## 1AC

### Contention One is Warming

#### The best science proves it’s anthropogenic

Muller, 2012 [Richard, professor of physics at the University of California, Berkeley, and a former MacArthur Foundation fellow, “The Conversion of a Climate-Change Skeptic”, http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html?pagewanted=all]

CALL me a converted skeptic. Three years ago I identified problems in previous climate studies that, in my mind, threw doubt on the very existence of global warming. Last year, following an intensive research effort involving a dozen scientists, I concluded that global warming was real and that the prior estimates of the rate of warming were correct. I’m now going a step further: ~~Humans~~ are almost entirely the cause. My total turnaround, in such a short time, is the result of careful and objective analysis by the Berkeley Earth Surface Temperature project, which I founded with my daughter Elizabeth. Our results show that the average temperature of the earth’s land has risen by two and a half degrees Fahrenheit over the past 250 years, including an increase of one and a half degrees over the most recent 50 years. Moreover, it appears likely that essentially all of this increase results from the ~~human~~ emission of greenhouse gases. These findings are stronger than those of the Intergovernmental Panel on Climate Change [IPCC], the United Nations group that defines the scientific and diplomatic consensus on global warming. In its 2007 report, the I.P.C.C. concluded only that most of the warming of the prior 50 years could be attributed to ~~humans~~. It was possible, according to the I.P.C.C. consensus statement, that the warming before 1956 could be because of changes in solar activity, and that even a substantial part of the more recent warming could be natural. Our Berkeley Earth approach used sophisticated statistical methods developed largely by our lead scientist, Robert Rohde, which allowed us to determine earth land temperature much further back in time. We carefully studied issues raised by skeptics: biases from urban heating (we duplicated our results using rural data alone), from data selection (prior groups selected fewer than 20 percent of the available temperature stations; we used virtually 100 percent), from poor station quality (we separately analyzed good stations and poor ones) and from ~~human~~ intervention and data adjustment (our work is completely automated and hands-off). In our papers we demonstrate that none of these potentially troublesome effects unduly biased our conclusions. The historic temperature pattern we observed has abrupt dips that match the emissions of known explosive volcanic eruptions; the particulates from such events reflect sunlight, make for beautiful sunsets and cool the earth’s surface for a few years. There are small, rapid variations attributable to El Niño and other ocean currents such as the Gulf Stream; because of such oscillations, the “flattening” of the recent temperature rise that some people claim is not, in our view, statistically significant. What has caused the gradual but systematic rise of two and a half degrees? We tried fitting the shape to simple math functions (exponentials, polynomials), to solar activity and even to rising functions like world population. By far the best match was to the record of atmospheric carbon dioxide (CO2), measured from atmospheric samples and air trapped in polar ice.

#### Fossil fuels are key

Vertessy and Clark3-13**-**2012[Rob, Acting Director of Australian Bureau of Meteorology, and Megan, Chief Executive Officer at the Commonwealth Scientific and Industrial Research Organisation, “State of the Climate 2012”, <http://theconversation.edu.au/state-of-the-climate-2012-5831>]

Carbon dioxide (CO2) emissions account for about 60% of the effect from anthropogenic greenhouse gases on the earth’s energy balance over the past 250 years. These global CO2 emissions are mostly from fossil fuels (more than 85%), land use change, mainly associated with tropical deforestation (less than 10%), and cement production and other industrial processes (about 4%). Australia contributes about 1.3% of the global CO2 emissions. Energy generation continues to climb and is dominated by fossil fuels – suggesting emissions will grow for some time yet. CO2 levels are rising in the atmosphere and ocean. About 50% of the amount of CO2 emitted from fossil fuels, industry, and changes in land-use, stays in the atmosphere. The remainder is taken up by the ocean and land vegetation, in roughly equal parts. The extra carbon dioxide absorbed by the oceans is estimated to have caused about a 30% increase in the level of ocean acidity since pre-industrial times. The sources of the CO2 increase in the atmosphere can be identified from studies of the isotopic composition of atmospheric CO2 and from oxygen (O2) concentration trends in the atmosphere. The observed trends in the isotopic (13C, 14C) composition of CO2 in the atmosphere and the decrease in the concentration of atmospheric O2 confirm that the dominant cause of the observed CO2 increase is the combustion of fossil fuels.

#### 4 degree warming is inevitable with current carbon usage trends – emissions must be reduced

Potsdam Institute, 2012 (Potsdam Institute for Climate Impact Research and Climate Analytics, “Turn Down the Heat: Why a 4°C Warmer World Must be Avoided”, A report for the World Bank, November, http://climatechange.worldbank.org/sites/default/files/Turn\_Down\_the\_heat\_Why\_a\_4\_degree\_centrigrade\_warmer\_world\_must\_be\_avoided.pdf)

The emission pledges made at the climate conventions in Copenhagen and Cancun, if fully met, place the world on a trajectory for a global mean warming of well over 3°C. Even if these pledges are fully implemented there is still about a 20 percent chance of exceeding 4°C in 2100.10 If these pledges are not met then there is a much higher likelihood—more than 40 percent—of warming exceeding 4°C by 2100, and a 10 percent possibility of this occurring already by the 2070s, assuming emissions follow the medium business-as-usual reference pathway. On a higher fossil fuel intensive business-as-usual pathway, such as the IPCC SRESA1FI, warming exceeds 4°C earlier in the 21st century. It is important to note, however, that such a level of warming can still be avoided. There are technically and economically feasible emission pathways that could still limit warming to 2°C or below in the 21st century. To illustrate a possible pathway to warming of 4°C or more, Figure 22 uses the highest SRES scenario, SRESA1FI, and compares it to other, lower scenarios. SRESA1FI is a fossil-fuel intensive, high economic growth scenario that would very likely cause mean the global temperature to exceed a 4°C increase above preindustrial temperatures. Most striking in Figure 22 is the large gap between the projections by 2100 of current emissions reduction pledges and the (lower) emissions scenarios needed to limit warming to 1.5–2°C above pre-industrial levels. This large range in the climate change implications of the emission scenarios by 2100 is important in its own right, but it also sets the stage for an even wider divergence in the changes that would follow over the subsequent centuries, given the long response times of the climate system, including the carbon cycle and climate system components that contribute to sea-level rise. The scenarios presented in Figure 22 indicate the likely onset time for warming of 4°C or more. It can be ~~seen~~ that most of the scenarios remain fairly close together for the next few decades of the 21st century. By the 2050s, however, there are substantial differences among the changes in temperature projected for the different scenarios. In the highest scenario shown here (SRES A1FI), the median estimate (50 percent chance) of warming reaches 4°C by the 2080s, with a smaller probability of 10 percent of exceeding this level by the 2060s. Others have reached similar conclusions (Betts et al. 2011). Thus, even if the policy pledges from climate convention in Copenhagen and Cancun are fully implemented, there is still a chance of exceeding 4°C in 2100. If the pledges are not met and present carbon intensity trends continue, then the higher emissions scenarios shown in Figure 22 become more likely, raising the probability of reaching 4°C global mean warming by the last quarter of this century. Figure 23 shows a probabilistic picture of the regional patterns of change in temperature and precipitation for the lowest and highest RCP scenarios for the AR4 generation of AOGCMS. Patterns are broadly consistent between high and low scenarios. The high latitudes tend to warm substantially more than the global mean. RCP8.5, the highest of the new IPCC AR5 RCP scenarios, can be used to explore the regional implications of a 4°C or warmer world. For this report, results for RCP8.5 (Moss et al. 2010) from the new IPCC AR5 CMIP5 (Coupled Model Intercomparison Project; Taylor, Stouffer, & Meehl 2012) climate projections have been analyzed. Figure 24 shows the full range of increase of global mean temperature over the 21st century, relative to the 1980–2000 period from 24 models driven by the RCP8.5 scenario, with those eight models highlighted that produce a mean warming of 4–5°C above preindustrial temperatures averaged over the period 2080–2100. In terms of regional changes, the models agree that the most pronounced warming (between 4°C and 10°C) is likely to occur over land. During the boreal winter, a strong “arctic amplification” effect is projected, resulting in temperature anomalies of over 10°C in the Arctic region. The subtropical region consisting of the Mediterranean, northern Africa and the Middle East and the contiguous United States is likely to ~~see~~ a monthly summer temperature rise of more than 6°C.

#### Global warming collapses biodiversityBiodiversity – 4 degrees overwhelms resilience and adaptation – extinction

Potsdam Institute, 2012 (Potsdam Institute for Climate Impact Research and Climate Analytics, “Turn Down the Heat: Why a 4°C Warmer World Must be Avoided”, A report for the World Bank, November, http://climatechange.worldbank.org/sites/default/files/Turn\_Down\_the\_heat\_Why\_a\_4\_degree\_centrigrade\_warmer\_world\_must\_be\_avoided.pdf)

Ecosystems and their species provide a range of important goods and services for ~~human~~ society. These include water, food, cultural and other values. In the AR4 an assessment of climate change effects on ecosystems and their services found the following: • If greenhouse gas emissions and other stresses continue at or above current rates, the resilience of many ecosystems is likely to be exceeded by an unprecedented combination of change in climate, associated disturbances (for example, flooding, drought, wildfire, insects, and ocean acidification) and other stressors (global change drivers) including land use change, pollution and over-exploitation of resources. • Approximately 20 to 30 percent of plant and animal species assessed so far are likely to be at increased risk of extinction, if increases in global average temperature exceed of 2–3° above preindustrial levels. • For increases in global average temperature exceeding 2 to 3° above preindustrial levels and in concomitant atmospheric CO2 concentrations, major changes are projected in ecosystem structure and function, species’ ecological interactions and shifts in species’ geographical ranges, with predominantly negative consequences for biodiversity and ecosystem goods and services, such as water and food supply. It is known that past large-scale losses of global ecosystems and species extinctions have been associated with rapid climate change combined with other ecological stressors. Loss and/or degradation of ecosystems, and rates of extinction because of ~~human~~ pressures over the last century or more, which have intensified in recent decades, have contributed to a very high rate of extinction by geological standards. It is well established that loss or degradation of ecosystem services occurs as a consequence of species extinctions, declining species abundance, or widespread shifts in species and biome distributions (Leadley et al. 2010). Climate change is projected to exacerbate the situation. This section outlines the likely consequences for some key ecosystems and for biodiversity. The literature tends to confirm the conclusions from the AR4 outlined above. Despite the existence of detailed and highly informative case studies, upon which this section will draw, it is also important to recall that there remain many uncertainties (Bellard, Bertelsmeier, Leadley, Thuiller, and Courchamp, 2012). However, threshold behavior is known to occur in biological systems (Barnosky et al. 2012) and most model projections agree on major adverse consequences for biodiversity in a 4°C world (Bellard et al., 2012). With high levels of warming, coalescing ~~human~~ induced stresses on ecosystems have the potential to trigger large-scale ecosystem collapse (Barnosky et al. 2012). Furthermore, while uncertainty remains in the projections, there is a risk not only of major loss of valuable ecosystem services, particularly to the poor and the most vulnerable who depend on them, but also of feedbacks being initiated that would result in ever higher CO2 emissions and thus rates of global warming. Significant effects of climate change are already expected for warming well below 4°C. In a scenario of 2.5°C warming, severe ecosystem change, based on absolute and relative changes in carbon and water fluxes and stores, cannot be ruled out on any continent (Heyder, Schaphoff, Gerten, & Lucht, 2011). If warming is limited to less than 2°C, with constant or slightly declining precipitation, small biome shifts are projected, and then only in temperate and tropical regions. Considerable change is projected for cold and tropical climates already at 3°C of warming. At greater than 4°C of warming, biomes in temperate zones will also be substantially affected. These changes would impact not only the ~~human~~ and animal communities that directly rely on the ecosystems, but would also exact a cost (economic and otherwise) on society as a whole, ranging from extensive loss of biodiversity and diminished land cover, through to loss of ecosystems services such as fisheries and forestry (de Groot et al., 2012; Farley et al., 2012). Ecosystems have been found to be particularly sensitive to geographical patterns of climate change (Gonzalez, Neilson, Lenihan, and Drapek, 2010). Moreover, ecosystems are affected not only by local changes in the mean temperature and precipitation, along with changes in the variability of these quantities and changes by the occurrence of extreme events. These climatic variables are thus decisive factors in determining plant structure and ecosystem composition (Reu et al., 2011). Increasing vulnerability to heat and drought stress will likely lead to increased mortality and species extinction. For example, temperature extremes have already been held responsible for mortality in Australian flying-fox species (Welbergen, Klose, Markus, and Eby 2008), and interactions between phenological changes driven by gradual climate changes and extreme events can lead to reduced fecundity (Campbell et al. 2009; Inouye, 2008). Climate change also has the potential to facilitate the spread and establishment of invasive species (pests and weeds) (Hellmann, Byers, Bierwagen, & Dukes, 2008; Rahel & Olden, 2008) with often detrimental implications for ecosystem services and biodiversity. ~~Human~~ land-use changes are expected to further exacerbate climate change driven ecosystem changes, particularly in the tropics, where rising temperatures and reduced precipitation are expected to have major impacts (Campbell et al., 2009; Lee & Jetz, 2008). Ecosystems will be affected by the increased occurrence of extremes such as forest loss resulting from droughts and wildfire exacerbated by land use and agricultural expansion (Fischlin et al., 2007). Climate change also has the potential to catalyze rapid shifts in ecosystems such as sudden forest loss or regional loss of agricultural productivity resulting from desertification (Barnosky et al., 2012). The predicted increase in extreme climate events would also drive dramatic ecosystem changes (Thibault and Brown 2008; Wernberg, Smale, and Thomsen 2012). One such extreme event that is expected to have immediate impacts on ecosystems is the increased rate of wildfire occurrence. Climate change induced shifts in the fire regime are therefore in turn powerful drivers of biome shifts, potentially resulting in considerable changes in carbon fluxes over large areas (Heyder et al., 2011; Lavorel et al., 2006) It is anticipated that global warming will lead to global biome shifts (Barnosky et al. 2012). Based on 20th century observations and 21st century projections, poleward latitudinal biome shifts of up to 400 km are possible in a 4° C world (Gonzalez et al., 2010). In the case of mountaintop ecosystems, for example, such a shift is not necessarily possible, putting them at particular risk of extinction (La Sorte and Jetz, 2010). Species that dwell at the upper edge of continents or on islands would face a similar impediment to adaptation, since migration into adjacent ecosystems is not possible (Campbell, et al. 2009; Hof, Levinsky, Araújo, and Rahbek 2011). The consequences of such geographical shifts, driven by climatic changes as well as rising CO2 concentrations, would be found in both reduced species richness and species turnover (for example, Phillips et al., 2008; White and Beissinger 2008). A study by (Midgley and Thuiller, 2011) found that, of 5,197 African plant species studied, 25–42 percent could lose all suitable range by 2085. It should be emphasized that competition for space with ~~human~~ agriculture over the coming century is likely to prevent vegetation expansion in most cases (Zelazowski et al., 2011) Species composition changes can lead to structural changes of the entire ecosystem, such as the increase in lianas in tropical and temperate forests (Phillips et al., 2008), and the encroachment of woody plants in temperate grasslands (Bloor et al., 2008, Ratajczak et al., 2012), putting grass-eating herbivores at risk of extinction because of a lack of food available—this is just one example of the sensitive intricacies of ecosystem responses to external perturbations. There is also an increased risk of extinction for herbivores in regions of drought-induced tree dieback, owing to their inability to digest the newly resident C4 grasses (Morgan et al., 2008). The following provides some examples of ecosystems that have been identified as particularly vulnerable to climate change. The discussion is restricted to ecosystems themselves, rather than the important and often extensive impacts on ecosystems services. Boreal-temperate ecosystems are particularly vulnerable to climate change, although there are large differences in projections, depending on the future climate model and emission pathway studied. Nevertheless there is a clear risk of large-scale forest dieback in the boreal-temperate system because of heat and drought (Heyder et al., 2011). Heat and drought related die-back has already been observed in substantial areas of North American boreal forests (Allen et al., 2010), characteristic of vulnerability to heat and drought stress leading to increased mortality at the trailing edge of boreal forests. The vulnerability of transition zones between boreal and temperate forests, as well as between boreal forests and polar/tundra biomes, is corroborated by studies of changes in plant functional richness with climate change (Reu et al., 2011), as well as analyses using multiple dynamic global vegetation models (Gonzalez et al., 2010). Subtle changes within forest types also pose a great risk to biodiversity as different plant types gain dominance (Scholze et al., 2006). Humid tropical forests also show increasing risk of major climate induced losses. At 4°C warming above pre-industrial levels, the land extent of humid tropical forest, characterized by tree species diversity and biomass density, is expected to contract to approximately 25 percent of its original size [~~see~~ Figure 3 in (Zelazowski et al., 2011)], while at 2°C warming, more than 75 percent of the original land can likely be preserved. For these ecosystems, water availability is the dominant determinant of climate suitability (Zelazowski et al., 2011). In general, Asia is substantially less at risk of forest loss than the tropical Americas. However, even at 2°C, the forest in the Indochina peninsula will be at risk of die-back. At 4°C, the area of concern grows to include central Sumatra, Sulawesi, India and the Philippines, where up to 30 percent of the total humid tropical forest niche could be threatened by forest retreat (Zelazowski et al., 2011). There has been substantial scientific debate over the risk of a rapid and abrupt change to a much drier savanna or grassland ecosystem under global warming. This risk has been identified as a possible planetary tipping point at around a warming of 3.5–4.5°C, which, if crossed, would result in a major loss of biodiversity, ecosystem services and the loss of a major terrestrial carbon sink, increasing atmospheric CO2 concentrations (Lenton et al., 2008)(Cox, et al., 2004) (Kriegler, Hall, Held, Dawson, and Schellnhuber, 2009). Substantial uncertainty remains around the likelihood, timing and onset of such risk due to a range of factors including uncertainty in precipitation changes, effects of CO2 concentration increase on water use efficiency and the CO2 fertilization effect, land-use feedbacks and interactions with fire frequency and intensity, and effects of higher temperature on tropical tree species and on important ecosystem services such as pollinators. While climate model projections for the Amazon, and in particular precipitation, remain quite uncertain recent analyses using IPCC AR4 generation climate indicates a reduced risk of a major basin wide loss of precipitation compared to some earlier work. If drying occurs then the likelihood of an abrupt shift to a drier, less biodiverse ecosystem would increase. Current projections indicate that fire occurrence in the Amazon could double by 2050, based on the A2 SRES scenario that involves warming of approximately 1.5°C above pre-industrial levels (Silvestrini et al., 2011), and can therefore be expected to be even higher in a 4°C world. Interactions of climate change, land use and agricultural expansion increase the incidence of fire (Aragão et al., 2008), which plays a major role in the (re)structuring of vegetation (Gonzalez et al., 2010; Scholze et al., 2006). A decrease in precipitation over the Amazon forests may therefore result in forest retreat or transition into a low biomass forest (Malhi et al., 2009). Moderating this risk is a possible increase in ecosystem water use efficiency with increasing CO2 concentrations is accounted for, more than 90 percent of the original humid tropical forest niche in Amazonia is likely to be preserved in the 2°C case, compared to just under half in the 4°C warming case (~~see~~ Figure 5 in Zelazowski et al., 2011) (Cook, Zeng, and Yoon, 2012; Salazar & Nobre, 2010). Recent work has analyzed a number of these factors and their uncertainties and finds that the risk of major loss of forest due to climate is more likely to be regional than Amazon basin-wide, with the eastern and southeastern Amazon being most at risk (Zelazowski et al., 2011). Salazar and Nobre (2010) estimates a transition from tropical forests to seasonal forest or savanna in the eastern Amazon could occur at warming at warming of 2.5–3.5°C when CO2 fertilization is not considered and 4.5–5.5°C when it is considered. It is important to note, as Salazar and Nobre (2010) point out, that the effects of deforestation and increased fire risk interact with the climate change and are likely to accelerate a transition from tropical forests to drier ecosystems. Increased CO2 concentration may also lead to increased plant water efficiency (Ainsworth and Long, 2005), lowering the risk of plant die-back, and resulting in vegetation expansion in many regions, such as the Congo basin, West Africa and Madagascar (Zelazowski et al., 2011), in addition to some dry-land ecosystems (Heyder et al., 2011). The impact of CO2 induced ‘greening’ would, however, negatively affect biodiversity in many ecosystems. In particular encroachment of woody plants into grasslands and savannahs in North American grassland and savanna communities could lead to a decline of up to 45 percent in species richness ((Ratajczak and Nippert, 2012) and loss of specialist savanna plant species in southern Africa (Parr, Gray, and Bond, 2012). Mangroves are an important ecosystem and are particularly vulnerable to the multiple impacts of climate change, such as: rise in sea levels, increases in atmospheric CO2 concentration, air and water temperature, and changes in precipitation patterns. Sea-level rise can cause a loss of mangroves by cutting off the flow of fresh water and nutrients and drowning the roots (Dasgupta, Laplante et al. 2010). By the end of the 21st century, global mangrove cover is projected to experience a significant decline because of heat stress and sea-level rise (Alongi, 2008; Beaumont et al., 2011). In fact, it has been estimated that under the A1B emissions scenario (3.5°C relative to pre-industrial levels) mangroves would need to geographically move on average about 1 km/year to remain in suitable climate zones (Loarie et al., 2009). The most vulnerable mangrove forests are those occupying low-relief islands such as small islands in the Pacific where sea-level rise is a dominant factor. Where rivers are lacking and/ or land is subsiding, vulnerability is also high. With mangrove losses resulting from deforestation presently at 1 to 2 percent per annum (Beaumont et al., 2011), climate change may not be the biggest immediate threat to the future of mangroves. However if conservation efforts are successful in the longer term climate change may become a determining issue (Beaumont et al., 2011). Coral reefs are acutely sensitive to changes in water temperatures, ocean pH and intensity and frequency of tropical cyclones. Mass coral bleaching is caused by ocean warming and ocean acidification, which results from absorption of CO2 (for example, Frieler et al., 2012a). Increased sea-surface temperatures and a reduction of available carbonates are also understood to be driving causes of decreased rates of calcification, a critical reef-building process (De’ath, Lough, and Fabricius, 2009). The effects of climate change on coral reefs are already apparent. The Great Barrier Reef, for example, has been estimated to have lost 50 percent of live coral cover since 1985, which is attributed in part to coral bleaching because of increasing water temperatures (De’ath et al., 2012). Under atmospheric CO2 concentrations that correspond to a warming of 4°C by 2100, reef erosion will likely exceed rates of calcification, leaving coral reefs as “crumbling frameworks with few calcareous corals” (Hoegh-Guldberg et al., 2007). In fact, frequency of bleaching events under global warming in even a 2°C world has been projected to exceed the ability of coral reefs to recover. The extinction of coral reefs would be catastrophic for entire coral reef ecosystems and the people who depend on them for food, income and shoreline. Reefs provide coastal protection against coastal floods and rising sea levels, nursery grounds and habitat for a variety of currently fished species, as well as an invaluable tourism asset. These valuable services to often subsistence-dependent coastal and island societies will most likely be lost well before a 4°C world is reached. The preceding discussion reviewed the implications of a 4°C world for just a few examples of important ecosystems. The section below examines the effects of climate on biological diversity Ecosystems are composed ultimately of the species and interactions between them and their physical environment. Biologically rich ecosystems are usually diverse and it is broadly agreed that there exists a strong link between this biological diversity and ecosystem productivity, stability and functioning (McGrady-Steed, Harris, and Morin, 1997; David Tilman, Wedin, and Knops, 1996)(Hector, 1999; D Tilman et al., 2001). Loss of species within ecosystems will hence have profound negative effects on the functioning and stability of ecosystems and on the ability of ecosystems to provide goods and services to ~~human~~ societies. It is the overall diversity of species that ultimately characterizes the biodiversity and evolutionary legacy of life on Earth. As was noted at the outset of this discussion, species extinction rates are now at very high levels compared to the geological record. Loss of those species presently classified as ‘critically endangered’ would lead to mass extinction on a scale that has happened only five times before in the last 540 million years. The loss of those species classified as ‘endangered’ and ‘vulnerable’ would confirm this loss as the sixth mass extinction episode (Barnosky 2011). Loss of biodiversity will challenge those reliant on ecosystems services. Fisheries (Dale, Tharp, Lannom, and Hodges, 2010), and agronomy (Howden et al., 2007) and forestry industries (Stram & Evans, 2009), among others, will need to match species choices to the changing climate conditions, while devising new strategies to tackle invasive pests (Bellard, Bertelsmeier, Leadley, Thuiller, and Courchamp, 2012). These challenges would have to be met in the face of increasing competition between natural and agricultural ecosystems over water resources. Over the 21st-century climate change is likely to result in some bio-climates disappearing, notably in the mountainous tropics and in the poleward regions of continents, with new, or novel, climates developing in the tropics and subtropics (Williams, Jackson, and Kutzbach, 2007). In this study novel climates are those where 21st century projected climates do not overlap with their 20th century analogues, and disappearing climates are those 20th century climates that do not overlap with 21st century projected climates. The projections of Williams et al (2007) indicate that in a 4°C world (SRES A2), 12–39 percent of the Earth’s land surface may experience a novel climate compared to 20th century analogues. Predictions of species response to novel climates are difficult because researchers have no current analogue to rely upon. However, at least such climates would give rise to disruptions, with many current species associations being broken up or disappearing entirely. Under the same scenario an estimated 10–48 percent of the Earth’s surface including highly biodiverse regions such as the Himalayas, Mesoamerica, eastern and southern Africa, the Philippines and the region around Indonesia known as Wallacaea would lose their climate space. With limitations on how fast species can disperse, or move, this indicates that many species may find themselves without a suitable climate space and thus face a high risk of extinction. Globally, as in other studies, there is a strong association apparent in these projections between regions where the climate disappears and biodiversity hotspots. Limiting warming to lower levels in this study showed substantially reduced effects, with the magnitude of novel and disappearing climates scaling linearly with global mean warming. More recent work by Beaumont and colleagues using a different approach confirms the scale of this risk (Beaumont et al., 2011, Figure 36). Analysis of the exposure of 185 eco-regions of exceptional biodiversity (a subset of the so-called Global 200) to extreme monthly temperature and precipitation conditions in the 21st century compared to 1961–1990 conditions shows that within 60 years almost all of the regions that are already exposed to substantial environmental and social pressure, will experience extreme temperature conditions based on the A2 emission scenario (4.1°C global mean temperature rise by 2100) (Beaumont et al., 2011). Tropical and sub-tropical eco-regions in Africa and South America are particularly vulnerable. Vulnerability to such extremes is particularly acute for high latitude and small island biota, which are very limited in their ability to respond to range shifts, and to those biota, such as flooded grassland, mangroves and desert biomes, that would require large geographical displacements to find comparable climates in a warmer world. The overall sense of recent literature confirms the findings of the AR4 summarized at the beginning of the section, with a number of risks such as those to coral reefs occurring at significantly lower temperatures than estimated in that report. Although non-climate related ~~human~~ pressures are likely to remain a major and defining driver of loss of ecosystems and biodiversity in the coming decades, it is also clear that as warming rises so will the predominance of climate change as a determinant of ecosystem and biodiversity survival. While the factors of ~~human~~ stresses on ecosystems are manifold, in a 4°C world, climate change is likely to become a determining driver of ecosystem shifts and large-scale biodiversity loss (Bellard et al., 2012; New et al., 2011). Recent research suggests that large-scale loss of biodiversity is likely to occur in a 4°C world, with climate change and high CO2 concentration driving a transition of the Earth´s ecosystems into a state unknown in ~~human~~ experience. Such damages to ecosystems would be expected to dramatically reduce the provision of ecosystem services on which society depends (e.g., hydrology—quantity flow rates, quality; fisheries (corals), protection of coastline (loss of mangroves). Barnosky has described the present situation facing the biodiversity of the planet as “the perfect storm” with multiple high intensity ecological stresses because of habitat modification and degradation, pollution and other factors, unusually rapid climate change and unusually high and elevated atmospheric CO2 concentrations. In the past, as noted above, this combination of circumstances has led to major, mass extinctions with planetary consequences. Thus, there is a growing risk that climate change, combined with other ~~human~~ activities, will cause the irreversible transition of the Earth´s ecosystems into a state unknown in ~~human~~ experience (Barnosky et al., 2012).

#### We have a Responsibility to respond to global warming – the emitting countries are largely developed and won’t be affected for long periods of time – developing countries are hit the hardest now

Nicholas Stern—Head of the British Government Economic Service—2007 (Former Head Economist for the World Bank, I.G. Patel Chair at the London School of Economics and Political Science, “The Economics of Climate Change: The Stern Review”, The report of a team commissioned by the British Government to study the economics of climate change led by Siobhan Peters, Head of G8 and International Climate Change Policy Unit, Cambridge University Press, p. 94-99)

Exposure: The geography of many developing countries leaves them especially vulnerable to climate change. Geographical exposure plays an important role in determining a country’s growth and development prospects. Many developing countries are located in tropical areas. As a result, they already endure climate extremes (such as those that accompany the monsoon and El Niño and La Niña cycles), intra and interannual variability in rainfall,3 and very high temperatures. India, for example, experienced peak temperatures of between 45°C and 49°C during the pre-monsoon months of 2003.4 Geographical conditions have been identified as important contributors to lower levels of growth in developing countries. If rainfall - that arrives only in a single season in many tropical areas - fails for example, a country will be left dry for over a year with powerful implications for their agricultural sector. This occurred in India in 2002 when the monsoon rains failed, resulting in a seasonal rainfall deficit of 19% and causing large losses of agricultural production and a drop of over 3% in India’s GDP.5 Recent analysis has led Nordhaus to conclude that “tropical geography has a substantial negative impact on output density and output per capita compared to temperate regions” .6 Sachs, similarly, argues that poor soils, the presence of pests and parasites, higher crop respiration rates due to warmer temperatures, and difficulty in water availability and control explain much of the tropical disadvantage in agriculture.7 Climate change is predicted to make these conditions even more challenging, with the range of possible physical impacts set out in Chapter 3. Even slight variations in the climate can have very large costs in developing countries as many places are close to the upper temperature tolerance of activities such as crop production. Put another way, climate change will have a disproportionately damaging impact on developing countries due, in part at least, to their location in low latitudes, the amount and variability of rainfall they receive, and the fact that they are “already too hot”.8  Sensitivity: Developing economies are very sensitive to the direct impacts of climate change given their heavy dependence on agriculture and ecosystems, rapid population growth and concentration of millions of people in slum and squatter settlements, and low health levels. Dependence on agriculture: Agriculture and related activities are crucial to many developing countries, in particular for low income or semi-subsistence economies. The rural sector contributes 21% of GDP in India, for example, rising to 39% in a country like Malawi,9 whilst 61% and 64% of people in South Asia and sub-Saharan Africa are employed in the rural sector.10 This concentration of economic activities in the rural sector – and in some cases around just a few commodities - is associated with low levels of income, as illustrated in Figure 4.2.11 The concentration of activities in one sector also limits flexibility to switch to less climate-sensitive activities such as manufacturing and services. The agricultural sector is one of the most at risk to the damaging impacts of climate change – and indeed current extreme climate variability - in developing countries, as discussed in Chapter 3.  Dependence on vulnerable ecosystems: All ~~humans~~ depend on the services provided by natural systems. However, environmental assets and the services they provide are especially important for poor people, ranging from the provision of subsistence products and market income, to food security and health services.1 Poor people are consequently highly sensitive to the degradation and destruction of these natural assets and systems by climate change. For example, dieback of large areas of forest – some climate models show strong drying over the Amazon if global temperature increases by more than 2°C, for example – would affect many of the one billion or more people who depend to varying degrees on forests for their livelihoods (Table 4.1).13  Population growth and rapid urbanisation: Over the next few decades, another 2-3 billion people will be added to the world’s population, virtually all of them in developing countries. 14 This will add to the existing strain on natural resources - and the social fabric - in many poor countries, and expose a greater number of people to the effects of climate change. Greater effort is required to encourage lower rates of population growth. Development on the MDG dimensions (in particular income, the education of women, and reproductive health) is the most powerful and sustainable way to approach population growth.15 Developing countries are also undergoing rapid urbanisation, and the trend is set to continue as populations grow. The number of people living in cities in developing countries is predicted to rise from 43% in 2005 to 56% by 2030.16 In Africa, for example, the 500km coast between Accra and the Niger delta will likely become a continuous urban megalopolis with more than 50 million people by 2020.17 It does not follow from this that policies to slow urbanisation are desirable. Urbanisation is closely linked to economic growth and it can provide opportunities for reducing poverty and decreasing vulnerability to climate change.18 Nonetheless, many of those migrating to cities live in poor conditions – often on marginal land – and are particularly vulnerable because of their limited access clean water, sanitation, and location in flood-prone areas. 19 In Latin America, for example, where urbanisation has gone far further than in Africa or Asia, more and more people are likely be forced to locate in cheaper, hazard prone areas such as floodplains or steep slopes.  Adaptive capacity: People will adapt to changes in the climate as far as their resources and knowledge allow. But developing countries lack the infrastructure (most notably in the area of water supply and management), financial means, and access to public services that would otherwise help them adapt. Poor water-related infrastructure and management: Developing countries are highly dependent on water – the most climate-sensitive economic resource - for their growth and development. Water is a key input to agriculture, industry, energy and transport and is essential for domestic purposes. Irrigation and effective water management will be very important in helping to reduce and manage the effects of climate change on ag riculture. 22 But many developing countries have low investment in irrigation systems, dams, and ground water. For example, Ethiopia has less than 1 % of the artificial water storage capacity per capita of North America, despite having to manage far greater hydrological variability.23 Many developing countries do not have enough water storage to manage annual water demand based on the current average seasonal rainfall cycle, as illustrated in Table 4.2. This will become an even greater bind with a future, less predictable cycle. In addition, inappropriate water pricing and subsidised electricity tariffs that encourage the excessive use of groundwater pumping (for agricultural use, for example) also increase vulnerability to changing climatic conditions. For example, 104 of Mexico’s 653 aquifers (that provide half the water consumed in the country) drain faster than they can replenish themselves, with 60% of the withdrawals being for irrigation .25 Similarly, water tables are falling in some drought-affected districts of Pakistan by up to 3 meters per year, with water now available only at depths of 200-300 meters.26 The consequences of inadequate investment in water-related infrastructure and poor management are important given that most climate change impacts are mediated through water (as discussed in Chapter 3).  Low incomes and underdeveloped financial markets: In many developing countries the capacity of poor people to withstand extreme weather events such as a drought is constrained both by low income levels and by limited access to credit, loans or insurance (in terms of access and affordability).27 These constraints are likely to become worse as wet and dry seasons become increasingly difficult to predict with climate change .28 This is often exacerbated by ~~weak~~ social safety nets that leave the poorest people very vulnerable to climate shocks. At the national level, many low-income countries have limited financial reserves to cushion the economy against natural disasters,29 coupled with underdeveloped financial markets and ~~weak~~ links to world financial markets that limit the ability to diversify risk or obtain or reallocate financial resources. Less than 1% of the total losses from natural disasters, for example, were insured in low-income countries during the period 1985 to 1999.30  Poor public services: Inadequate resources and poor governance (including corruption) often result in poor provision of public services. Early warning systems for extreme weather conditions, education programmes raising awareness of climate change, and preventive measures and control programmes for diseases spread by vectors or caused by poor nutrition are examples of public services that would help to manage and cope with the effects of climate change but receive ~~weak~~ support and attention in developing countries.

#### Climate change is a double inequity—rich countries are responsible for emissions while poor countries bear the brunt of the consequences

Nicholas Stern—Head of the British Government Economic Service—2007 (Former Head Economist for the World Bank, I.G. Patel Chair at the London School of Economics and Political Science, “The Economics of Climate Change: The Stern Review”, The report of a team commissioned by the British Government to study the economics of climate change led by Siobhan Peters, Head of G8 and International Climate Change Policy Unit, Cambridge University Press, p. 29)

The incremental impact of a tonne of GHG is independent of where in the world it is emitted. But the volume of GHGs emitted globally is not uniform. Historically, rich countries have produced the majority of GHG emissions. Though all countries are affected by climate change, they are affected in different ways and to different extents. Developing countries will be particularly badly hit, for three reasons: their geography; their stronger dependence on agriculture; and because with their fewer resources comes greater vulnerability. There is therefore a double inequity in climate change: the rich countries have special responsibility for where the world is now, and thus for the consequences which flow from this difficult starting point, whereas poor countries will be particularly badly hit.

### Plan Text

#### The President of the United States should not have the authority to initiate armed forces into hostilities to prevent proliferation.

### Contention Two: Solvency

#### Counter-proliferation posture is codified in post-9-11 War Powers authority to preempt – only Congress can check

Gene Healy, 2003. Vice President, CATO Policy Scholars, CATO Institute Handbook for Congress, http://object.cato.org/sites/cato.org/files/serials/files/cato-handbook-policymakers/2003/9/hb108-11.pdf

In some ways, this is nothing new. Throughout the 20th century, congressional control of the war power eroded, not simply as a result of executive¶ branch aggrandizement, but also because of congressional complicity. The imperial presidency continues to grow, largely because many legislators want to duck their responsibility to decide the question of war and peace;¶ delegate that responsibility to the president; and reserve their right to¶ criticize him, should military action go badly.¶ Indeed, even in authorizing the president to use force, Congress¶ attempted to shirk its responsibility to decide on war. After voting for the¶ resolution, which gave the president all the authority he needs to attack¶ Iraq should he choose to do so, prominent members of Congress insisted¶ they hadn’t really voted to use force. That was for the president to decide.¶ As Senate Majority Leader Tom Daschle (D-S.D.) put it: ‘‘Regardless of¶ how one may have voted on the resolution last night, I think there is an¶ overwhelming consensus . . . that while [war] may be necessary, we’re¶ not there yet.’’¶ It is not for the president to decide whether we are ‘‘there yet.’’ The¶ Constitution leaves that question to Congress. Thus far in the war on¶ terror, though, Congress has dodged that responsibility, delegating it to¶ the president. The use-of-force resolution Congress passed immediately¶ after September 11, 2001, contains an even broader delegation of authority to the president, authorizing him to make war on ‘‘those nations, organizations, or persons he determines planned, authorized, committed, or aided¶ the terrorist attacks that occurred on Sept. 11, 2001, or harbored such¶ organizations or persons’’ [emphasis added]. By its plain terms, the resolution leaves it to the president to decide when the evidence that a target¶ nation has cooperated with al-Qaeda justifies war. President Bush has¶ exercised that authority in good faith so far, declining to argue that the¶ flimsy evidence of a Saddam–al-Qaeda connection permits him to attack¶ Iraq under the September 14, 2001, resolution. But if Congress wants a say on whether we should go to war with Iran, Syria, Lebanon, or any¶ number of other nations the president may target in the future, it will have a difficult case to make.¶ Such broad delegations of legislative authority are constitutionally suspect in the domestic arena; surely they are no less so when it comes to¶ questions of war and peace. As Madison put it:¶ Those who are to conduct a war cannot in the nature of things, be proper¶ or safe judges, whether a war ought to be commenced, continued, or¶ concluded. They are barred from the latter functions by a great principle¶ in free government, analogous to that which separates the sword from the¶ purse, or the power of executing from the power of enacting laws [emphasis¶ in original].¶ Preemptive Wars¶ The administration’s new security doctrine, which emphasizes preemptive military strikes, may have equally troubling consequences for congressional control over the war power. Under the new doctrine, rogue nations in the process of developing nuclear, chemical, or biological weapons will be vulnerable at any time to sudden attack by the United States. In a¶ graduation speech given at West Point on June 1, 2002, President Bush¶ discussed the new strategy: ‘‘The war on terror will not be won on the¶ defensive,’’ he said, ‘‘we must take the battle to the enemy . . . [and]¶ be ready for preemptive action when necessary.’’ The administration¶ formalized the policy in the National Security Strategy of the United¶ States of America, released in September. That document does not discuss¶ whether preemptive wars will be conducted pursuant to congressional¶ authorization or launched unilaterally as surprise attacks by the president.¶ In the case of Iraq, which may be the administration’s first preemptive¶ war, the president has not used the doctrine as an excuse to bypass the¶ constitutional requirement of congressional authorization. But the development of the doctrine must be carefully monitored by this Congress and¶ future ones, lest it become a pretext for unilateral presidential war making.¶ Granted, the Constitution does not categorically rule out unilateral military action by the president. No one would argue that, when missiles are¶ in the air or enemy troops are landing on our shores, the president is¶ obliged to call Congress into session before he can respond. As Madison’s¶ notes from the Constitutional Convention make clear, the constitutional consensus about war powers was that, though Congress had the power to ‘‘commence war,’’ the president would have ‘‘the power to repel sudden attacks.’’ Within that power, there’s some latitude for preemptive strikes.¶ If a rogue state plans a nerve gas attack on the New York subway system,¶ the president need not and should not wait until enemy agents are ashore¶ to order military action.¶ But if the preemptive strike doctrine morphs into a freestanding justification for presidential wars, that will have grave consequences for the¶ constitutional balance of power. The doctrine applies whether or not any¶ specific attack on the United States is planned and whether or not U.S.¶ intelligence can establish with any certainty that the target has weapons¶ of mass destruction (WMD). It could be used by this administration or¶ future ones to avoid the inconvenient task of securing authority from¶ Congress. That would change the president’s constitutional power to repel¶ sudden attacks into a dangerous and unconstitutional power to launch¶ sudden attacks.¶ Moreover, such a power would be ripe for abuse. Firm evidence of¶ WMD capability is very hard to come by—indeed, in the case of Iraq,¶ Secretary of Defense Donald Rumsfeld doubts that even an intensive, onthe-ground inspection regime, such as the United Nations operated in Iraq¶ until December 1998, could determine with any degree of certainty what¶ Saddam’s WMD capabilities are. Justifications for preemptive wars will¶ necessarily be speculative and susceptible to manipulation. The potential¶ for politically driven attacks would be enormous.¶ Public opinion polls indicate that Americans view President Bush as a¶ person of integrity and reward him with a high level of public trust. But¶ Bush will not be the last president to wield the broad new powers his¶ administration is forging in the domestic and foreign affairs arenas. As¶ Rumsfeld has noted, the war on terror will take years, and if and when¶ victory is achieved, we may not know with any certainty that we’ve won.¶ Our entire constitutional system repudiates the notion that electing good¶ men is a sufficient check on abuse of power. As President Bush himself¶ noted in his September 17 proclamation: ‘‘In creating our Nation’s Constitutional framework, the Convention’s delegates recognized the dangers¶ inherent in concentrating too much power in one person, branch, or institution.’’ It’s imperative that the 108th Congress resist the tendency to concentrate power and the further growth of the imperial presidency.

#### Obama’s counter-prolif posture is based on the Bush Doctrine interp of war powers authority to preempt

Mathew Waxman, September 11, 2013. “The Most Puzzling Line of the President’s Speech,” http://www.lawfareblog.com/2013/09/the-most-puzzling-line-of-the-presidents-speech/

My first question is to what he’s referring here, or to which part of the past decade. President Bush undoubtedly held very broad views of war powers, but the two major wars embarked up during his presidency, in Afghanistan and Iraq, were clearly congressionally authorized, and Congress has played a significant role in pushing their wind-down. The 2011 Libya intervention, by contrast, was not congressionally authorized, and the Obama administration adopted the view that the War Powers Resolution did not apply to the operations there (which, unlike the contemplated Syria operations, aimed to help bring down a regime). The Obama administration has also resisted the idea that Congress should re-examine the 2001 Authorization for Use of Military Force, which has been interpreted to apply in geographically broad ways that may or may not have been intended by Congress at the time it was adopted. My second question is why, if he believes it’s problematic that more and more war-making power has been put in the hands of the President to the exclusion of Congress, President Obama also adopts the position that he possesses unilateral constitutional authority to act in this case. We haven’t yet ~~seen~~ the underlying legal opinion and analysis, but Jack has pointed out here that in asserting the authority to act independently the Obama administration may be extending, not pulling back on, previous OLC reasoning about presidential power to use force. My third question is about effectiveness. I agree that as a general matter “America acts more effectively abroad when we ~~stand~~ together,” but which is better for the strategic goal Obama lays out here of deterring future chemical weapon use through limited strikes: a more congressionally constrained presidential power or a more flexible one? A President with broad unilateral authority, or a system of strong, formal constitutional checks? I’ve been thinking and writing recently about the relationship between constitutional allocation of war powers and strategies of deterrence or coercive diplomacy, and I believe that even without formally voting to authorize force or not, Congress plays an important role in politically constraining the President and in signaling abroad – to adversaries and allies alike – about our policy preferences and resolve. Part of what worries me about the President’s current approach is that even if the President can win a congressional vote to strike Syria in this instance, the debate so far has shown ~~weak~~ congressional commitment to a global chemical-weapons policing policy – which is what the President claims is important to U.S. security interests (“As the ban against these weapons erodes, other tyrants will have no reason to think twice about acquiring poison gas, and using them”).

#### Broad development of nuclear energy is slow now – preempting prolif cements the “nuclear suppliers cartel,” killing technology trade and civilian growth

Mueller, 2008 (John, Dept of Political Science at Ohio State University, “The Costs and Consequences of Efforts to Prevent Proliferation”, July 16, http://politicalscience.osu.edu/faculty/jmueller//apsa08.pdf)

The nonproliferation focus has also exacerbated the nuclear waste problem in the United States. In the late 1970s, the Carter administration banned the reprocessing of nuclear fuel, something that radically reduces the amount of nuclear waste, under the highly questionable assumption that this policy would reduce the danger of nuclear proliferation. Nonproliferation efforts worldwide also hamper worldwide economic development by increasing the effective costs of developing nuclear energy--sometimes even making them prohibitive for some countries. As countries grow, they require ever increasing amounts of power. Any measure that limits their ability to acquire this vital commodity--or increases its price--effectively slows economic growth and essentially kills people by reducing the gains in life expectancy commonly afforded by economic development. The Non-Proliferation Treaty specifically guarantees to signing nonnuclear countries "the fullest possible exchange of technology" for the development of peaceful nuclear power. However, as Richard Betts points out, this rationale has been undermined by the development of a "nuclear suppliers cartel" which has worked to "cut off trade in technology for reprocessing plutonium or enriching uranium," thereby reducing the NPT to "a simple demand to the nuclear weapons have-nots to remain so."49 More broadly the nonproliferation quest has from time to time boosted international oil prices to the detriment of almost all the countries in the world except for the potential proliferator. Because nuclear power does not emit greenhouse gases, it is an obvious potential candidate for helping with the problem of global warming, an issue many people hold to be of the highest concern for the future of the planet.

#### Aff signal encourages suppliers – dual-use tech raises security flags – US posture is the number one factor in willingness to assist developing nuclear powers

Kate Davidson, UNE Business School Faculty of the Professions, University of New England, 2012. “Contemporary Perspectives on Nuclear Proliferation,” http://www.une.edu.au/\_\_data/assets/pdf\_file/0008/24110/econwp12-2.pdf

The role of the United States in matters of proliferation cannot be emphasised enough. In the Cold War period, the foreign policies of both the US and the Soviet Union were by and large premised upon nuclear matters and necessarily shaped the nuclear field we are faced with today. Post Cold War, US policy has dominated international interactions. The US does contribute enormously to the development of norms; however its own influence extends beyond and almost independently of these norms. In typical “do as I say, not as I do” style, the US exerts huge pressures on states to follow the path of non-proliferation despite their own attachment to nuclear weapons. Levite (2002/03, p76) acknowledges the “glaring omission” in the literature of a “systematic assessment of the vast array of non-proliferation instruments and assets employed by the United States across the cases of nuclear restraint and reversal”, mounting a convincing argument36 based on the claim that “an understanding with the United States is, in fact, a hallmark of many cases of nuclear slowdown or reversal” (p82). She contends that the US is least influential in effecting the nature of domestic regimes which shape nuclear ambitions, concluding that “success is within reach only to the extent that foreign influence and domestic conditions converge, and the foreign effort is closely tuned (in terms of both agenda and timing) to the domestic context” (p87). While the mechanisms by which the US asserts its influence are many and varied37, the hegemon’s role in non-proliferation is deemed to be fundamental.¶ Following on from this, since the US has been so willing to “purchase” non- proliferation through various means perhaps this leads states to making small developments towards the nuclear end which they can then “sell” in order to enhance their economic or diplomatic ~~standing~~. Japan and North Korea have been implicated in such actions, and it is certainly a notion worth some consideration. It is also possible that Israel’s unwillingness to admit its own nuclear status is in part that doing so may compromise its foreign aid flows, particularly from the US.¶ The second and related issue of vital significance is the role of sanctions, both positive and negative, in non-proliferation measures. While such actions are inextricably linked with US policy and superpower, the theoretical grounding is markedly different. Quite fortunately for the purpose of this discussion, the very recent publishing of the book ‘Sanctions, Statecraft, and Nuclear Proliferation’ edited by Solingen (2012) addresses this very subject. While the authors focus largely on specific causal mechanisms, domestic distributional costs and benefits remain at the forefront and provide insight as to how sanctions and inducements, either targeted or comprehensive, can actually have unintended consequences, particularly given varying domestic political economy models and regime types.¶ As noted by Stein (2012, p30) although “sanctions are as old as antiquity”, they are more prevalent now than ever, but “ironically, sanctions can ~~weaken~~ a state absolutely¶ but also strengthen it relatively (to its society and domestic opposition)” (p55). That is, sanctions may actually support the regime which is driving a nuclear program and thereby strengthen its support – a counterproductive action by any standards. Similarly, Kreps and Pasha argue that military threats may make “good politics” domestically (p175), but empirically support the hypothesis that “military threats reinforce the coalitions that are hostile to international economic integration and cooperation with international regimes more generally” (p208) – the very regimes which Solingen argues are most likely to nuclearise.¶ Tying in with the initial point of discussion in this section, Nincic (2012) rethinks the US counter proliferation policy with regard to inducements, intuitively noting that “few measures could be fully effective when not initiated, or at least supported, by the world’s sole superpower” (p127). Observing the “abysmal failure and frequently counterproductive character of threats and punishment” (p153), Nincic pushes the role of positive engagement in non-proliferation measures. In a less US-centric rationale, Drezner (2012) claims “that more comprehensive economic sanctions – or more wide ranging inducements – will often be more likely to lead to the desired policy changes” than ‘smart sanctions’ which are specifically targeted to reduce externalities (p155).¶ The consistent failure of sanctions to procure desired outcomes is a theme throughout the various chapters. Solingen concludes by outlining three factors which burden the probability that sanctions would have the desired effects in the nuclear realm (2012, p347):¶ 1. Inward ~~looking~~ autocracies, being the most frequent targets of these sanctions, are also the least vulnerable to them.¶ 2. Selection bias results as “sanctions are expected to surface only when targets believe that concessions would risk regime survival more than defiance”. That is, targets receptive to inducements may pre-empt sanctions, leaving analysis of sanctions largely on inward-~~looking~~ autocracies which “appear to be endogenous to why sanctions emerge as tools of statecraft to begin with”.¶ 3. Inward ~~looking~~ autocracies may price nuclear weapons markedly highly, justified as public goods, making them more resistant to comply with non-proliferation demands.¶ To illustrate the common use of these tools, Figure 6 shows the number of sanctions and inducements directed toward the four main targets of the period 1990 to 2009: North Korea, Libya, Iraq and Iran. From this the relative use of sanctions versus inducements for each target can be recognised, as can the dominance of the US in the utilisation of these tools. Other senders depicted in the legend of the Figure are non- US unilateral (Uni), United Nations (UN), and non-UN multilateral (Multi). It is also interesting to note that 78% of sanctions in the past three decades were imposed on non-democratic target states38, which gives rise to a possibility that perhaps discriminate treatment of non-democratic regimes by more powerful nations may provide incentive for nuclear weapon acquisition by the ~~weaker~~ state in a struggle for power. Or in other words, economic mistreatment gives rise to a perception of threatened security, which under the assumption of realism will provide motivation for nuclear weapon acquisition.¶ With Iran’s nuclear ambitions being so enthusiastically repressed at present, a few brief points are worth mentioning – the most obvious being that the huge numbers of sanctions have not worked. Stein notes the need to create an “international sanctioning cartel”39 can often “multilateralize an initial bilateral conflict” (p41). Unilateral sanctions are often ineffective or difficult to implement on their own and thus allies in sanctioning will often be sought. Drezner (2012, p167) points out that Iran “has been under some form of embargo for its entire existence, and the regime has grown comfortable with them”. Nader (2012) examines Iran in greater depth, finding it to be unclear whether sanctions have impacted Iran’s willingness to pursue its nuclear program but also suggesting the nation may actually thrive on a sense of political and economic isolation stemming from its ideology (p214). He concludes: “The regime’s survival is increasingly contingent on a favourable outcome regarding the nuclear program, whether it leads to a virtual or actual nuclear weapons capability. A sanctions regime contributing to Iran’s economic decline cannot alter this reality.” (p231)¶ A third point with regard to external incentives is, again, tied in tightly with the other two but worthy of mention: institutional organisations. A number of institutional non- proliferation measures have been already discussed: these include the IAEA, the UN, regional NWFZs and various other multilateral treaties. Through encouraging membership to these institutions and also utilising mechanisms under these structures, external pressure can be applied to nations in order to discourage them from developing nuclear weapons programs. The role of the US, and the use of sanctions and inducements by various nations, are both major features of any such institution, however, given the complex web of globalised trade and business patterns which have developed across the globe, the interactions of such institutions needs to be considered. ¶ While the subject of external incentives has focussed rather heavily on¶ discouraging proliferation, such circumstances may exist under which external pressures act in favour of nuclearisation. Aggressive marketing by nuclear technology companies may lead a nation down the path of nuclear energy, only to find its “Siamese twin” comes too**.** This now leads into the supply side explanation of ¶ proliferation. ¶ Access to nuclear technology: more able leads to more willing ¶ This theory of nuclear proliferation is a relatively new development in the literature40 ¶ and represents the supply side, positing that a state’s ability to build nuclear weapons ¶ will influence its probability of actually doing so. As nuclear technology has spread ¶ over the globe41¶ ¶ , the technical means of developing nuclear weapons has also spread ¶ through the dual purpose nature of the technology. The technical links between ¶ civilian nuclear facilities and military programs have previously been discussed, as has ¶ the notion of a virtual nuclear state, and it is important to remember that “whether or ¶ not a state wants a nuclear weapons is irrelevant if it is unable to acquire them” ¶ (Kroenig, 2009 p163). However, as many as fifty states could be considered to be ¶ nuclear weapons capable (Hymans, 2010 p13). The puzzle then is to explain the gap ¶ between the number of states which are technically capable of developing nuclear ¶ weapons and the number which actually choose to do so. Supply side theories seem to ¶ have relied heavily on empirical analysis, and as a result some of the quantitative ¶ proliferation literature will now be introduced to this discussion. ¶ Initially, there is a requirement that nuclear capability be defined. The possession of a ¶ nuclear reactor is obviously the first point required for a state to even be considered ¶ nuclear capable, however this is by no means sufficient. Contemporary literature has ¶ built on Meyer’s (1984) landmark book ‘The Dynamics of Nuclear Proliferation’ and ¶ Stoll’s (1996) revision of this data (cited in Sagan, 2011 p228). In defining nuclear ¶ latency, Meyer measured ten technical and economic indicators – previous national ¶ mining activity, indigenous uranium deposits, metallurgists, steel production, ¶ construction work force, chemical engineers, nitric acid production, electrical ¶ production capacity, nuclear engineers, physicists, chemists and explosives and ¶ electronics specialists42¶ ¶ . As neither the quantity or quality of a state’s nuclear ¶ engineers nor its explosives and electronics specialists could be accurately determined ¶ as being sufficient to develop a nuclear weapon, Meyer used two proxy indicators: ¶ whether the state had been operating a research reactor for three reactor years and ¶ whether the state manufactured automobiles, or assembled automobiles and ¶ manufactured radios and television sets. Based on these indicators, Meyer concluded ¶ that 34 states had the latent capability of building nuclear weapons in 1982 (cited in ¶ Sagan, 2011 p229). ¶ Stoll’s (1996) revision of the data set assumed that all states had access to nuclear ¶ materials since they were (purportedly) available on the open market, and thus ¶ “assumed away the crucial technical bottleneck of whether a state has access to ¶ uranium that, once enriched, could be used in a nuclear weapons program” (Sagan, ¶ 2011 p229). Stoll’s updated data set led to the conclusion that 48 states had latent ¶ weapons capability in 1992. ¶ ¶ Real world events brought supply side issues to the forefront of the proliferation ¶ debate and the 9/11 attack on the United States highlighted the potential role of non-¶ state actors in international conflict. Furthermore, the uncovering of the AQ Khan ¶ network of supplying nuclear equipment and knowledge, and the apparent ¶ nuclearisation of North Korea (more on these later) demonstrated that supply chains ¶ of nuclear material and technology were out of control, and the notion of second tier ¶ proliferation became a subject for debate. Braun and Chyba (2004) point to three ¶ challenges to the non-proliferation regime: ¶ ¶ i. Latent proliferation under the Non-proliferation Treaty ¶ ¶ ii. First tier nuclear proliferation, in which technology or material is ¶ stolen from private companies or state nuclear programs assists ¶ non-nuclear weapon states develop illegal programs ¶ ¶ iii. Second tier proliferation in which states in the developing world with ¶ varying technical capabilities trade amongst themselves to bolster ¶ one another’s nuclear and strategic weapons efforts ¶ ¶ They explore the proliferation “ring” formed by strategic alliances and trade occurring ¶ between and among a list of nations, most notably Pakistan, North Korea, Libya, Iran ¶ and Iraq. This inspired a greater focus on the supply of nuclear technology globally ¶ and more pertinently, the need to better understand the relationship between access ¶ to nuclear technology and materials, and weapons proliferation itself. ¶ ¶ Data coding applied to proliferation studies were further developed by Jo and Gartzke ¶ (2007), who considered the determinants of nuclear proliferation in terms of ¶ opportunity and willingness (p168). On the supply-side, they further organised ¶ opportunity into three categories (p169): the set of technologies related to the ¶ manufacture of nuclear weapons, nuclear fissile materials, and economic capacity. ¶ They then devised three variables upon which to base their analysis (Jo and Gartzke, ¶ 2007 p172-3). First, latent nuclear weapons production capability was constructed by ¶ summing resource and production capacities using seven components: uranium ¶ deposits, metallurgists, chemical engineers, and nuclear ¶ engineers/physicists/chemists, electronic/explosive specialists, nitric acid production ¶ capacity, and electricity production capacity. Second, economic capacity was ¶ constructed using data relating to states’ energy consumption and iron/steel ¶ production. Third, diffusion of knowledge of how to build nuclear weapons was ¶ assumed to occur, and quantified using a log transformation of years passed since ¶ 1938. The dependent variables were dichotomous and coded annually: NWEAPON ¶ identified whether states had a nuclear weapon in the given year, and NPROGRAM a ¶ nuclear weapons program. ¶ ¶ In relation to nuclear proliferation opportunity, they found that latent nuclear ¶ production capabilities increased the predicted probability of having a weapons ¶ program, but did not impact the conditional decision to produce weapons. ¶ Furthermore they concluded that barriers to proliferation ease with the diffusion of ¶ time. This data set was a significant step in the quantitative approach to proliferation ¶ studies and is very widely cited, thus warrants discussion here despite doing little to ¶ actually define nuclear latency. Their measure of nuclear latency was a simple scale ¶ from zero to seven reflecting the seven components of the index. Sagan (2011, p229) ¶ is quite critical of Jo and Gartzke’s coding, claiming the failure to treat possession of ¶ fissile materials as necessary for nuclear capability as inadequate. The shortcomings¶ of their coding rules are evidenced by the fact that North Korea and South Africa are ¶ both considered to not have full capability to develop weapons in 200143¶ ¶ (ibid). ¶ More recently, the supply side proliferation literature has explored the relationship between civilian nuclear assistance and nuclear proliferation. Matthew Fuhrmann has contributed enormously to the proliferation literature to this end44. He explored the determinants of dual-use trade (2008), defining dual-use commodities as having two ¶ applications: “they can be used in weapons of mass destruction (WMD) programs but ¶ also have many legitimate civilian applications” (p634). With most governments placing restrictions on the export of such commodities he was able to analyse licensed dual-use exports from the US between 1991 and 2001 (post Cold War era). He concludes his research to be “preliminary support for the assertion that states channel dual-use trade towards destinations where security guarantees exist and away from targets where security threats are present to minimise its potentially negative security externalities” 45¶ ¶ (p648). Following from this, Fuhrmann (2009a) explores whether the diffusion of knowledge makes proliferation more likely and further examines the determinants of civilian nuclear cooperation (2009b). These works tie in with the ¶ research of Matthew Kroenig, another significant contributor on the topic of nuclear ¶ assistance.

#### Status quo scares demand, too – wannabe nuclear power states perceive preemption as the norm

Henry Sokolski Executive Director¶ The Nonproliferation Policy Education Center, Editor, December 2010. NUCLEAR POWER’S GLOBAL EXPANSION: WEIGHING ITS COSTS AND RISKS, online

With commercial nuclear energy projects, especially those exported overseas, there is a major additional worry—nuclear energy’s link to nuclear weapons proliferation. Here, the security risks are real, particularly in the Middle East. Israel, the United States, Iran, and Iraq have launched aerial bombing or missile strikes against reactors at Osirak in Iraq and Bushehr in Iran, even though Iraq and Iran were members of the Nu- clear Nonproliferation Treaty (NPT) and the attacked reactors were under International Atomic Energy Agency (IAEA) safeguards. If one includes the 2007 Israeli strike against Syria’s reactor and Iraq’s failed missile attack against Dimona during the first Gulf War, there have been no fewer than 13 acts of war directed against IAEA member state reactors. Such facts should put a security premium on efforts to subsidize the construction of such projects both here and abroad. Certainly, the more the U.S. and other advanced economies go out of their way to use gov- ernment financial incentives to promote the expansion of nuclear power programs domestically or overseas, the more difficult it is likely to be to dissuade devel- oping nations from making similar investments. This dynamic will exist even if the nuclear projects in ques- tion are clearly uncompetitive with nonnuclear alter- natives. Moreover, we should be trying to discourage subsidies that substantially assist these states to move closer to developing nuclear weapons options.

#### The prolif dilemma underlies all nuclear energy development – relaxing posture is key to safe distribution at a scale large enough to solve warming

Squassoni, 2009 (Sharon, Senior associate at the Carnegie Endowment for International Peace focusing on nuclear nonproliferation and national security, “Nuclear Power: How Much More?” Nuclear Policy Education Center, March 25, http://www.npolicy.org/article.php?aid=176&rid=2)

The amount of nuclear capacity required to make a signification contribution to global climate change mitigation is so large that it would inevitably be widely distributed across the globe. Such a distribution would have particular implications for nuclear proliferation. However, projected distributions of nuclear energy out to 2050 are extremely speculative. The industry itself does not engage in such projections, and countries that set nuclear energy production goals have a history of widely missing long-range targets, such as China and India. The discussion below considers a hypothetical distribution of nuclear energy for 2050, based on the 2003 MIT Study. [12] Scenario III, shown in Figure 7, uses the “High 2050” scenario in Appendix 2 (“Global Electricity Demand and the Nuclear Power Growth Scenario”) of the 2003 MIT study, The Future of Nuclear Power. Although this is not a distribution designed to achieve optimal CO2 reductions, it is expansion at a level significant enough (1500 GWe) to have an effect on CO2 emissions. This would mean a fourfold increase from current reactor capacity. The MIT study used an underlying assumption that the developed countries would continue with a modest annual increase in per capita electricity use and the developing countries would move to the 4000 kWh per person per year benchmark if at all feasible (the 4000 kWh benchmark being the dividing line between developed and advanced countries). Electricity demand was then pegged to estimated population growth. Finally, it was assumed that nuclear energy would retain or increase its current share of electricity generation. The least-off developing countries were assumed in the MIT study not to have the wherewithal for nuclear energy. It should be noted that MIT’s 2050 projection was “an attempt to understand what the distribution of nuclear power deployment would be if robust growth were realized, perhaps driven by a broad commitment to reducing greenhouse gas emissions and a concurrent resolution of the various challenges confronting nuclear power’s acceptance in various countries.” A few countries that the MIT High 2050 case included but are not included here are countries that currently have laws restricting nuclear energy, such as Austria. Implications for Uranium Enrichment A fourfold expansion of nuclear energy would entail significant new production requirements for uranium enrichment as shown in Figure 8 and possibly, reprocessing. The MIT study anticipated that 54 states would have reactor capacities that could possibly justify indigenous uranium enrichment. If a capability of 10 GWe is considered the threshold at which indigenous enrichment becomes cost-effective, more than 15 additional states could find it advantageous to engage in uranium enrichment. Figure 9 depicts what the geographic distribution of enrichment capacity might ~~look~~ like, based on the development of 10 GWe or more of reactor capacity. Of course, some states – such as Australia or Kazakhstan – might opt to enrich uranium regardless of domestic nuclear energy capacity, choosing to add value to their own uranium exports. In addition, states may choose to take the path of the UAE, which has formally renounced domestic enrichment and reprocessing in its domestic law, despite aspiring to reach 10 GWe of capacity. Ultimately, these decisions lie very much in the political realm, and can be reversed. Implications for Proliferation Proliferation experts generally fall into two camps – those that do not consider power reactors a cause for proliferation concern but focus on the sensitive aspects of the nuclear fuel cycle and those that are concerned about the entire fuel cycle. Advocates of nuclear energy point out that most states that have developed nuclear weapons have used dedicated production or research reactors rather than power reactors to produce their fissile material [13]; others point to the potential for a state to use peaceful nuclear power to further a clandestine weapons program, either through technology transfer, hiding clandestine activities within a peaceful nuclear fuel cycle or diverting lightly irradiated fuel to be further enriched. Regardless of one’s views on the proliferation risks of power reactors, the recent surge of enthusiasm for nuclear energy poses several proliferation risks. First, recent enthusiasm is not limited just to power reactors. On the enrichment side, President Bush’s 2004 initiative to limit capabilities to current technology holders failed, not just in strategy but also in tactics. For example, Argentina, Canada, and South Africa have all expressed an interest in keeping their enrichment options open. Brazil, which is commissioning a new centrifuge enrichment plant at Resende, will likely produce more low-enriched uranium than is needed for its own consumption by 2015. By and large, these countries do not produce nuclear energy on at scale large enough to make domestic enrichment capability economic. [14] However, they have keen national interests in maintaining their right to enrich. Faced with allied objections to restricting future options, the Bush Administration folded. This is partly the reason for the impasse at the NSG on further detailed criteria restricting enrichment and reprocessing. A perception of the U.S. approach as discriminatory could open the door to further challenges. Even if piecemeal efforts to limit the number of states with uranium-enrichment or spent fuel reprocessing capabilities succeed, these could ultimately further erode the NPT by extending the existence of haves and have-nots from nuclear weapons into the nuclear fuel cycle. In the short term, efforts to limit expansion could slow some states’ implementation of the safeguards-strengthening measures in the 1997 Model Additional Protocol. In the long term, other decisions to strengthen the NPT could be jeopardized. On the reprocessing end, the United States has recently embraced spent fuel reprocessing at home and abroad. From the Global Nuclear Energy Partnership (GNEP) to nuclear cooperation with India, Bush administration policies supported reprocessing. This is a complete reversal from the policies adopted in the mid-1970s not to encourage the use of plutonium in the civilian fuel cycle. A nuclear renaissance that embraces reprocessing as necessary to reduce spent fuel accumulation could result in more plutonium in transit, providing more potential targets for diversion. A renaissance that includes widespread installation of fast reactors would similarly increase targets for diversion. Although GNEP advocates stress that the kind of spent fuel “conditioning” they favor would not result in the separation of plutonium, there are few assurances thus far that new techniques are any more proliferation-resistant than PUREX. As opponents like to point out, no future fuel conditioning technique in the United States will be more proliferation resistant than storing spent fuel. And while most countries are probably interested in having someone else solve the problem either of spent fuel storage or high-level waste storage, no commercial reprocessing service currently will store high-level waste. Neither the United States, nor Russia, nor France has committed to taking back spent fuel under GNEP. A further question is whether the next generation of reactors will be more or less proliferation-resistant than existing reactors. As of December 2002, the Generation IV Forum had not yet adopted a standard methodology for evaluating proliferation resistance and physical protection for the six systems under consideration. In addition, there have been a few reports that India is considering exporting its Pressurized Heavy Water Reactors. India may not be the only state in a second tier of suppliers that might be interested in exporting reactors, injecting some uncertainty into assessments. Beyond the technical realm, there are very real political questions about widespread diffusion of civilian nuclear power. Would new nuclear states would raise proliferation concerns by virtue of their geographic location, the existence of terrorist groups on their soil, or other sources of political instability? Would expanded nuclear infrastructure in Egypt, Jordan, Indonesia, Malaysia, Morocco, Nigeria, Vietnam, and the GCC countries lead their neighbors to worry about and respond to the possibility that these countries will develop weapons programs? The expansion of nuclear power would also have practical consequences for the nuclear nonproliferation regime. Additional facilities will place additional safeguards requirements on IAEA inspectors It is unclear how the IAEA will meet these requirements – will these mean more inspection days or will other approaches be used under the “integrated safeguards” program? Although reactors themselves require relatively few inspection days, there will be significant work in helping prepare new nuclear states for nuclear power programs. Already, the IAEA has conducted workshops on infrastructure requirements, including energy needs and planning considerations; nuclear security and safeguards; physical infrastructure; current and future reactor technology; experience in developing nuclear programs; ~~human~~ resource requirements; and public perceptions. States must also develop their states systems of accounting and control. A nuclear expansion, in particular, that results in more states with bulk-handling facilities (enrichment and reprocessing) could place significant strain on the IAEA and the inspections system. Recent experience suggest that current methods of inspection cannot provide timely detection. The fact that the IAEA’s goals for timely detection are clearly longer than material conversion times – that is, the time it would take for a proliferator to produce finished metal shapes – is a big concern. The largest enrichment and reprocessing plants under safeguards now are under EURATOM safeguards; the IAEA’s role in verifying material balances in those plants is limited by the IAEA-EURATOM agreement. The only experience in safeguarding commercial-scale enrichment and reprocessing plants outside of EURATOM in a non-nuclear-weapon state is in Japan, where incidents with significant material losses have raised questions. British commercial reprocessing at the THORP facility also has produced recurring reports of significant materials losses. Perhaps the largest question about a nuclear expansion is whether or not planned technological developments will outpace nonproliferation initiatives, such as fuel supply assurances and multinational fuel-cycle centers, voluntary export guidelines, and further restrictions within the Nuclear Suppliers Group. Criticism of the U.S. GNEP program had been aimed in part at the aggressive timeline for technology demonstration of advanced reprocessing, in contrast to developments more closely tied to nonproliferation objectives, such as supporting more proliferation-resistant reactors with sealed fuel cores that would limit handling of fuel. Already, efforts to manage expansion of the front and back ends of the fuel cycle, whether nuclear fuel assurances, fuel banks, or fuel leasing projects, have abandoned any concepts of formal restraints in favor of incentives. It is too soon to tell how compelling those incentives will be. Finally, although there is disagreement among experts about the proliferation potential of light water reactors, it is clear that the proliferation potential of a country with no nuclear expertise is lower than that of a country with nuclear power and its associated infrastructure. The current encouraging climate for nuclear energy – new cooperation agreements between France and the UAE, Libya and Algeria, and between the United States and Turkey and Jordan, for a few – suggests that regardless of global climate change concerns, or whether or not a significant expansion occurs, some states in the Middle East will develop nuclear energy. It is not clear whether new nuclear reactors in the Middle East would result in new enrichment or reprocessing plants in the Middle East. In part, much depends on the outcome of negotiations with Iran on its enrichment capabilities. If states clearly renounce making nuclear fuel and allow sufficient wide- ranging inspections to verify such pledges, the proliferation implications could be significantly diminished. The hope is that this can be accomplished with the UAE.

#### Nuclear power is necessary to avoid four degrees warming

Comeau 3-12-20’13

[Steve, a database programmer and a member of Local Motion, a Burlington-based group that promotes people-powered transportation, “Comeau: Nuclear power can be tool in avoiding global warming”, http://vtdigger.org/2013/03/12/comeau-nuclear-power-can-be-tool-in-avoiding-global-warming/]

Nuclear power is used to generate electricity, primarily replacing the use of coal for that purpose. In the two years since the Fukushima-Daiichi nuclear facility disaster hundreds of thousands of people worldwide have died from air pollution related to burning coal. According to the World Health Organization, “Urban outdoor air pollution is estimated to cause 1.3 million deaths worldwide per year.” Much of that pollution can be attributed to coal, which accounts for over 40 percent of electricity generated in the world. Burning coal produces massive amounts of waste products including fly ash, sulfur dioxide, mercury, and other heavy metals. Burning coal is bad for the environment and ~~human~~ health. But the biggest issue with burning coal is that it is the largest contributor of CO2 emissions, and therefore a huge contributor to ~~human~~-caused global warming. To make progress on reducing CO2 emissions related to global warming, coal needs to stay in the ground. Of course there are many political and economic forces that make this close to impossible, but it can only be done if the electricity produced by coal is replaced. The replacements available for that purpose are natural gas, renewable energy, and nuclear power. These all have issues and risks, but are far cleaner and with fewer health consequences than coal. There are many interesting developments that will allow nuclear power to be safer, produce less waste, and even use up the existing nuclear waste. Bill Gates is promoting a company called TerraPower, developing the Traveling Wave Reactor. Environmentalist Stewart Brand, editor of the Whole Earth Catalog, supports nuclear power and the development of integral fast reactors that use uranium more efficiently and can use waste from other reactors. James Hansen, a leading climate scientist and now an activist, also supports third- and fourth-generation nuclear reactors as a way to avert climate change. The projections from a variety of sources depict that CO2 emissions will decline slowly in the United States and likely continue to increase around the world — so pretty much a “business-as-usual” scenario. A report by PricewaterhouseCoopers, “Too late for two degrees,” shows that in 2001 the world energy related emissions grew by 3 percent. China’s emissions grew by 9.4 percent, but emissions in the United States dropped by 1.9 percent, in part due to a mild winter. The most revealing and useful metric is the CO2 measurements taken at the Mauna Loa Observatory in Hawaii since 1959. Based on the trend of the CO2 measurements over the past 20 years, the atmospheric CO2 level — currently at 396 ppm (parts per million) — will reach 450 ppm in 2034. This is approximately the level of CO2 where the average global temperature will increase by 2 degrees (3.6 degrees F) over the pre-industrial level. Based on the latest climate change science, disruptive climate change is occurring now and will continue to occur with increased warming. That part is certain. What is uncertain is the intensity and timing of the transition to dangerous climate change, the threshold which is thought to be 2 degrees C of warming over the pre-industrial level. According to a report published in November 2012 by the World Bank, titled “Turn Down the Heat — Why a 4℃ Warmer World Must be Avoided,” if the current commitments and pledges for reducing emissions are not fully implemented, warming of 4 degrees C (7.2 degrees F) could occur as early as the 2060s. This level of warming will likely produce enormous environmental harm, as well as social and economic disruption. I encourage everyone to download and read this World Bank report. We need a greater understanding and appreciation of the magnitude of the projected harm that dangerous climate change can cause. People will adapt to climate change, but that adaptation will include migration and displacement that is orders of magnitude greater than that caused by the Fukushima-Daiichi nuclear facility disaster. That adaptation will include the abandonment of large cities flooded by a rising sea and migration from regions parched by drought. The warming and CO2 levels will last for centuries and change the world ecosystems. To postpone or avert the greatest harm from climate change it is necessary to accept the risks and potential harm that come with nuclear power, renewable energy, and natural gas, because the alternative is so much worse. The environmentalist positions against the energy technologies that offer effective solutions for replacement of coal are not helpful. As stated in the World Bank report: “The projected 4℃ warming must not be allowed to occur — the heat must be turned down.”

### Contention Three: Case Outweighs

#### Irrational bodies are built into prolif discourse, where “soft paths” for racism solidify into policy and affirm larger “patterns” that sustain deprivation and abandonment of the developing world – plan rearranges the institutional source of binary, exposing both of the lay of the land and thus revolutionary potential

Gusterson, 2004 [Hugh, People of the Bomb, p 25-27]

The dominant discourse that stabilizes this system of nuclear apartheid in Western ideology is a specialized variant within a broader system of colonial and postcolonial discourse that takes as its essentialist premise a profound Otherness separating Third World from Western countries.17 This inscription of Third World (especially Asian and Middle Eastern) na­tions as ineradicably different from our own has, in a different context, been labeled "Orientalism" by Edward Said. Said argues that orientalist discourse constructs the world in terms of a series of binary oppositions that produce the Orient as the mirror image of the West: where "we" are rational and disciplined, "they" are impulsive and emotional; where "we" are modern and flexible, "they" are slaves to ancient passions and routines; where "we" are honest and compassionate, "they" are treacherous and uncultivated. While the blatantly racist orientalism of the high colonial period has softened, more subtle orientalist ideologies endure in contempo­rary politics. They can be found, as Akhil Gupta has argued, in discourses of economic development that represent Third World nations as child na­tions lagging behind Western nations in a uniform cycle of development or, as Catherine Lutz and Jane Collins suggest, in the imagery of popular magazines such as *National Geographic."* I want to suggest here that an­other variant of contemporary orientalist ideology is also to be found in U.S. national security discourse.Following Anthony Giddens in his *Central Problems in Social Theory*, I define ideology as a way of constructing political ideas, institutions, and behavior that (1) makes the political structures and institutions created by dominant social groups, classes, and nations appear to be naturally given and inescapable rather than socially constructed; (2) presents the interests of elites as if they were universally shared; (3) obscures the connections between different social and political antagonisms so as to inhibit massive, binary confrontations (i.e., revolutionary situations); and (4) legitimates domination. The Western discourse on nuclear proliferation is ideological in all four of these senses: (1) it makes the simultaneous ownership of nu­clear weapons by the major powers and the absence of nuclear weapons in Third World countries seem natural and reasonable while problematizing attempts by such countries as India, Pakistan, and Iraq to acquire these weapons; (2) it presents the security needs of the established nuclear pow­ers as if they were everybody's; (3) it effaces the continuity between Third World countries' nuclear deprivation and other systematic patterns of dep­rivation in the underdeveloped world in order to inhibit a massive north- south confrontation; and (4) it legitimates the nuclear monopoly of the recognized nuclear powers.In the following pages I examine four popular arguments against hori­zontal nuclear proliferation and suggest that all four are ideological and ori­entalist. The arguments are that (1) Third World countries are too poor to afford nuclear weapons; (2) deterrence will be unstable in the Third World; (3) Third World regimes lack the technical maturity to be trusted with nu­clear weapons; and (4) Third World regimes lack the political maturity to be trusted with nuclear weapons. Each of these four arguments could as easily be turned backward and used to delegitimate Western nuclear weapons, as I show in the following commentary. Sometimes, in the specialized literature of defense experts, one finds frank discussion of near accidents, ~~weaknesses~~, and anomalies in deterrence as it has been practiced by the established nuclear powers, but these admissions tend to be quarantined in specialized discursive spaces where the general public has little access to them and where it is hard to connect them to the broader public discourse on nuclear proliferation." In this chapter I retrieve some of these discussions of flaws in deterrence from their quarantined spaces and juxtapose them with the dominant discourse on the dangers of proliferation in order to destabilize its foundational as­sumption of a secure binary distinction between "the West" and "the Third World." It is my argument that, in the production of this binary distinc­tion, possible fears and ambivalences about Western nuclear weapons are purged and recast as intolerable aspects of the Other. This purging and recasting occurs in a discourse characterized by gaps and silences in its representation of our own nuclear weapons and exaggerations in its repre­sentation of those of the Other. Our discourse on proliferation is a piece of ideological machinery that transforms anxiety-provoking ambiguities into secure dichotomies. I should clarify two points here. First, I am not arguing that there are, finally, no differences between countries in terms of their reliability as custo­dians of nuclear weapons. I am arguing that those differences are complex, ambiguous, and crosscutting in ways that are not captured by a simple bi­nary division between, on the one hand, a few countries that have nuclear weapons and insist they are safe and, on the other hand, those countries that do not have nuclear weapons and are told they cannot safely acquire them. It is my goal here to demonstrate the ways in which this simple binary distinction works as an ideological mechanism to impede a more nuanced and realistic assessment of the polymorphous dangers posed by nuclear weapons in all countries and to obscure recognition of the ways in which our own policies in the West have often exacerbated dangers in the Third World that, far from being simply the problems of the Other, are problems produced by a world system dominated by First World institu­tions and states.

#### Our advocacy is one of negative state action, the aff fiats less imposition on a global scale – the state isn’t always good but policy-knowledge and deliberations are indispensable to the solution to climate change

**Hansen ‘9**, heads the [NASA](http://en.wikipedia.org/wiki/NASA) [Goddard Institute for Space Studies](http://en.wikipedia.org/wiki/Goddard_Institute_for_Space_Studies) and [adjunct professor](http://en.wikipedia.org/wiki/Professors_in_the_United_States#Adjunct_professor) in the Department of Earth and Environmental Sciences at [Columbia University](http://en.wikipedia.org/wiki/Columbia_University) (James, December, Storms of My Grandchildren, xi)

I believe the biggest obstacle to solving global warming is the role of money in politics, the undue sway of special interests. **But the public, and young people in particular, will need to get involved in a major way.** “What?” you say. You already did get involved by working your tail off to help elect President Barack Obama. Sure, I (a registered Independent who has voted for both Republicans and Democrats over the years) voted for change too, and I had moist eyes during his Election Day speech in Chicago. That was and always will be a great day for America. But let me tell you: President Obama does not get it. He and his key advisers are subject to heavy pressures, and so far the approach has been, “Let’s compromise.” **So you still have a hell of a lot of work ahead of you**. You do not have any choice. Your attitude must be “Yes, we can.” I am sorry to say that most of what our politicians are doing on the climate front is greenwashing – their proposals sound good, but they are deceiving you and themselves at the same time. Politicians think that if matters ~~look~~ difficult, compromise is a good approach. **Unfortunately, nature and the laws of physics cannot compromise – they** are what they are**.** Policy decisions on climate change are being deliberated every day by those without full knowledge of the science, and often with intentional misinformation spawned by special interests. This book was written to help rectify the situation. Citizens with a special interest – in their loved ones – need to become familiar with the science, exercise their democratic rights, and pay attention to politicians’ decisions. Otherwise, it seems, short-term special interests will hold sway in capitals around the world – and we are running out of time.

## 2AC

### O/V

#### The effects of global warming outweigh the K. The G’wychin in Alaska are losing their land and livelihoods by the melting of ice in the Arctic and the shifting of Caribou migratory patterns. Islands in the Pacific are literally being sucked up by the sea. Agriculture is suffering in countries without the privilege of complex irrigation systems. And worst of all, nobody gives a shit because we can just turn up the AC without thinking about the way that electricity produced or sustained. It is this complacency in the systems of energy production that makes our interrogation of the topic specifically important in challenging climate change and a form of privilege that THEY have failed to recognize in this debate space.

#### The affirmation of the topic engages in a process of inverse double consciousness- to recognize the construction of American society (and thus the self) from the position of the oppressed. This makes complicity in the machinery of whiteness explicit and lays the foundation for the recognition of the autonomy of others and works towards decolonizing the white mind and structures of racist oppression.

Martinot 2010

[Steve, Adjunct Professor San Francisco State University*,The Machinery of Whiteness: Studies in the Structure of Racialization*, Temple University Press, 2010, pg 185-186, modified for ableist language]

Perhaps, as an alternative to trying to construct an anti-racist whiteness, a fi rst ~~step~~ toward decolonizing the United States, and the white mind, and ~~weakening~~ its cultural structures of racialization can be made by adopting an inverse form of DuBoisian double consciousness. DuBois theorized the notion of a double consciousness as the condition under which black people found themselves. For him, it meant always ~~seeing~~ oneself through the eyes of others. A black person was both excluded from being American by being black and striving to transcend the white-imposed mark of being black in order to be American. Each black person is judged in advance by those other ~~eyes~~, and always already rendered guilty in both the white ~~gaze~~ and one’s own interiorization of it. Yet one remains guilty of nothing more than having been ~~seen~~, of having been noticed because rendered noticeable by the other’s racialization of oneself. That is, a black person is noticed by whites because of something whites do to themselves, through which the black person is then ~~seen~~, and oppressed by being ~~seen~~ and socially categorized by the whites’ act of noticing. A reverse double consciousness for whites, as a ~~step~~ toward a decolonizing anti-racism, would be to ~~see~~ [recognize] themselves as they are ~~seen~~ [understood] by the oppressed, by those they racialize. The dominant tend to ~~see~~ [recognize] themselves as the norm, as simply human. Thus, a double consciousness would entail ~~seeing~~ [recognizing] themselves not as the norm but rather as the oppressors that they are in the eyes of those they oppress and racialize. It would be to see their hegemony, their dominance, their pretense to privilege through the eyes of those who suffer from it. This is not a question of guilt, but rather of ~~seeing~~ who one is, and who one is made to be, by one’s position, one’s role, and one’s complicity in the machinery of whiteness. Three things would happen. First, for a person to ~~see~~ [recognize] himself as he or she is ~~seen~~ [understood] by another would be to grant that other person a subjectivity, an autonomy of consciousness that is denied to that other by racism and white supremacy. One would have to ~~see~~ oneself as judged by that other, not as an individual but as a part of a social machine. Part of the purpose of the vilifi cation of the victims of racist violence is to de-authorize the racialized from rendering such judgments. Second, since white identity is based on the ability of whiteness to objectify those it racializes for itself, to ~~see~~ [recognize] oneself as ~~seen~~ [understood] by those racialized would dispel both the other’s objectifi cation by one’s white identity and one’s own ability to use them for white identity construction. One’s white identity, which depends on that objectifi cation, would unravel. And third, one would become an object (in one’s own mind) because one had become an object for those others. But one would become an object whose nature, in its capacity or potentiality to dominate, would be ~~seen~~ [understood] as other, as objectifi ed, by oneself. One could ~~see~~ [recognize] the dehumanization one had imposed on others in oneself. One could then ~~see~~ [recognize] the modes by which one dominates or oppresses simply by being white, because ~~seen~~ as such by those whom whites have racialized. It might be a place to start.

### Framework

#### Our framework is that the aff and neg should defend competing methods – we’ve taken the position that the 1AC is a response to the Ideology of the status quo that requires we defend negative state action – any other framework is worse for debates.

#### Makes true offense impossible – shifts the debate to impact claims which allows one position to take the moral high ground by saying something like global warming is bad without a method to challenge that

#### Method is everything – Our Gusterson evidence says that ideologies are sustained by the policies that are implemented – these specific energy policies are the product of whiteness and we need to challenge those

### Perm

#### Permutation do both – our methods are not incompatible –

#### Our advocacies can be coalitional. Refusing the affirmative is characteristic of every problem with leftist criticism. The net benefit is that we make more effective criticism combined with political action.

Connolly 1999 [William, prof of poli sci at john Hopkins, Assembling the Left *Boundary 2* 26.3 (1999) 47-54 ]

Fraser goes on to say that gay and lesbian issues conform best to the model of cultural politics, and class to that of distributive politics, [End Page 50] whereas race and gender fall in between as “bivalent” (19) modes. But I find her exploration of gender politics to be richer than her readings of the two types said to best fit her distinctions. What is for her a bivalence in gender that cuts across the analytical model is for me a condition that reveals the deficiency of the model. To Fraser, one line of correspondence is marked by “socioeconomic injustice,” “political-economic structure,” and “redistribution,” while the other is constituted by “representation, interpretation, and communication,” and “cultural or symbolic change.” But no politics anywhere seems to me to fit this division as she characterizes it. Such a division, first, understates the role that the politics of interpretation plays on the distributive side. Mobilization of energies for the reduction of income inequality, for instance, involves a whole series of changes in patterns of self-interpretation now deeply entrenched in the culture: the state as the primary site of ineptness and source of dislocations in the corporate economy; the market as a vehicle of rationality and freedom that must not be tampered with to promote redistribution; the primacy of individual responsibility for unemployment and welfare dependence; the displacement of Keynesianism by Friedmanite manipulation of the monetary system; and so on. To reduce economic inequality not only requires macropolitical action at the level of the state and interstate system; such macropolitical action requires extensive seeding and support by micropolitical engagements on a number of fronts. As one acknowledges how significantly cultural self-interpretation helps to constitute macro-institutional practices and priorities, one, first, restrains the tendency to place macropolitics on the side of distribution and micropolitics on the side of recognition, and, second, sets the stage to scramble further the analytical divide Fraser constructs between distribution and recognition. On the recognition side of Fraser’s scheme, the reduction of recognition to the symbolic underplays both the dense materiality of culture and its constitutive role in institutional life. Even to learn a language, for instance, is to inscribe its forms into the fine muscles of your jaw, mouth, lips, and tongue. The accents we display when we speak a second language convey this incorporation of culture into our organs of hearing and muscles of articulation. Fraser, it turns out, is not materialist enough for me. Moreover, a sensual orientation—orthodox or heterodox—is located not merely in a symbolic dimension but in complex relays between the symbolic and specific corporealizations of thought-imbued feelings of attraction, disgust, indifference, aversion, and identification. Not only “homosexuality” and “heterosexuality” but multiple differences in attraction to muscular or [End Page 51] slender types, blondes or brunettes, humorous or ironic individuals are incorporated. No ethnic, religious, sexual, or gender identity would *be* without a complex of corporeal orientations, even though none is reducible to a set of stereotyped gestures. But that means that a softening of relations between antagonistic constituencies of difference often involves complex work on the visceral register of subjectivity and intersubjectivity. That is why Foucauldian arts of the self and Deleuzian micropolitics are so pertinent to politics: Politics often involves work on the complex cultural relays between argument, images, intensities, and feelings. Deliberative democracy, as it were, is relevant but insufficient to materialization of an egalitarian ethos of pluralism. Finally, Fraser’s “pure” example of the politics of recognition—gay and lesbian politics—is intimately bound up with corporate, family, military, academic, and state institutions. To “recognize” same-sex marriage, for instance, would be to change innumerable laws, habits, and customs about who gets married, the terms of medical coverage, eligible life insurance beneficiaries, the types of affiliation exemplified in novels and films, street displays of affection, laws of inheritance, and so on. Any significant change in relations between constituencies involves a series of changes in institutional practice and corporeal orientation. So by the time Fraser is ready to unfold a middle position that “reconciles” the critical theory of Seyla Benhabib with the deconstructive perspective of Judith Butler, I have already jumped the ship of reconciliation. I ~~see~~ no reason for Butler to accept analytical distinctions inadvertently devaluing priorities that grip her profoundly. And while I feel confident that I would dissent from the metaphysics of Benhabib, I think she is wise to keep reflection alive on that register. For this is a persistent area of contestation within the Left. It seems unlikely to me, then, that Fraser, Butler, Benhabib, and I will ever achieve harmony. Nonetheless, while I oppose Fraser’s depreciation of micropolitics and arts of the self, while I find these modes to be very pertinent to a culture of pluralization and economic egalitarianization, I still imagine I would be aligned with some of Fraser’s macropolitical strategies of income distribution if we could get them on the radar screen of public engagement. It also seems likely to me that I will coalesce with Benhabib and Butler on numerous occasions as well. At some point in time, all four of us may join the same coalition, even though we will draw on different sources of ethics and strategic priorities in doing so. You might even glimpse a small, rhizomatic assemblage forming around these four nodal points, without a definitive center at which all the parties converge. [End Page 52] My conviction is that the materialization of a generous ethos of multidimensional pluralism—an ethos itself drawn from several ethical sources—also sets a key condition of possibility for the reduction of economic inequality.[4](http://muse.uq.edu.au/journals/boundary/v026/26.3connolly.html#NOTE4#NOTE4) And vice versa.[5](http://muse.uq.edu.au/journals/boundary/v026/26.3connolly.html#NOTE5#NOTE5) The potential for synergy on the Left, then, may reside in the production of multiple relays between constituencies who locate their priorities differently, more than in the formation of a single block in which members agree on what priorities all must adopt with respect to both. Indirect evidence for this thesis can be found on right-wing TV talk shows. Every time it appears possible to generalize medical care, increase welfare, or improve urban education, the Right campaigns against these changes by blaming the poor for their condition and by showing how homosexuals, AIDS victims, unwed mothers, drug addicts, or nihilists might benefit from the proposed policies. That strategy of division would not succeed if a generous ethos of pluralism were materialized. So the ethos sets a condition of possibility for a reduction of inequality in income and job security. I have no doubt that many on the democratic Left disagree with my convictions on this score. But it still seems probable that many of us can find specific occasions to band together across these differences. [End Page 53] The academic Left will continue to debate metaphysical, epistemological, ethical, and strategic issues even as its participants, hopefully, soften the intensity of these debates and seek points of connection across them. A preliminary objective might be to outgrow the exclusionary politics that haunts journals and academic enclaves on the Left by letting go of the fantasy of defining a hegemonic position to which all true leftists must subscribe. The need today is, rather, construction of a series of alliances across multiple lines of difference in assumption, priority, ethical source, and modes of politics. As we establish relations of agonistic respect across differences, we can also hope to strengthen our hand in the academy and improve communications with sympathetic parties in the media, churches, street movements, and labor groups.

#### This is especially true in the context of academia – we must make use of the similarities between philosophies instead of attending to their differences. Otherwise we risk disciplinary compartmentalization that stops our oppositions to status quo forms of violence

SPANOS 2008 [William, American exceptionalism in the age of globalization, p 248-249]

The purpose of this book, both the theoretical chapters and those that interpret literary texts about the Vietnam War, has not only been to "identify" and "name" this anxiety-provoking specter, but also to re­trieve from the oblivion to which, in the aftermath of 9/11, the monu­mentalist dominant culture in America has attempted, finally in vain, to bury "it." More precisely, its purpose has been to bring *this* war's irre­sistible spectrality to corporeal presence in behalf of soliciting (in the Der­ridian sense of the word) the second Bush administration's representation and justification of its "war on terror"—and its unrelenting will, as the president insistently puts this narratological "structure of attitude," to "stay the course" in the face of a situation that is increasingly coming to resemble the Vietnam "quagmire."To achieve this "end," I have relied heavily on certain fundamental aspects of the destructuring thought of a number of "poststructuralist" theorists, above all Martin Heidegger, Jacques Derrida, Jean-Francois Lyotard, Louis Althusser, Michel Fou­cault, Gilles Deleuze and Felix Guattari, Gayatri Spivak, and Edward Said. But this reliance on poststructuralist theory, it needs to be empha­sized, has been strategically heretical. Rather than attending meticulously to the differences that distinguish one theory from another, as both the theorists and their commentators have done more or less universally— and ~~disablingly~~—I have attended primarily to what they have in common and to what I take to be the epochal historical circumstances—the more or less simultaneous coming to the end (fulfillment and demise, in the sense of decentering) of philosophy and imperialism—that contributed to that commonality. And this is not only because the obsessive practice of distinguishing has left the disciplinary (compartmentalizing) structure of knowledge production of modernity—the alienating mechanism of divide and conquer—intact and, in so doing, has minimized its political effectiv­ity, if not, as Antonio Negri and Michael Hardt and, in a different way, Timothy Brennan, have claimed, rendered these theories complicitous with the very regime of truth they have wanted to oppose.9 It is also, and primarily, because such attention to the *relationality* of the various per­spectives of poststructuralist theory, in collapsing the arbitrarily imposed boundaries between the "sites" of knowledge production (the disci­ plines), reveals being—and its representations—to be an indissoluble *con‑* *tinuum,* that, *however unevenly at any particular historical conjuncture,* ranges from being as such (the ontological), the subject (the epistemolog­ical), and the ecos (the biological), through gender identities and rela­tions, the family, race, and class, to economic, cultural, military, social, domestic political, and international or global formations. This multiple critical orientation, it has seemed to me, renders visible, in a way that no disciplinary perspective can, the kind of "realities" that the gaze of the empirical or instrumentalist problematic of the political leaders who de­cided to intervene in Vietnam, the bureaucrats in the Pentagon who planned the war, the military and cultural missions10 that conducted it, were blind to and, despite the self-destruction of this gaze in that epochal decade, the American political leaders who decided to undertake pre­emptive wars in Afghanistan and Iraq after 9/11, the bureaucrats who have envisioned and planned them, and the military and cultural missions that are executing them continue to be blind to. In attempting to achieve my purpose in this book, I have relied on what Edward Said long ago called a "secular critical" approach to the representations of the Vietnam War during and after its non-ending end—if by "secular criticism" he means, as I think he does, a worldly criticism that not only rejects a reli­gious but also an anthropological transcendental signified or natural su­pernaturalism, not only a *theo-logos,* but an *anthropo-logos,* if, that is, his well-known criticism of poststructuralist theory is intended, not as a rejection, but as a manifestation of the betrayal of its initial collaborative critical possibilities.'

#### Policies are the markers of ideology in the status quo – attacking whiteness at that level is critical

Mutimer 2k - Ph.D., Political Science, York University

[David, “The Weapons State: Proliferation and the Framing of Security”, p 93-95]

 The U.S. military appears to have been central in the construction of a new category of threat, the rogue state governed by an outlaw regime. The timing of that construction was unfortunate for Iraq. As has been widely reported, U.S. Ambassador to Iraq April Glaspie met the Iraqi leadership a few days before the invasion of Kuwait. The message of that meeting seems to have been that the United States was not overly concerned with Iraq's border dispute with Kuwait. Even if the meeting could not be read as a tacit approval of the invasion (and it is not impossible to read it that way), it did not indicate the sort of response the United States mounted after 2 August." The problem is that the Rogue Doctrine was a construction of the military and had not yet been formally announced. It is reasonable to assume that a diplomat in a relatively minor posting would not be aware of the reworking of U.S. military doctrine the president was about to announce. There is, of course, a much more cynical interpretation of these events, which would argue that the United States sought a convenient illustration of its newfound enemy. Either way, in July 1990 there were no rogue states because the category had not been articulated. In July 1990, as Glaspie met Hussein, Iraq was a regional power that had been employed by both superpowers during the Cold War and that had a not unreasonable grievance with one of its neighbors. On 2 August President Bush announced a new category, a new set of markers by which the identity of states could be interpreted. On 2 August Iraq acted in a fashion that fit this contemporaneously articulated set of markers. Other Iraqs, rogues, and outlaws are now the currency of the international discourse of proliferation that grew out of the Western response to the Gulf War. These are the labels, drawn from the debate in the United States, applied to states whose behavior causes serious concern to the Western powers in their supplier groups. What sort of labels are they? What lines of difference do these labels establish? To answer these questions, we can ~~look~~ at rogues and outlaws as metaphors that link the proliferation image to other, more widespread discourses and discover the entailments they draw from these discourses. Rogues and outlaws are used similarly in everyday language. A rogue is defined by the Oxford English Dictionary as: "\. One belonging to a class of idle vagrants or vagabonds. ... 2. A dishonest, unprincipled person; a rascal. ... 5. An elephant driven away, or living apart from, the herd and of a savage or destructive disposition." Similarly, an outlaw is "one put outside the law and deprived of its benefits and protection .... More vaguely: One banished or proscribed; an exile, a fugitive." Both rogues and outlaws are used in everyday language to identify criminals, although generally not the worst and most ~~hardened~~ criminals. Indeed, a certain romanticism is attached to both the rogue and the outlaw. The rogue is one who steps outside the limits of acceptable behavior but in a way that tends to be appealing to those who do not dare to commit such transgressions-thus, for example, the definition of rogue as rascal. Similarly, the outlaw is a common figure in U.S. romantic Western literature. Outlaws roamed the frontiers of the central United States, at once dangerous and admired for the rugged individualism they portrayed. Little of this romanticism seems to remain in the use of rogues in official discourse, however. U.S. Secretary of State Warren Christopher did not seem to admire the rugged individualism of potential rogues, for instance, when he told the Senate Foreign Relations Committee that "nuclear weapons give rogue states disproportionate power, destabilize entire regions, and threaten human and environmental disasters. They can turn local conflicts into serious threats to our security. In this era, weapons of mass destruction are more readily available-and there are fewer inhibitions on their use."39 Nevertheless, the use of rogue carries with it marked condescension. Rogues are, as often as not, young men, indeed even little boys, who are acting naughtily-in the former case often in a sexual manner. One of the many ironies that emerge in stories of proliferation is that at the same time the primary international rogue, Iraq, was under intense U.S. pressure because of its refusal to allow UNSCOM unfettered access to its presidential palaces, the U.S. president was being labeled a rogue for reports that he had perhaps allowed too much access to presidential parts. "Some of the President's intimates note his remarkable ability to compartmentalize his life: The policy wonk who genuinely admires his wife resides in onc space; the rogue who risks political standing through personal indiscretion occupies another."4o Put another way, the mature adult resides on the one side and the rather indiscreet little boy on the other. The use of rogue to label states behaving in ways deemed unacceptable identifies those states as immature compared with the mature states doing the labeling-foremost among these the United States. Such an entailment fits well with the practices established for proliferation control. The mature elders gather together to determine which states are sufficiently responsible to be trusted with advanced technologies and military equipment-indeed, the practice smacks of Star Trek's Prime Directive. This notion of maturity is then reflected in academic commentary on contemporary security, as Charles Krauthammer's characterization of the weapon state threat illustrates: "relatively small, peripheral and backward states will be able to emerge rapidly as threats not only to regional, but to world, security."41 Similarly, a repeated concern in the literature has been that new nuclear states would lack the maturity to control their weapons adequately, unlike the old nuclear states.42 Perhaps the most interesting definition of rogue and outlaw is the one they share: both terms are used to describe members of a community expelled from that community or no longer living within the constraints of communal life. In medieval Europe the outlaw was outcast, placed beyond Entailing Self and Other 95 the protection the law provided as punishment. Later, the outlaw in the mythology of the American West fled from life within the community to escape the (often rough) justice of the frontier. Similarly, the rogue animal is one that has been forced from the herd or that for some reason has left the herd, Evoking these terms in the proliferation discourse clearly marks the logic of identity and difference, of inside and outside, which were evident in the practices examined earlier. For there to be rogues and outlaws there must also be a larger, settled community whose rules the outlaws refuse to follow. It would seem that the U.S. military's concern with defending its budget following the Cold War threw up a powerful new marker of identity/difference for the contemporary practice of international security. The idea of the rogue state has achieved wide currency in popular discussion of international affairs. Klare cites a U.S. Congress study to the effect that in major newspapers and journals, the use of rogue nation, rogue state, and rogue regime increased more than 1,500 percent between 1990 and 1993.43 The label originally devised to categorize potential military opponents was quickly drawn into the construction of the new proliferation control agenda following the Gulf War, as Iraq was identified as the first of the rogues. The notion of the rogue state provides agency in an image of an international security problem largely devoid of agency. The term is used to label states whose behavior causes serious concern to the members of the supplier group, identifying them as outsiders, immature states unable or unwilling to follow the rules of civilized state action rules policed by that same core of supplier states.

### Links

#### The affirmative engages with the things the topic wishes to sweep under the rug. That changes can allow better cooperation between different western countries and prevent the “rogue” and “irrational” nations from getting nuclear weapons because white nations can use them but the black and brown nations will cause some sort of nuclear war.

#### This is not something that is omitted but a conscious choice rooted in Ideology.

### Performance

#### Our Martinot evidence on point answers their dualism arguments – the 1AC is an embodiment of our method – nothing about what we do is disembodied. We understand the oppressed peoples as having a unique subjectivity that shouldn’t be managed, we recognize ourselves as complicit with those oppressive systems that ensure that racism, ableism, homophobia etc continue to exist, lastly we understand ourselves as an object that should not act and cannot act on the world outside of those systems – that is an embodiment of our challenge to white supremacy in the 1AC and that embodiment is not mutually exclusive with their method

#### We are not the team that said disabled people deserve to die, we are not the team that laughed at disabled bodies, we are the team that presented a challenge to this fundamental ideology of the status quo

### Extinction

#### The 1AC does not simply isolate an extinction scenario but injects the science of climatology into the debate as a way to understand why policies affect different bodies differently