and Gender. Vol 34. 2010.

A growing body of scholarship is examining America's rural-urban divide in the context of legal studies. As a general point, "society's focus, its programs, its culture, and its standards are based on an urban assumption."' Likewise, our legal system is considered equally urban-centric.'" In the U.S., "[a]n unspoken assumption permeates modem scholarship: the impact of laws should be measured exclusively in terms of how the legal system operates in America's cities and suburbs."" This urban assumption of American society results in the exclusion and marginalization of those who are not "urban"—America's rural inhabitants who have "disappeared from view."'^ This marginalization manifests in "ruralism," a distinctive form of "discrimination on the basis of factors stemming from living in a rural area."'^ Awareness and acknowledgment of mralism as a form of discrimination suffers because ruralism "does not look like what we [think] discrimination [should] look[] like."'" Ruralism's effects are not a result of "outright hostility to a particular group,"" as "most individuals do not overtly express discriminatory animus toward rural dwellers."'\* As such, ruralism is often characterized as merely a set of disadvantages. Ruralism is best cast as a form of structural discrimination. Current literature has not considered this approach, but it is an appropriate framework for describing how American society's various policies, assumptions, and stereotypes have pervasive and systemic—and hence, discriminatory— adverse effects on rural dwellers. Structural discrimination is more fully explored in Part V, as applied to queer ruralism. For now, it suffices to define structural discrimination as: "the policies of dominant race/ethnic/ gender institutions and the behavior of the individuals who implement these policies and control these institutions, which are race/ethnic/gender neutral in intent but which have a differential and/or harmful effect on minority race/ethnic/gender groups."'^ The structural discrimination that constitutes ruralism arises from the confluence of an urban-centric focus of policymakers who draft laws tailored to urban ills while eliding rural differences,'^ judicial rhetoric that embraces and constitutes rural stereotypes," and society's popularly embraced perceptions of rurality as embodied in television, literature, and film.^" fhe effects of ruralism are numerous. Ruralism works to exacerbate rural poverty.^' The predominant focus on urban poverty renders mral poverty virtually invisible and lacking the attention that it requires. This may be attributed to stereotypes, as discussed above, that portray rural as ideal and positive or because of spatial isolation and metro-centrism.^^ Ruralism contributes to an educational and employment divide. Economic factors, such as funding disparities, and geographic and cultural isolation, which make it difficult to recruit and retain high quality teachers, have created a " 'separate but equal' problem: educational facilities are provided to rural children, but the opportunities do not approximate those provided to urban children."" Educational disadvantages, coupled with ruralist perceptions that "[brilliance is associated with urban, not rural, dwellers" puts these rural inhabitants at a significant disadvantage for post-college employment.^^ Ruralism manifests in the lack of access to various goods and services.^' These include access to quality and affordable healthcare,^« housing," and other govemment and social services, such as welfare,^\* mental health treatment,^' and substance abuse programs.^" Disconcertingly, "ruralism serves to exacerbate the impact of other forms of discrimination."^' This paper explores how ruralism uniquely complicates life for queer rural dwellers. In one sense, it is an extension of either work that has examined the particularly acute challenges rural racial minorities face by residing at the intersection of racism and ruralism.^^

A) Gaddafi is a war criminal who sought to subjugate West Africa

New Africa Analysis 2011 – New Africa Analysis is produced by a group of Africans in London, supported by a circle of interested Europeans. We have a network of journalists, policy analysts, seasoned academics and independent researchers in Africa, Europe and the rest of the world (“Gaddafi: A Penchant For War Crimes,” http://newafricaanalysis.co.uk/index.php/2011/03/gaddafi-a-penchant-for-war-crimes/)

The world is well aware of the atrocities committed by Colonel Gaddafi on his own people both in recent weeks and over his 40 year reign in the North African country. Yet, it is the sight just outside the city of Benghazi where his World Revolutionary Centre (WRC) was located that saw the start of some of his worst crimes across the continent and the globe. The centre, at its height in the 80’s when Gaddafi was at his, was a training ground for violent dissidents who have gone on to wreak havoc, predominately across West Africa. The subversive activities, and the deadly and pernicious atrocities committed by the centre’s alumni in several countries still wreak division and political instability. Douglas Farah, senior fellow at the International Assessment and Strategy Centre in Virginia, USA, described the WRC as the ‘Harvard and Yale of a whole generation of African revolutionaries, many of them the continent’s most notorious tyrants.’ Charles Taylor, Foday Sankoh, Blaise Compaoré, Ibrahim Bah and Idriss Deby were just a few to graduate from the WRC. They formed a powerful association that relied on the backing of Gaddafi to carry out their baneful activities. It was a criminal network that was centred on the exploitation of minerals including diamonds for the personal wealth of these individuals. Bah, who assisted in getting both Taylor and Compaoré to power, is known to have fought with Islamic militants in Afghanistan as well as with Hezbollah in Lebanon. It is he who had contacts in the illicit diamond trade. And he made the others extremely wealthy in return for their support and arms for his violent campaigns, particularly with Sankoh’s Revolutionary United Front (RUF) in Sierra Leone. In ‘87, troops loyal to Blaise Compaoré assassinated Thomas Sankara, the President of Burkina Faso, to pave the way for Compaoré to take power. As Head of State he supplied Sankoh’s RUF throughout the civil war in Sierra Leone. A 2002 UN investigation found he had breached various arms embargos in supplying arms to both Charles Taylor in Liberia and the RUF. He remains in power today still allied with Colonel Gaddafi. His and Gaddafi’s support for Sankoh’s RUF, which committed grave atrocities as they slaughtered, maimed and mutilated hundreds of thousands in a bid to control the diamond mines throughout the decade long Civil War, is indisputable. Nicholas Kumjian, the prosecuting lawyer in Charles Taylor’s trial at The Hague for his involvement in the Sierra Leone conflict admits; ‘the involvement of Moamer Kadhafi and Blaise Campaore (in Sierra Leone) has been proven.’ The Sierra Leone Truth and Reconciliation Commission (TRC) was established to address the violations committed throughout the civil war to promote healing and reconciliation and aid the victims. It also recognises the detrimental role Gaddafi played in perpetuating the conflict; voicing dismay over Gaddafi’s visit to the country and warm reception he received from former President Ahmad Tejan Kabbah in ‘07. The TRC has called for reparations to be made by Gaddafi in recognition of his role in that conflict. They called for money to be paid by Libya to the victims of the war just as they had done with the victims of other nations who have borne the brunt of Gaddafi’s terror. In ’04 Libya paid $170 million to the relatives of the French victims of a UTA French airliner bombing in 1989, which was blamed on Gaddafi. Further terrorist actions from Libya on other western nations have been met with similar compensatory payments. In ’04 $3 billion was paid by Libya to the relatives of the victims of the Lockerbie bombing (the biggest single terrorist attack ever in the UK). As of yet Sierra Leone has received some bags of rice and a few buses in terms of reparations for the thousands killed, and the hundreds of thousands more maimed and displaced throughout the 11-year-long war. This is despite the TRC having found a letter of thanks from the RUF to Gaddafi for a gift of $500,000. It is an admittedly small amount of money, but one that links Gaddafi to those who committed vast war crimes in that West African country. On top of this he has flaunted various arms embargos to support fledgling dictators in the region. Whilst Taylor was placed under a UN travel ban and faced sanctions for his role in the diamonds for weapons trade, Gaddafi continued to supply him with shipments of weapons. Gaddafi’s active role in Sierra Leone, which saw him try to establish a satellite state under Sankoh’s RUF, has led many to question why he is not alongside Charles Taylor in The Hague. As well as Kumjian’s testimony to his involvement, Taylor’s defence lawyer Courtney Griffiths, has questioned; ‘why is Colonel Moamer Gaddafi not in the dock?’ There is sufficient evidence for him to be facing trial for the war crimes that he perpetrated. After all, the RUF was a movement that was trained in Libya and financed by Gaddafi and his allies in Liberia and Burkina Faso. The American David Crane, the Chief Prosecutor on Taylor’s case from ’02 to ’05, believes the answer is political. He claims to have ‘named and shamed’ Gaddafi in his indictment but the threat of Western powers withdrawing the Court’s funding prevented him indicting Gaddafi for war crimes and crimes against humanity. Having opened Libya up to western oil and business investments so vastly in the last few years it is little wonder western powers were not keen to push for him standing trial. Needless to say Sierra Leone and its victims were not privy to the same investment opportunities. Although never being at the WRC Robert Mugabe remains one of Gaddafi’s closest allies in the continent. The Zimbabwean President has benefitted from direct Libyan donations and subsidized oil shipments, amounting to hundreds of millions of dollars. It is these sorts of brutal regimes that Gaddafi has bolstered and continues to support. However with the uprising in Libya and UN resolution 1973 to protect civilians and the opposition, the international community now has the opportunity to rectify their deliberate oversight and inaction and insist Gaddafi is made to answer for his crimes both domestically and abroad. The chaos he has spread across West Africa cannot be allowed to go unpunished.

B) Their essentialist embrace of Gaddafi makes real suffering inevitable

**Kiely 95** (Ray, Lecturer in Development Studies @ U of East London, *Third Worldist Relativism: A New Form of Imperialism*, Journal of Contemporary Asia, Vol. 25 No. 2) jl

Nevertheless, the point remains that conflict exists within the Third World, and this cannot simply be read off from the machinations of "western imperialism." To do so is to deny the capacity of the peoples in the periphery to forge their own history -a classic example of imperialist thinking. It is the case that power is concentrated firmly in the hands of the western powers, but it is not the case that this [a]ffects sic all nations of the periphery in a uniform way. It is in this light that there is a basis for a re-assessment of nationalism, and therefore the case for intervention by western powers, in the developing world. Third World Nationalism and Western Intervention There is a long history of western intervention in the periphery, which can easily be denounced as imperialism. This applies to the colonial period, and to the alarming number of interventions which have taken place since 1945. These interventions occurred for a variety of reasons, such as access to important raw materials, strategic interests in the context of the Cold War, and (not least) a US political culture in which the rulling elite has consistently believed that it has a divine right to expand beyond its territorial boundaries (Kiernan 1980). Western rhetoric concerning the promotion of democracy against Communism during the Cold War can be dismissed as nonsense when one considers the countless interventions designed to prop up right-wing dictators, and even overturn liberal-democracies (see Blum 1986; Pearce 1982). Moreover, during the Cold War western intervention in the Third World was far more common than so-called communist expansion (Halliday 1983: 97-104). Nevertheless, there is now a belief in the west, even among those on the Left, that there is case for western intervention in the Third World in the post-Cold War era. This is said to be the case because "oppressed peoples are looking for forms of western intervention that can save them from the horrors visited on them by their 'own' and neighbouring regimes....To uphold national sovereignty and damn intervention is to give a free hand to genocide" (Shaw 1993: 16). What is crucial here is that Shaw justifies intervention on the basis of the sound observation that conflicts exist within the Third World, and these cannot simply be read off from the actions of an omnipresent "West." This is made clear when Shaw (1993: 17) argues that "(t)he left has a particular duty to respond, not to the self-serving nationalist rhetoric of corrupt and repressive third world governments, but to the people who suffer from them/' This statement echoes Bill Warren's critique of (some versions of) dependency theory, which all too easily justified a reactionary nationalism in the name of so-called anti-imperialism (Warren 1980: chs.l and 7). On the other hand, many people on the western Left argue that intervention and imperialism amount to one and the same thing, and they cite the history of reactionary and bloody interventions by the western world since 1945 (or earlier - Chomsky's 1993 taken us back to 1492). On this basis, interventions in the 1990s in the Gulf and Somalia are regarded as imperialist in character (Pilger 1993: 10-11). There are however competing strands within this school of thought, which I allude to below. The problem with these two views is that they tend to talk past each other. While both approaches may appeal to the justice of their respective positions, it is seldom spelt out what is meant by this concept, a weakness intensified by the one-sided nature of both approaches. On the one hand, the interventionists appeal to justice and the rights of subjects (rather than states) in the periphery, but they tend to do so in isolation from the real world of international politics. On the other hand, opponents of intervention focus on realpolitik and the bloody history of western interventions, but in so doing they tend to provide no clear grounds for any forms of intervention. These points can be illustrated by an examination of the competing positions in the Gulf War. The interventionists argued that United Nations' action to remove Iraqi forces from Kuwait was largely justifiable (Halliday 1991). The best criterion for what constitutes a just war can be found in the work of Michael Walzer (1977). He argues that war is justified when it is in response to an act of aggression by one state against the territorial integrity of another. In a new edition of this work Walzer (1992: xi-xxiii) has argued that the Gulf War constitutes a just war. This is so for the following reasons: (i) the Iraqi invasion of Kuwait in August 1990 was against the wishes of its citizens, and the rest of the population; (ii) the declared aims of the UN forces were to liberate Kuwait, and to ensure that Iraq would be incapable of further aggression; (iii) the UN forces did not go on to overthrow Saddam Hussein or to occupy Iraq, except to guarantee some safety for the Kurds after their unsuccessful uprising. On the other hand, others have argued that United States' imperialism is so om-nipotent that the only correct position was to support the Iraqi regime. The United Nations is simply a tool of US imperialism, and the US' chief concern was economic (oil) and/or strategic (the preservation of Israel and Arab client regimes). Proponents of this view pointed out the double standards by which Iraq was condemned for its occupation of Kuwait, while there were no calls for "just wars" against Israel, Indonesia or in the past, South Africa (Samara 1991: 265-6). This point is more relevant than the interventionists would sometimes have us believe, as I show below. First, however, the pro-Iraq position needs further clarification. The key argument of this position is that Saddam Hussein represented a challenge to the status quo in the Middle East, whereby there were great discrepancies between the wealth of Arab states, and local "comprador" classes deposited their oil wealth in western banks. In this respect, the Iraqi takeover of Kuwait represented a liberation for that country (Samara 1991: 260-1). There are strong grounds for dismissing this position as every bit as opportunist as that of the worst hawks in successive United States' administrations. Saddam Hussein's nationalism can hardly be described as progressive - he was an old ally of the United States, especially during the latter stages of the Iran-Iraq war, his treatment of Kurds within Iraq has been brutal and he has persistently attempted to control the cause of Palestinian national liberation (Halliday 1990: 73). To simply assume that Saddam Hussein was now a progressive anti-imperialist because he had fallen out with his old allies is naive at best, and at worst represents a mirror-image of the US approach that "our enemy's enemy is our friend." (Elliott 1992: 11) Furthermore, Iraqi treatment of those living in Kuwait during the occupation can hardly be described as a 'liberation" - rather, it was characterised by extremely repressive measures against the population. Moreover, to point to isolated examples of successful social programmes in Iraq (Gowan 1991) is hardly sufficient (and indeed is patronising) to secure progressive credentials. Once again. Warren's point that anti-imperialist rhetoric is not necessarily progressive seems pertinent. A less extreme anti-interventionist position was to not take sides in the war, but at the same time not call for action against the Iraqi regime. The basic justification for this view was that the international order was so unjust and exploitative that no one had the right to impose their will on anyone else. Of course this view abstracts from the fact that the Iraqi regime had done just that, and it becomes a call for lack of action - the logic of this view is that there can be no change for the better until the glorious day of world-wide socialism. Moreover, this view implicitly rests on the view that the capitalist state always unproblematically serves the functional needs of capital, and so actions by capitalist states are always seen as inherently "bad." So, according to this view the West intervened in the Gulf because it suited its interests, but is reluctant to intervene in Bosnia because it too suits its interests. While I think that there is a great deal of truth in this assertion, it takes things too far. Just because the West has no intrinsic interest in intervention in Bosnia does not mean that we should simply leave it there (or worse still appeal to the Yugoslavian "class struggle" in a way that totally abstracts from the concrete conditions in the region), as many Marxists in the west imply (see Callmicos 1993) ~ instead, when there is a case for some form of intervention (as I believe there is in Bosnia) there should be criticism of western governments precisely on the grounds that strategic or economic interests should not determine foreign policy (Magas 1992). The common assertion that these interests always win the day is to dismiss the struggle for alternatives from the outset. Similarly, just because intervention in one place may take imperialist forms (such as in Somalia in 1992-3) does not mean that the case against any form of intervention is established. Standard western Left views (which I show below have much in common with post-modernism) can again be seen as based on an approach which is defeatist. The structures of international capitalism are seen as so universally bad that there is no room for reform within this system. Struggle for reforms against this system is thereby discounted at the outset. We are therefore forced back to the logic of a Frankian "pessimism of the intellect, pessimism of the will" (Bernstein and Nicholas 1983), in which there is no hope for the Third World until the glorious day of redemption (that is world-wide revolution led by "the vanguard party"). As Elliott (1992: 11) argues, this perspective "proffered an abstract internationalism whereby the cure for all remediable ills was postponed to an indefinite future...." So, to summarise: the pro-Iraq position is based on a patronising Third Worldist/ dependency approach in which all the ills of a country are blamed on the West, and so anti-western positions are automatically progressive. The anti-sanctions position rests on a similarly misguided view that the "world-system" is so omnipresent and bad that the call for reforms within it is doomed to failure. Does this mean then, that the interventionist view is correct? In terms of the Gulf War, I think not. In terms of interventions in other places at other times, the only answer that can be given is that it depends on the concrete circumstances (rather than by recourse to an omnipresent imperialism which is assumed to always win the day). On the question of the Gulf War, the pro-intervention position abstracts from the motives that guided US-led intervention. As already stated, there were enormous double standards in the decision to punish Saddam's invasion whilst other equally illegal occupations had not led to military action, or even sanctions. It does seem odd that interventionists such as Fred Halliday and Norman Geras supported the US actions in the Gulf but made no call for similar action against South Africa, Israel or Indonesia (Cockbum 1991: 15-16). According to this view, the US intervened in the Gulf in order to maintain its hegemony in the region, and to help preserve regimes that had entered into an effective partnership with the West whereby the former deposited oil profits in the metropolitan countries in return for military protection (Stork and Lesch 1990; Bromley 1991; Brenner 1991: 134).

Founding identity around a collective historical injury is bad – it reinforces the ability of the powerful to create injury and stands in the way of true liberation or self affirmation

Brown, 1993 (Wendy, “Wounded Attachments,” Political Theory, Volume 21, Number 3, August)

Now, what I want to suggest is that in a culture already streaked with thepathos of ressentiment for these reasons, there are several characteristics oflate moder postindustrial societies that accelerate and expand the conditionsof its production. My listing is necessarily highly schematic. First, thephenomenon that William Connolly names "increased global contingency"combines with the expanding pervasiveness and complexity of dominationby capital and bureaucratic state and social networks to create an unparalleledindividual powerlessness over the fate and direction of one's own life,intensifying the experiences of impotence, dependence, and gratitude inherentin liberal capitalist orders and consitutive of ressentiment.'9 Second, thesteady desacralization of all regions of life-what Weber called disenchantment,what Nietzsche called the death of God-would appear to add yetanother reversal to Nietzsche's genealogy of ressentiment as perpetuallyavailable to "alternation of direction." In Nietzsche's account, the asceticpriest deployed notions of "guilt, sin, sinfulness, depravity and damnation"to "direct the ressentiment of the less severely afflicted sternly back uponthemselves . . . and in this way [exploited] the bad instincts of all sufferersfor the purpose of self-discipline, self-surveillance, and self-overcoming."20However, the desacralizing tendencies of late modernity undermine theefficacy of this deployment and turn suffering's need for exculpation backtoward a site of external agency. Third, the increased fragmentation, if notdisintegrationo, f all forms of associationu ntil recentlyn ot organizedb y thecommodities market-communities, churches, families-and the ubiquitousnessof the classificatory, individuating schemes of disciplinary societycombine to produce an utterly unrelieved individual, one without insulationfrom the inevitable failure entailed in liberalism's individualistic construction.In short, the characteristics of late modern secular society, in whichindividualsa reb uffeteda ndc ontrolledb y global configurationso f disciplinaryand capitalistp ower of extraordinaryp roportions,a nd are at the sametime nakedlyi ndividuated,s trippedo f reprievef rom relentlesse xposurea ndaccountability for themselves, together add up to an incitement to ressentimentthat might have stunned even the finest philosopher of its occasions andlogics. Starkly accountable, yet dramatically impotent, the late moderliberal subject quite literally seethes with ressentiment.Enter politicized identity, now conceivable in part as both product of and"reaction" to this condition, where "reaction" acquires the meaning thatNietzsche ascribed to it, namely, as an effect of domination that reiterates Impotence, a substitute for action, for power, for self-affirmation that reinscribes incapacity, powerlessness, and rejection. For Nietzsche, ressentiment itself is rooted in "reaction"-the substitution of reasons, norms, and ethics fordeeds-and not only moral systems but identities themselves take theirbearings in this reaction. As Tracy Strong reads this element of Nietzsche'sthought,Identity . . . does not consist of an active component, but is a reaction to somethingoutside; action in itself, with its inevitable self-assertive qualities, must then becomesomething evil, since it is identified with that against which one is reacting. The will topower of slave morality must constantly reassert that which gives definition to the slave:the pain he suffers by being in the world. Hence any attempt to escape that pain willmerely result in the reaffirmation of painful structures.21Ifressentiment's "cause" is suffering, its "creative deed" is the reworkingof this pain into a negative form of action, the "imaginary revenge" of whatNietzsche terms "natures denied the true reaction, that of deeds."22 Thisrevenge is achieved through the imposition of suffering "on whatever doesnot feel wratha ndd ispleasurea s he does"23(a ccomplishede specially throughthe productiono f guilt), throught he establishmento f sufferinga s the measureof social virtue, and through casting strength and good fortune ("privilege"as we say today) as self-recriminatinga, s its own indictmenti n a cultureo fsuffering: "it is disgraceful to be fortunate, there is too much misery."24But in its attempt to displace its suffering, identity structured by ressentimentat the same time becomes invested in its own subjection. This investmentlies not only in its discovery of a site of blame for its hurt will, not onlyin its acquisition of recognition through its history of subjection (a recognitionpredicated on injury, now righteously revalued), but also in the satisfactions of revenge that ceaselessly reenact even as they redistribute the injuriesof marginalization and subordination in a liberal discursive order that alternatelydenies the very possibility of these things or blames those whoexperience them for their own condition. Identity politics structured by ressentiment reverses without subverting this blaming structure: it does notsubject to critique the sovereign subject of accountability that liberal individualism presupposes nor the economy of inclusion and exclusion thatliberal universalism establishes. Thus politicized identity that presents itself as a self-affirmation now appears as the opposite, as predicated on andrequiring its sustained rejection by a "hostile external world."25Insofar as what Nietzsche calls slave morality produces identity in reactionto power, insofar as identity rooted in this reaction achieves its moral superiority by reproaching power and action themselves as evil, identity structured by this ethos becomes deeply invested in its own impotence, even while it seeks to assuage the pain of its powerlessness through its vengeful moralizing, through its wide distribution of suffering, through its reproachof power as such. Politicized identity, premised on exclusion and fueled bythe humiliation and suffering imposed by its historically structured impotencein the context of a discourse of sovereign individuals, is as likely to seek generalized political paralysis, to feast on generalized political impotence,as it is to seek its own or collective liberation. Indeed it is more likely to punish and reproach-"punishment is what revenge calls itself; with a hypocritical lie it creates a good conscience for itself'-than to find venues of self-affirming action.26

#### **TURN – their historical focus requires Western discourse to make their argument intelligible**

FitzGerald, 2009 (FitzGerald, Sharron A., Aberystwyth University, The Female Diaspora: Interrogating the Female Trafﬁcked Migrant (July 10, 2009). DECOLONISATION OF LEGAL KNOWLEDGE: WHOSE RESPONSIBILITY?, Amita Dhanda and Archana Parashar, eds., Forthcoming. Available at SSRN: [http://ssrn.com/abstract=1432449](http://ssrn.com/abstract%3D1432449))

Wendy Brown’s States of Injury: Power and Freedom in Late Modernity(1995) interrogates how State protection from exploitation hasbecome ‘a form of/technique of domination’ (1995: 15). Brown drawson Foucault’s genealogy as a method for analysing discourses, and shequestions how ‘violation’ has become the foundation of liberal democraciesin pursuit of particular claims on power, often through legalprocesses. She traces how the concept of historical ‘injury’ against the‘sisterhood’ structures the foundations for legitimated political identities such as the ‘victim subject’ (Doezema 2001: 19). More specifically,Brown attempts to write against the grain of radical feminism asespoused by Catherine MacKinnon. Mackinnon’s critique of patriarchycentres on the idea that prostitution is evidence of men’s continuedviolence against women (MacKinnon 1987).Brown**’s** analysis of thisperspective cautions us about the dangers of uncritically maintaining the image of ‘the injured body’ in human rights discourses for allwomen. She asserts that a human rights discourse used in this way blinds us to how our theorisations have become sites of racialised gender exclusion. Thus, we need to be careful of imposing normsand hierarchies of ‘truth’ that construct certain expressions of genderand subjectivity as ‘true’, and exclude ‘Others’ such as the sex workeror the female trafficked migrant from the developing world. Theunchallenged rhetoric of **exploitation and** vulnerability embedded infeminist responses to trafficking and prostitution is problematic because‘it implies that women are in greater need of social equality andpolitical protection than freedom’(Brown 1995: 21). Brown assertsthat the continued feminist commitment to the notion ofuniversalfemale injury legitimises the state’s ‘various regulatory discourses’ at the expense of women’s human rights(1995: 21).

#### In 51 case studies civil disobedience has NEVER been successful for EJ movements

Caren and Tucker 9 (Mediating success and failure: The outcomes of local environmental justice struggles Neal Caren neal.caren@unc.edu University of North Carolina, Chapel Hill Tuneka Tucker tktucker@email.unc.edu University of North Carolina, Chapel Hill, <http://www.unc.edu/~ncaren/workingpapers/files/WP_Environmental_Justicer.pdf>)

Using data from Sherman (2003), we analyze fifty-one cases of non-white communities fighting environmental hazards. We employ fuzzy set-analytic methods (Ragin 2008) as we hold that understanding the impact of the way these different attributes of the organizations come together is critical in uncovering what a successful EJ campaign looks like, and what a failed 4 campaign looks like. We find three configurations of attributes that are more likely than not to be cases of success than failure, and two configurations of attributes that are more consistent with failure than with success. The successful configurations demonstrate the importance of political alliances in combination with other sets of factors in achieving success, while the failure configurations demonstrate that the lack of political alliances combined with a new grievance and either a preexisting organization or the use of civil disobedience are not likely to lead to positive outcomes. For each of the five configurations that are likely to lead to either success or failure, we provide exemplar cases in order to reveal specific mechanisms present, and discuss ways that political mediation theory can account for our findings

#### Protest alone is insufficient to enact change – must have policy solutions

Caren and Tucker 9 (Mediating success and failure: The outcomes of local environmental justice struggles Neal Caren neal.caren@unc.edu University of North Carolina, Chapel Hill Tuneka Tucker tktucker@email.unc.edu University of North Carolina, Chapel Hill, <http://www.unc.edu/~ncaren/workingpapers/files/WP_Environmental_Justicer.pdf>)

Tactics: Types of protest are usually divided into two categories: protest for disruption and protest for persuasion and are part of the action/reaction model, in which protesters can influence the state by compelling them to react to their actions (Andrews 2001). The purpose of disruptive protest is to cause a physical disruption in the normal functioning of the state, whether by property damage, blocking entrances or thoroughfares or other means of disallowing normal business (Piven and Cloward 1977). As a result of the disruption elites will then concede to the challengers or repress their efforts quickly, as a way of quickly regaining order over the situation (Tarrow 1998). Protest for persuasion, as its name suggests, attempts to persuade the elites to 8 concede to challenger claims by gaining the support of third parties, who will in turn exert their influence on the state (Lipski 1968; McAdam and Su 2002; Olzak and Soule 2009). Protest alone is not enough to enact change, because once challengers have demonstrated, they have little control over what actions polity members will take regarding their claims, but instead begins a chain of events that can eventually lead to the securing of new advantages (Andrews 2001).

Turn: Homogenization. They presume Nommo interrupts white supremacy because it grew out of resistance. It papers over other views in African American culture. When you assume a language only expresses resistance, it *prevents dialectic to change* those ideas.

John h. **Mcclendon** III, Bates College Journal of Speculative Philosophy, Vol. 18, No. 4, 20**04**. P.308-9

Additionally, the function of various forms of social stratification—especially the impact of class contradictions—harbors the real possibility for different ideological responses to commonly experienced conditions of life. In the manner of the Marxist conception of ideology, as found in The German Ideology, I presume that philosophy (ontology) is a form of ideology (Marx and Engels 1976). Hence, only on the presupposition that the African American community is socially homogeneous can it plausibly be argued that African Americans all share the same ontology. Given it is not the case that the African American community is homogeneous, then there is no plausible warranting for the belief that all African Americans share a common ontology. This leads directly to point three and my charge of Yancy’s (and Smitherman’s) vindicationism, where he argues that resistance to white supremacy is the defining characteristic of African American culture and hence language.

When African American vindicationism is bereft of dialectical theory and method, as a determinate philosophical approach to African American culture, it neglects a very important aspect of the historical dialectic of African Ameri can culture, viz. that African American culture is not in any way a monolithically formed culture where there are only manifestations of resistance. There is more to African American history and culture than a continuous line of resistance to oppression, for, by way of example, not all African Americans sang the spirituals with an eye to joining the Underground Railroad (Fisher 1990). Some believed that freedom was wearing a robe in “heaben” and that washing in the blood of Jesus would make one “as white as the snow.” Or that loyalty to Massa was the highest virtue and resistance and revolt were of the greatest folly. The modern day connotation for “Uncle Tom” did not enter the lexicon of African American language without the historical presence of real, existing “Toms.” It is no accident that there is the current exercise in African American locution of playing on this word (Tom) whenever Supreme Court Justice, Clarence “Tomto- us” is mentioned among African American political speakers.

After all, the historical record indicates that the failure of Gabriel Prosser’s, Denmark Vesey’s, and Nat Turner’s slave insurrections were due in part to other slaves that were more loyal to Massa than their own liberation. Mind you that those who ratted out the slave revolts shared in the same language, ate the same food, lived the same experiences, but also had a different worldview (conception of reality) and set of values. The idea that social ontology and identity among African Americans, past and present, are preeminently the same for all is the sort of reductionism that flattens out the cultural, social, political, and ideological landscape called African American culture.

Albeit, resistance is cardinal and crucial to any description, definition, and interpretation of African American culture, nonetheless, it is not exhaustive of its actualities and even of its future possibilities. African American culture in its full substance and scope is more complex than a singular thrust in the monodirection of resistance. Rather, African American culture historically constitutes an ensemble of traditions in which we are able, for analytical purposes, to locate what are two primary and yet contradictory forms, viz. one of resistance and another of accommodation. This internal dialectic is undermined when a scenario of resistance sans accommodation gains support via vindicationism.

### **1AR**

Their form of language furthers hegemony of whiteness – it’s a tool for domination and through white people’s ignorance

Sullivan 2004- Shannon, Penn State University, Journal of Speculative Philosophy, Vol. 18, No. 4,. P. 301-2

While a white/Anglo person’s learning Spanish can begin to balance the relationship of power and knowledge between white/Anglo and Latino worlds, it also can have the opposite effect of increasing the hegemony of the white world. This occurs when white people learn a language other than Standard American Language—Spanish, African American Language, or otherwise—precisely to dominate the world that speaks that language. Certainly this happened during times of colonialist conquest, but it also continues today as business corporations and advertising firms in the United States learn (bits of) African American Language and Spanish to better market products that promise the “exoticism” of Blackness and the “spiciness” of Latino culture. (Standard, middleclass whiteness is so unhip nowadays, as Yancy notes [Yancy 2004, 276].) It also can happen in less insidious ways, however, such as when white people learn another language to (try to) break out of their white solipsism. Even in these well-intentioned instances, the protection provided to minority races by white people’s ignorance of their languages can be eroded once white people begin to understand and speak them.

It opens up space for white hegemony to fill it – undermines other points of resistance

Sullivan 2004 - Shannon, Penn State University, Journal of Speculative Philosophy, Vol. 18, No. 4,, p. 302

This point was brought home to me when a Latina friend and philosopher explained that she did not want white/Anglo people to learn Spanish because their knowledge would intrude on the Spanish/Latina world that she and other Spanish-speaking philosophers are able to create in the midst of white/Anglodominated conferences.2 Opening up her world to white/Anglo philosophers tends to result in the destruction of a valuable point of resistance to white racism. Because of the dominance of white people in philosophy in the United States, she frequently is forced to travel to white worlds and wants to preserve a small space that is relatively free of white people and the issues of race and racism that their presence inevitably (though not necessarily deliberately) produces.

Making their language the center of the debate renders the ballot into a policing tool – makes it impossible to take it to the next level

Ladelle **McWhorter**, Professor of. Philosophy and Women's Studies, University of Richmond, Philosophy & Social Criticism, vol 31 nos 5–6, 20**05**, pp. 533–556

In the growing body of literature that makes up what has in recent years come to be called ‘Whiteness Studies’, observations like the following are commonplace: ‘Whiteness has, at least within the modern era and within Western societies, tended to be constructed as a norm, an unchanging and unproblematic location, a position from which all other identities come to be marked by their difference’ (Bonnett, 1996: 146).1 According to Whiteness Studies theorists, the white race functions not so much as a race, one among many, as, at times at least, the race – the real human race – and, at other times, no race, simply the healthy, mature norm of human existence as opposed to all those other groups of people who are somehow off-white, off-track, more or less deviant. Whiteness, the racial norm in Western industrial societies, is at one and the same time the exemplar of human being and the unmarked selfsame over against the racially marked other(s).2

 This understanding of whiteness emerged in the late 1980s and 1990s as race scholars in the USA and the UK began to treat white identity as an epistemic object, in contrast to many earlier race theorists who studied non-whites primarily.3 By taking whiteness as an object of study, these scholars problematized the status of the white race as an unmarked norm and exposed the racism implicit in its having that status. Thus, it seemed, these new race theorists had discovered a potentially very powerful tool for dismantling racism. Revealing the ways in which whiteness functions as a racial norm, they began to denaturalize it and thereby rob it of some of its power to order thought and practice. Their scholarship was and is, deliberately and unapologetically, deeply engaged political activism. Feminist sociologist Ruth Frankenberg articulates this confluence of theory and practice well when she writes: ‘Naming whiteness and white people helps dislodge the claims of both to rightful dominance’ (Frankenberg, 1993: 234).

While readers of the work of Michel Foucault may well be struck by the deep affinities between Foucaultian genealogy, counter-memory, and counter-attack on the one hand and Whiteness Studies’ denaturalization of heretofore largely unquestioned racial categories on the other, surprisingly most writers in the Whiteness Studies movement seem all but unaware of Foucault’s analytics of biopower and his descriptions of normalization.4 Their repeated observation that whiteness functions as a norm and their close analyses of its unmarked status come not out of an awareness of Foucaultian genealogy but rather out of sociological studies of institutional racism like Omi and Winant’s Racial Formation in the United States: From the 1960s to the 1990s (1994). Their work sounds like Foucault’s at times, but if they are moving toward an analysis that is like his in some ways, it is from a starting point that is radically different. In this paper I will argue that, in part because of the limitations imposed by that different starting point, Whiteness Studies theorists typically miss their mark both analytically and politically. Their major problem lies in the fact that they still work within what Foucault calls a juridical conception of power, a conception that simply does not capture the ways in which power operates in modern industrialized societies, especially in relation to the so obviously bio-political phenomenon of racial oppression.

Don’t grant them the link of omission – state-centric discourse doesn’t legitimize the state

Frost 96 – IR Professor, King’s College (Mervyn, Ethics in International Relations, p 89-90)

We are not condemned to critical impotence if we accept that the answer to the pressing normative issues in international relations must necessarily be found within the modern state domain of discourse. Neither does it commit us to the maintenance of the status quo. Accepting the centrality of this domain of discourse does not imply that there can be no non native political theory of world politics. That there has been little normative theorizing in international relations is true enough, but the reasons for this lack are not because working out the "implications of the theory of the state" is a trivial thing to do. The reasons for the lack of normative theorizing have already been covered in chapters 1 and 2. In this section I want to argue that seeking answers within the state centric domain of discourse to the list of pressing questions is a worth-while activity and that far from being a trivial residue of state theory it is of primary importance. What I take to be involved in this endeavour will be elucidated in some detail in the following two chapters. It involves constructing a coherent back- ground theory justifying the settled norms in the modern state domain of discourse. It is necessary to be quite clear about what is, and what is not involved in having recourse to the modern state domain of discourse. The language of this domain is the ordinary language of international relations. This language is a functioning whole - not a completely coherent one - which includes within it a mix of the following terms: state, sovereignty, self-determination, citizen, democracy, human rights (individual rights and group rights), and a set of terms connected to the notion of modernization. Asserting the primacy of the modern state domain of discourse for my purposes does not commit me to holding that people will always live in states as we know them or that life in states, as we know them, is the only proper life for human beings, or that the way states are organized at present is the best way of organizing them. I simply contend that any discussion about what ought to be done in world politics (be the proposed action a small one or a large one such as, for example, the wholesale reor- ganization of the global political system) must be conducted in the language of the modern state system. No other suitable language is available. Viewed in this way, it will become clear that the various objections against the modern state domain of discourse as the ground of normative theory in international relations fall away as misconceived. There are several such objections which must be confronted.

A single round produces virtually no change – their project is not going to change the community

Atchison and Panetta ‘05

(Jarrod, PhD Candidate – U Georgia, and Ed, Professor of Communication – U Georgia, “Activism in Debate: Parody, Promise, and Problems”, NCA Paper)

The first problem is the difficulty of any individual debate to generate community change. Although any debate has the potential to create problems for the community (videotapes of objectionable behavior, etc…), rarely does any one debate have the power to create community wide change. We attribute this ineffectiveness to the **structural problems** inherent in individual debates and the **collective forgetfulness** of the debate community. The structural problems are clear. Debaters engage in preliminary debates in rooms that are rarely populated by anyone other than the judge or a few scouts. Judges are instructed to vote for the team that does the best debating, but the ballot is rarely seen by anyone outside the tabulation room. Given the limited number of debates in which a judge actually writes meaningful comments, there is little documentation available for use in many cases. During the period when judges interact with the debaters there are often external pressures (filing evidence, preparing for the next debate, etc…) that restrict the ability for anyone outside the debate to pay attention to why a judge voting a particular way. Elimination debates do not provide for a much better audience because debates still occur simultaneously and travel schedules dictate that most of the tournament has left by the later elimination rounds. We find it difficult for anyone to substantiate the claim that asking a judge to vote to solve a community problem in an individual debate with so few participants is the best strategy for addressing important problems. In addition to the structural problems, the collective forgetfulness of the debate community reduces the impact that individual debates have on the community. The debate community has a high turnover rate. Despite the fact that some debaters make their best effort to debate for more than four years, the debate community is largely made up of participants who debate and then move on. The coaches and directors that make up the backbone of the community are the people with the longest cultural memory, but they are also a small minority of the community when considering the number of debaters involved in the activity. We do not mean to suggest that the activity is reinvented every year—certainly there are conventions that are passed down from coaches to debaters and from debaters to debaters. However, given the fact that there are virtually no transcriptions available for everyone to read, it is difficult to assume that the debate community would remember any individual debate. Additionally, given the focus on competition and individual skill, the community is more likely to remember the accomplishments and talents of debaters rather than what argument they won a particular round on. The debate community does not have the necessary components in place for a strong collective memory of individual debates. We believe that the combination of the structures of debate and the collective forgetfulness means that any strategy for creating community change that is premised on winning individual debates is less effective than seeking a larger community dialogue that is recorded and/or transcribed. The second major problem with attempting to create community change in individual debates is that the debate community is made up of more individuals than the four debaters and one judge that are a part of every debate. The coaches and directors that make up the backbone of the community have very little space for engaging in a discussion about community issues. We suspect that this helps explain why so few debaters get involved in the edebates over activist strategies. Coaches and directors dominant this forum because there is so little public dialogue over the issues that directly affect the community that they have dedicated so much of their professional and personal lives. This is especially true for coaches and directors that are not preferred judges and therefore do not even have a voice at the end of a debate. Coaches and directors should have a public forum to engage in a community conversation with debaters instead of attempting to take on their opponents through the wins and losses of their own debaters.

Any change is compensated by competitive backlash

Atchison and Panetta ‘05

(Jarrod, PhD Candidate – U Georgia, and Ed, Professor of Communication – U Georgia, “Activism in Debate: Parody, Promise, and Problems”, NCA Paper)

The simple point is this: if we are serious about creating real community change then it is more likely to occur outside of a traditional competitive debate. When a team loses a debate because the judge decides that it is better for the community for the other team to win then they have sacrificed two potential advocates for change within the community. Creating change through wins **generates backlash through loses**. Some people are comfortable with generating backlash and see the reaction as a sign that the community is at least responding to what they are saying. We believe, however, that any change that is developed as a result of these hostile situations is a **pyrrhic victory**. Instead of giving up on hope for change and agitating for wins regardless of who is left behind, we believe that the debate community should try public argumentation in order to generate a discussion of necessary community changes. We do not believe that debate rounds as currently constituted represent the best atmosphere for community change because it is a competition for a win. Beating a team does not generate comrades in the struggle for change.