### 1NC 1

#### A – Interpretation:

#### Topical affirmatives must affirm the resolution through instrumental defense of action by the United States Federal Government.

#### B – Definitions

#### Should denotes an expectation of enacting a plan

#### American Heritage Dictionary 2000 (Dictionary.com)

should. The will to do something or have something take place: I shall go out if I feel like it.

#### Federal government is the central government in Washington DC

Encarta Online 2005,

http://encarta.msn.com/encyclopedia\_1741500781\_6/United\_States\_(Government).html#howtocite

United States (Government), the combination of federal, state, and local laws, bodies, and agencies that is responsible for carrying out the operations of the United States. The federal government of the United States is centered in [Washington, D.C.](http://encarta.msn.com/encyclopedia_761576320/Washington_D_C.html)

#### Resolved implies a policy

Louisiana House 3-8-2005, <http://house.louisiana.gov/house-glossary.htm>

Resolution A legislative instrument that generally is used for making declarations, stating policies, and making decisions where some other form is not required. A bill includes the constitutionally required enacting clause; a resolution uses the term "resolved". Not subject to a time limit for introduction nor to governor's veto. ( Const. Art. III, §17(B) and House Rules 8.11 , 13.1 , 6.8 , and 7.4)

#### C – Vote neg – We have four net benefits

#### First is Decisionmaking

#### The primary purpose of debate should be to improve our skills as decision-makers. We are all individual policy-makers who make choices every day that affect us and those around us. We have an obligation to the people affected by our decisions to use debate as a method for honing these critical thinking and information processing abilities.

Austin J. Freeley and David L. Steinberg – John Carroll University / U Miami – 2009, Argumentation and Debate: Critical Thinking for Reasoned Decision Making, p. 1-4, googlebooks

After several days of intense debate, first the United States House of Representatives and then the U.S. Senate voted to authorize President George W. Bush to attack Iraq if Saddam Hussein refused to give up weapons of mass destruction as required by United Nations's resolutions. Debate about a possible military\* action against Iraq continued in various governmental bodies and in the public for six months, until President Bush ordered an attack on Baghdad, beginning Operation Iraqi Freedom, the military campaign against the Iraqi regime of Saddam Hussein. He did so despite the unwillingness of the U.N. Security Council to support the military action, and in the face of significant international opposition.¶ Meanwhile, and perhaps equally difficult for the parties involved, a young couple deliberated over whether they should purchase a large home to accommodate their growing family or should sacrifice living space to reside in an area with better public schools; elsewhere a college sophomore reconsidered his major and a senior her choice of law school, graduate school, or a job. Each of these\* situations called for decisions to be made. Each decision maker worked hard to make well-reasoned decisions.¶ Decision making is a thoughtful process of choosing among a variety of options for acting or thinking. It requires that the decider make a choice. Life demands decision making. We make countless individual decisions every day. To make some of those decisions, we work hard to employ care and consideration; others seem to just happen. Couples, families, groups of friends, and coworkers come together to make choices, and decision-making bodies from committees to juries to the U.S. Congress and the United Nations make decisions that impact us all. Every profession requires effective and ethical decision making, as do our school, community, and social organizations.¶ We all make many decisions every day. To refinance or sell one's home, to buy a high-performance SUV or an economical hybrid car. what major to select, what to have for dinner, what candidate to vote for, paper or plastic, all present us with choices. Should the president deal with an international crisis through military invasion or diplomacy? How should the U.S. Congress act to address illegal immigration?¶ Is the defendant guilty as accused? The Daily Show or the ball game? And upon what information should I rely to make my decision? Certainly some of these decisions are more consequential than others. Which amendment to vote for, what television program to watch, what course to take, which phone plan to purchase, and which diet to pursue all present unique challenges. At our best, we seek out research and data to inform our decisions. Yet even the choice of which information to attend to requires decision making. In 2006, TIME magazine named YOU its "Person of the Year." Congratulations! Its selection was based on the participation not of ''great men" in the creation of history, but rather on the contributions of a community of anonymous participants in the evolution of information. Through blogs. online networking. You Tube. Facebook, MySpace, Wikipedia, and many other "wikis," knowledge and "truth" are created from the bottom up, bypassing the authoritarian control of newspeople, academics, and publishers. We have access to infinite quantities of information, but how do we sort through it and select the best information for our needs?¶ The ability of every decision maker to make good, reasoned, and ethical decisions relies heavily upon their ability to think critically. Critical thinking enables one to break argumentation down to its component parts in order to evaluate its relative validity and strength. Critical thinkers are better users of information, as well as better advocates.¶ Colleges and universities expect their students to develop their critical thinking skills and may require students to take designated courses to that end. The importance and value of such study is widely recognized.¶ Much of the most significant communication of our lives is conducted in the form of debates. These may take place in intrapersonal communications, in which we weigh the pros and cons of an important decision in our own minds, or they may take place in interpersonal communications, in which we listen to arguments intended to influence our decision or participate in exchanges to influence the decisions of others.¶ Our success or failure in life is largely determined by our ability to make wise decisions for ourselves and to influence the decisions of others in ways that are beneficial to us. Much of our significant, purposeful activity is concerned with making decisions. Whether to join a campus organization, go to graduate school, accept a job oiler, buy a car or house, move to another city, invest in a certain stock, or vote for Garcia—these are just a few of the thousands of decisions we may have to make. Often, intelligent self-interest or a sense of responsibility will require us to win the support of others. We may want a scholarship or a particular job for ourselves, a customer for out product, or a vote for our favored political candidate.

#### Second is Predictable Limits - The resolution proposes the question the negative is prepared to answer and creates a bounded list of potential affs for us to think about. Debate has unique potential to change attitudes and grow critical thinking skills because it forces pre-round internal deliberation on a of a focused, common ground of debate

Robert E. Goodin and Simon J. Niemeyer- Australian National University- 2003,

When Does Deliberation Begin? Internal Reflection versus Public Discussion in Deliberative Democracy, POLITICAL STUDIES: 2003 VOL 51, 627–649, http://onlinelibrary.wiley.com/doi/10.1111/j.0032-3217.2003.00450.x/pdf

What happened in this particular case, as in any particular case, was in some respects peculiar unto itself. The problem of the Bloomfield Track had been well known and much discussed in the local community for a long time. Exaggerated claims and counter-claims had become entrenched, and unreflective public opinion polarized around them. In this circumstance, the effect of the information phase of deliberative processes was to brush away those highly polarized attitudes, dispel the myths and symbolic posturing on both sides that had come to dominate the debate, and liberate people to act upon their attitudes toward the protection of rainforest itself. The key point, from the perspective of ‘democratic deliberation within’, is that that happened in the earlier stages of deliberation – before the formal discussions (‘deliberations’, in the discursive sense) of the jury process ever began. The simple process of jurors seeing the site for themselves, focusing their minds on the issues and listening to what experts had to say did virtually all the work in changing jurors’ attitudes. Talking among themselves, as a jury, did very little of it. However, the same might happen in cases very different from this one. Suppose that instead of highly polarized symbolic attitudes, what we have at the outset is mass ignorance or mass apathy or non-attitudes. There again, people’s engaging with the issue – focusing on it, acquiring information about it, thinking hard about it – would be something that is likely to occur earlier rather than later in the deliberative process. And more to our point, it is something that is most likely to occur within individuals themselves or in informal interactions, well in advance of any formal, organized group discussion. There is much in the large literature on attitudes and the mechanisms by which they change to support that speculation.31 Consider, for example, the literature on ‘central’ versus ‘peripheral’ routes to the formation of attitudes. Before deliberation, individuals may not have given the issue much thought or bothered to engage in an extensive process of reflection.32 In such cases, positions may be arrived at via peripheral routes, taking cognitive shortcuts or arriving at ‘top of the head’ conclusions or even simply following the lead of others believed to hold similar attitudes or values (Lupia, 1994). These shorthand approaches involve the use of available cues such as ‘expertness’ or ‘attractiveness’ (Petty and Cacioppo, 1986) – not deliberation in the internal-reflective sense we have described. Where peripheral shortcuts are employed, there may be inconsistencies in logic and the formation of positions, based on partial information or incomplete information processing. In contrast, ‘central’ routes to the development of attitudes involve the application of more deliberate effort to the matter at hand, in a way that is more akin to the internal-reflective deliberative ideal. Importantly for our thesis, there is nothing intrinsic to the ‘central’ route that requires group deliberation. Research in this area stresses instead the importance simply of ‘sufficient impetus’ for engaging in deliberation, such as when an individual is stimulated by personal involvement in the issue.33 The same is true of ‘on-line’ versus ‘memory-based’ processes of attitude change.34 The suggestion here is that we lead our ordinary lives largely on autopilot, doing routine things in routine ways without much thought or reflection. When we come across something ‘new’, we update our routines – our ‘running’ beliefs and pro cedures, attitudes and evaluations – accordingly. But having updated, we then drop the impetus for the update into deep-stored ‘memory’. A consequence of this procedure is that, when asked in the ordinary course of events ‘what we believe’ or ‘what attitude we take’ toward something, we easily retrieve what we think but we cannot so easily retrieve the reasons why. That more fully reasoned assessment – the sort of thing we have been calling internal-reflective deliberation – requires us to call up reasons from stored memory rather than just consulting our running on-line ‘summary judgments’. Crucially for our present discussion, once again, what prompts that shift from online to more deeply reflective deliberation is not necessarily interpersonal discussion. The impetus for fixing one’s attention on a topic, and retrieving reasons from stored memory, might come from any of a number sources: group discussion is only one. And again, even in the context of a group discussion, this shift from ‘online’ to ‘memory-based’ processing is likely to occur earlier rather than later in the process, often before the formal discussion ever begins. All this is simply to say that, on a great many models and in a great many different sorts of settings, it seems likely that elements of the pre-discursive process are likely to prove crucial to the shaping and reshaping of people’s attitudes in a citizens’ jury-style process. The initial processes of focusing attention on a topic, providing information about it and inviting people to think hard about it is likely to provide a strong impetus to internal-reflective deliberation, altering not just the information people have about the issue but also the way people process that information and hence (perhaps) what they think about the issue. What happens once people have shifted into this more internal-reflective mode is, obviously, an open question. Maybe people would then come to an easy consensus, as they did in their attitudes toward the Daintree rainforest.35 Or maybe people would come to divergent conclusions; and they then may (or may not) be open to argument and counter-argument, with talk actually changing minds. Our claim is not that group discussion will always matter as little as it did in our citizens’ jury.36 Our claim is instead merely that the earliest steps in the jury process – the sheer focusing of attention on the issue at hand and acquiring more information about it, and the internal-reflective deliberation that that prompts – will invariably matter more than deliberative democrats of a more discursive stripe would have us believe. However much or little difference formal group discussions might make, on any given occasion, the pre-discursive phases of the jury process will invariably have a considerable impact on changing the way jurors approach an issue. From Citizens’ Juries to Ordinary Mass Politics? In a citizens’ jury sort of setting, then, it seems that informal, pre-group deliberation – ‘deliberation within’ – will inevitably do much of the work that deliberative democrats ordinarily want to attribute to the more formal discursive processes. What are the preconditions for that happening? To what extent, in that sense, can findings about citizens’ juries be extended to other larger or less well-ordered deliberative settings? Even in citizens’ juries, deliberation will work only if people are attentive, open and willing to change their minds as appropriate. So, too, in mass politics. In citizens’ juries the need to participate (or **the anticipation of participating) in formally organized group discussions might be the ‘prompt’ that evokes those attributes**. But there might be many other possible ‘prompts’ that can be found in less formally structured mass-political settings. Here are a few ways citizens’ juries (and all cognate micro-deliberative processes)37 might be different from mass politics, and in which lessons drawn from that experience might not therefore carry over to ordinary politics: • A citizens’ jury concentrates people’s minds on a single issue. Ordinary politics involve many issues at once. • A citizens’ jury is often supplied a background briefing that has been agreed by all stakeholders (Smith and Wales, 2000, p. 58). In ordinary mass politics, there is rarely any equivalent common ground on which debates are conducted. • A citizens’ jury separates the process of acquiring information from that of discussing the issues. In ordinary mass politics, those processes are invariably intertwined. • A citizens’ jury is provided with a set of experts. They can be questioned, debated or discounted. But there is a strictly limited set of ‘competing experts’ on the same subject. In ordinary mass politics, claims and sources of expertise often seem virtually limitless, allowing for much greater ‘selective perception’. • Participating in something called a ‘citizens’ jury’ evokes certain very particular norms: norms concerning the ‘impartiality’ appropriate to jurors; norms concerning the ‘common good’ orientation appropriate to people in their capacity as citizens.38 There is a very different ethos at work in ordinary mass politics, which are typically driven by flagrantly partisan appeals to sectional interest (or utter disinterest and voter apathy). • In a citizens’ jury, **we think and listen in anticipation of the discussion phase, knowing that we soon will have to defend our views in a discursive setting where they will be probed intensively**.39 In ordinary mass-political settings, there is no such incentive for paying attention. It is perfectly true that citizens’ juries are ‘special’ in all those ways. But if being special in all those ways makes for a better – more ‘reflective’, more ‘deliberative’ – political process, then those are design features that we ought try to mimic as best we can in ordinary mass politics as well. There are various ways that that might be done. Briefing books might be prepared by sponsors of American presidential debates (the League of Women Voters, and such like) in consultation with the stakeholders involved. Agreed panels of experts might be questioned on prime-time television. Issues might be sequenced for debate and resolution, to avoid too much competition for people’s time and attention. Variations on the Ackerman and Fishkin (2002) proposal for a ‘deliberation day’ before every election might be generalized, with a day every few months being given over to small meetings in local schools to discuss public issues. All that is pretty visionary, perhaps. And (although it is clearly beyond the scope of the present paper to explore them in depth) there are doubtless many other more-or-less visionary ways of introducing into real-world politics analogues of the elements that induce citizens’ jurors to practice ‘democratic deliberation within’, even before the jury discussion gets underway. Here, we have to content ourselves with identifying those features that need to be replicated in real-world politics in order to achieve that goal – and with the ‘possibility theorem’ that is established by the fact that (as sketched immediately above) there is at least one possible way of doing that for each of those key features.

#### Third is Dogmatism – Most problems are not black and white but have complex, uncertain interactions. By declaring that whiteness is always bad, they prevent us from understanding the nuances of an incredibly important and complex issue. This is the epitome of dogmatism

Keller, et. al,– Asst. professor School of Social Service Administration U. of Chicago - 2001

(Thomas E., James K., and Tracly K., Asst. professor School of Social Service Administration U. of Chicago, professor of Social Work, and doctoral student School of Social Work, “Student debates in policy courses: promoting policy practice skills and knowledge through active learning,” Journal of Social Work Education, Spr/Summer 2001, EBSCOhost)

John Dewey, the philosopher and educational reformer, suggested that the initial advance in the development of reflective thought occurs in the transition from holding fixed, static ideas to an attitude of doubt and questioning engendered by exposure to alternative views in social discourse (Baker, 1955, pp. 36-40). Doubt, confusion, and conflict resulting from discussion of diverse perspectives "force comparison, selection, and reformulation of ideas and meanings" (Baker, 1955, p. 45). Subsequent educational theorists have contended that learning requires openness to divergent ideas in combination with the ability to synthesize disparate views into a purposeful resolution (Kolb, 1984; Perry, 1970). On the one hand, clinging to the certainty of one's beliefs risks dogmatism, rigidity, and the inability to learn from new experiences. On the other hand, if one's opinion is altered by every new experience, the result is insecurity, paralysis, and the inability to take effective action. The educator's role is to help students develop the capacity to incorporate new and sometimes conflicting ideas and experiences into a coherent cognitive framework. Kolb suggests that, "if the education process begins by bringing out the learner's beliefs and theories, examining and testing them, and then integrating the new, more refined ideas in the person's belief systems, the learning process will be facilitated" (p. 28).

The authors believe that involving students in substantive debates challenges them to learn and grow in the fashion described by Dewey and Kolb. Participation in a debate stimulates clarification and critical evaluation of the evidence, logic, and values underlying one's own policy position. In addition, to debate effectively students must understand and accurately evaluate the opposing perspective. The ensuing tension between two distinct but legitimate views is designed to yield a reevaluation and reconstruction of knowledge and beliefs pertaining to the issue.

#### Our method solves – Even if the resolution is wrong, having a devil’s advocate in deliberation is vitally important to critical thinking skills and avoiding groupthink

Hugo Mercier and Hélène Landemore- 2011

(Philosophy, Politics and Economics prof @ U of Penn, Poli Sci prof @ Yale), Reasoning is for arguing: Understanding the successes and failures of deliberation, Political Psychology, http://sites.google.com/site/hugomercier/publications

Reasoning can function outside of its normal conditions when it is used purely internally. But it is not enough for reasoning to be done in public to achieve good results. And indeed the problems of individual reasoning highlighted above, such as polarization and overconfidence, can also be found in group reasoning (Janis, 1982; Stasser & Titus, 1985; Sunstein, 2002). Polarization and overconfidence happen because not all group discussion is deliberative. According to some definitions of deliberation, including the one used in this paper, reasoning has to be applied to the same thread of argument *from different opinions* for deliberation to occur. As a consequence, “If the participants are mostly like-minded or hold the same views before they enter into the discussion, they are not situated in the circumstances of deliberation.” (Thompson, 2008: 502). We will presently review evidence showing that the absence or the silencing of dissent is a quasi-necessary condition for polarization or overconfidence to occur in groups. Group polarization has received substantial empirical support. 11 So much support in fact that Sunstein has granted group polarization the status of law (Sunstein, 2002). There is however an important caveat: group polarization will mostly happen when people share an opinion to begin with. In defense of his claim, Sunstein reviews an impressive number of empirical studies showing that many groups tend to form more extreme opinions following discussion. The examples he uses, however, offer as convincing an illustration of group polarization than of the necessity of having group members that share similar beliefs at the outset for polarization to happen (e.g. Sunstein, 2002: 178). Likewise, in his review of the group polarization literature, Baron notes that “The crucial antecedent condition for group polarization to occur is the presence of a likeminded group; i.e. individuals who share a preference for one side of the issue.” (Baron, 2005). Accordingly, when groups do not share an opinion, they tend to depolarize. This has been shown in several experiments in the laboratory (e.g. Kogan & Wallach, 1966; Vinokur & Burnstein, 1978). Likewise, studies of deliberation about political or legal issues report that many groups do not polarize (Kaplan & Miller, 1987; Luskin, Fishkin, & Hahn, 2007; Luskin et al., 2002; Luskin, Iyengar, & Fishkin, 2004; Mendelberg & Karpowitz, 2000). On the contrary, some groups show a homogenization of their attitude (they depolarize) (Luskin et al., 2007; Luskin et al., 2002). The contrasting effect of discussions with a supportive versus dissenting audience is transparent in the results reported by Hansen ( 2003 reported by Fishkin & Luskin, 2005). Participants had been exposed to new information about a political issue. When they discussed it with their family and friends, they learned more facts supporting their initial position. On the other hand, during the deliberative weekend—and the exposition to other opinions that took place—they learned more of the facts supporting the view they disagreed with. The present theory, far from being contradicted by the observation that groups of likeminded people reasoning together tend to polarize, can in fact account straightforwardly for this observation. When people are engaged in a genuine deliberation, the confirmation bias present in each individual’s reasoning is checked, compensated by the confirmation bias of individuals who defend another opinion. When no other opinion is present (or expressed, or listened to), people will be disinclined to use reasoning to critically examine the arguments put forward by other discussants, since they share their opinion. Instead, they will use reasoning to strengthen these arguments or find other arguments supporting the same opinion. In most cases the reasons each individual has for holding the same opinion will be partially non-overlapping. Each participant will then be exposed to new reasons supporting the common opinion, reasons that she is unlikely to criticize. It is then only to be expected that group members should strengthen their support for the common opinion in light of these new arguments. In fact, groups of like-minded people should have little endogenous motivation to start reasoning together: what is the point of arguing with people we agree with? In most cases, such groups are lead to argue because of some external constraint. These constraints can be more or less artificial—a psychologist telling participants to deliberate or a judge asking a jury for a well supported verdict—but they have to be factored in the explanation of the phenomenon. 4. Conclusion: a situational approach to improving reasoning We have argued that reasoning should not be evaluated primarily, if at all, as a device that helps us generate knowledge and make better decisions through private reflection. Reasoning, in fact, does not do those things very well. Instead, we rely on the hypothesis that the function of reasoning is to find and evaluate arguments in deliberative contexts. This evolutionary hypothesis explains why, when reasoning is used in its normal conditions—in a deliberation—it can be expected to lead to better outcomes, consistently allowing deliberating groups to reach epistemically superior outcomes and improve their epistemic status. Moreover, seeing reasoning as an argumentative device also provides a straightforward account of the otherwise puzzling confirmation bias—the tendency to search for arguments that favor our opinion. The confirmation bias, in turn, generates most of the problems people face when they reason in abnormal conditions— when they are not deliberating. This will happen to people who reason alone while failing to entertain other opinions in a private deliberation and to groups in which one opinion is so dominant as to make all others opinions—if they are even present—unable to voice arguments. In both cases, the confirmation bias will go unchecked and create polarization and overconfidence. We believe that the argumentative theory offers a good explanation of the most salient facts about private and public reasoning. This explanation is meant to supplement, rather than replace, existing psychological theories by providing both an answer to the why-questions and a coherent integrative framework for many previously disparate findings. The present article was mostly aimed at comparing deliberative vs. non-deliberative situations, but the theory could also be used to make finer grained predictions within deliberative situations. It is important to stress that the theory used as the backbone for the article is a theory of reasoning. The theory can only make predictions about reasoning, and not about the various other psychological mechanisms that impact the outcome of group discussion. We did not aim at providing a general theory of group processes that could account for all the results in this domain. But it is our contention that the best way to reach this end is by investigating the relevant psychological mechanisms and their interaction. For these reasons, the present article should only be considered a first step towards more fined grained predictions of when and why deliberation is efficient. Turning now to the consequences of the present theory, we can note first that our emphasis on the efficiency of diverse groups sits well with another recent a priori account of group competence. According to Hong and Page’s Diversity Trumps Ability Theorem for example, under certain plausible conditions, a diverse sample of moderately competent individuals will outperform a group of the most competent individuals (Hong & Page, 2004). Specifically, what explains the superiority of some groups of average people over smaller groups of experts is the fact that cognitive diversity (roughly, the ability to interpret the world differently) can be more crucial to group competence than individual ability (Page, 2007). That argument has been carried over from groups of problem-solvers in business and practical matters to democratically deliberating groups in politics (e.g., Anderson, 2006; Author, 2007, In press). At the practical level, the present theory potentially has important implications. Given that individual reasoning works best when confronted to different opinions, the present theory supports the improvement of the presence or expression of dissenting opinions in deliberative settings. Evidently, many people, in the field of deliberative democracy or elsewhere, are also advocating such changes. While these common sense suggestions have been made in the past (e.g., Bohman,

2007; Sunstein, 2003, 2006), the present theory provides additional arguments for them. It also explains why approaches focusing on individual rather than collective reasoning are not likely to be successful. Specifically tailored practical suggestions can also be made by using departures from the normal conditions of reasoning as diagnostic tools. Thus, different departures will entail different solutions. Accountability—having to defends one’s opinion in front of an audience—can be used to bring individual reasoners closer to a situation of private deliberation. The use of different aggregation mechanisms could help identify the risk of deliberation among like-minded people. For example, before a group launches a discussion, a preliminary vote or poll could establish the extent to which different opinions are represented. If this procedure shows that people agree on the issue at hand, then skipping the discussion may save the group some efforts and reduce the risk of polarization. Alternatively, a **devil’s advocate** could be introduced in the group to defend an alternative opinion (e.g. Schweiger, Sandberg, & Ragan, 1986).

#### Fourth is Policy Education

#### A focus on policy is necessary to learn the pragmatic details of powerful institutions – acting without this knowledge is doomed to fail in the face of policy professionals who make the decisions that actually affect outcomes

McClean, Adjunct Professor of Philosophy at Molloy College in New York, 2001

(David E., “The Cultural Left and the Limits of Social Hope”, Conference of the Society for the Advancement of American Philosophy, http://www.americanphilosophy.org/archives/past\_conference\_programs/pc2001/)

Or we might take Foucault who, at best, has provided us with what may reasonably be described as a very long and eccentric footnote to Nietzsche (I have once been accused, by a Foucaltian true believer, of "gelding" Foucault with other similar remarks). Foucault, who has provided the Left of the late 1960s through the present with such notions as "governmentality," "Limit," "archeology," "discourse" "power" and "ethics," creating or redefining their meanings, has made it overabundantly clear that all of our moralities and practices are the successors of previous ones which derive from certain configurations of savoir and connaisance arising from or created by, respectively, the discourses of the various scientific schools. But I have not yet found in anything Foucault wrote or said how such observations may be translated into a political movement or hammered into a political document or theory (let alone public policies) that can be justified or founded on more than an arbitrary aesthetic experimentalism. In fact, Foucault would have shuddered if any one ever did, since he thought that anything as grand as a movement went far beyond what he thought appropriate. This leads me to mildly rehabilitate Habermas, for at least he has been useful in exposing Foucault's shortcomings in this regard, just as he has been useful in exposing the shortcomings of others enamored with the abstractions of various Marxian-Freudian social critiques. Yet for some reason, at least partially explicated in Richard Rorty's Achieving Our Country, a book that I think is long overdue, leftist critics continue to cite and refer to the eccentric and often a priori ruminations of people like those just mentioned, and a litany of others including Derrida, Deleuze, Lyotard, Jameson, and Lacan, who are to me hugely more irrelevant than Habermas in their narrative attempts to suggest policy prescriptions (when they actually do suggest them) aimed at curing the ills of homelessness, poverty, market greed, national belligerence and racism. I would like to suggest that it is time for American social critics who are enamored with this group, those who actually want to be relevant, to recognize that they have a disease, and a disease regarding which I myself must remember to stay faithful to my own twelve step program of recovery. The disease is the need for elaborate theoretical "remedies" wrapped in neological and multi-syllabic jargon. These elaborate theoretical remedies are more "interesting," to be sure, than the pragmatically settled questions about what shape democracy should take in various contexts, or whether private property should be protected by the state, or regarding our basic human nature (described, if not defined (heaven forbid!), in such statements as "We don't like to starve" and "We like to speak our minds without fear of death" and "We like to keep our children safe from poverty"). As Rorty puts it, "When one of today's academic leftists says that some topic has been 'inadequately theorized,' you can be pretty certain that he or she is going to drag in either philosophy of language, or Lacanian psychoanalysis, or some neo-Marxist version of economic determinism. . . . These futile attempts to philosophize one's way into political relevance are a symptom of what happens when a Left retreats from activism and adopts a spectatorial approach to the problems of its country. Disengagement from practice produces theoretical hallucinations"(italics mine).(1) Or as John Dewey put it in his The Need for a Recovery of Philosophy, "I believe that philosophy in America will be lost between chewing a historical cud long since reduced to woody fiber, or an apologetics for lost causes, . . . . or a scholastic, schematic formalism, unless it can somehow bring to consciousness America's own needs and its own implicit principle of successful action." Those who suffer or have suffered from this disease Rorty refers to as the Cultural Left, which left is juxtaposed to the Political Left that Rorty prefers and prefers for good reason. Another attribute of the Cultural Left is that its members fancy themselves pure culture critics who view the successes of America and the West, rather than some of the barbarous methods for achieving those successes, as mostly evil, and who view anything like national pride as equally evil even when that pride is tempered with the knowledge and admission of the nation's shortcomings. In other words, the Cultural Left, in this country, too often dismiss American society as beyond reform and redemption. And Rorty correctly argues that this is a disastrous conclusion, i.e. disastrous for the Cultural Left. I think it may also be disastrous for our social hopes, as I will explain. Leftist American culture critics might put their considerable talents to better use if they bury some of their cynicism about America's social and political prospects and help forge public and political possibilities in a spirit of determination to, indeed, achieve our country - the country of Jefferson and King; the country of John Dewey and Malcom X; the country of Franklin Roosevelt and Bayard Rustin, and of the later George Wallace and the later Barry Goldwater. To invoke the words of King, and with reference to the American society, the time is always ripe to seize the opportunity to help create the "beloved community," one woven with the thread of agape into a conceptually single yet diverse tapestry that shoots for nothing less than a true intra-American cosmopolitan ethos, one wherein both same sex unions and faith-based initiatives will be able to be part of the same social reality, one wherein business interests and the university are not seen as belonging to two separate galaxies but as part of the same answer to the threat of social and ethical nihilism. We who fancy ourselves philosophers would do well to create from within ourselves and from within our ranks a new kind of public intellectual who has both a hungry theoretical mind and who is yet capable of seeing the need to move past high theory to other important questions that are less bedazzling and "interesting" but more important to the prospect of our flourishing - questions such as "How is it possible to develop a citizenry that cherishes a certain hexis, one which prizes the character of the Samaritan on the road to Jericho almost more than any other?" or "How can we square the political dogma that undergirds the fantasy of a missile defense system with the need to treat America as but one member in a community of nations under a "law of peoples?" The new public philosopher might seek to understand labor law and military and trade theory and doctrine as much as theories of surplus value; the logic of international markets and trade agreements as much as critiques of commodification, and the politics of complexity as much as the politics of power (all of which can still be done from our arm chairs.) This means going down deep into the guts of our quotidian social institutions, into the grimy pragmatic details where intellectuals are loathe to dwell but where the officers and bureaucrats of those institutions take difficult and often unpleasant, imperfect decisions that affect other peoples' lives, and it means making honest attempts to truly understand how those institutions actually function in the actual world before howling for their overthrow commences. This might help keep us from being slapped down in debates by true policy pros who actually know what they are talking about but who lack awareness of the dogmatic assumptions from which they proceed, and who have not yet found a good reason to listen to jargon-riddled lectures from philosophers and culture critics with their snobish disrespect for the so-called "managerial class."

#### The only way to reform the energy system is for critical scholars to learn the technical language and bureaucratic regulations of energy policy – essential to address growing environmental and geopolitical challenges of energy policy

Loren Lutzenhiser – assistant professor of sociology @ Washington State University – 1994, Energy and Interdisciplinary Environmental Science, The American Sociologist, Vol. 25, No. 1, Natural Resources and the Environment andSociology (Spring, 1994), pp. 58-79, jstor

Why is the Sociology of Energy Important to Environmental Policy and Research? Despite these limitations, other disciplines generally offer weaker accounts of the human role in energy production and consumption. In fact, efforts by physics, engineering and economics derived from the study of macro-level processes often mislead analysis by misrepresenting the micro-level social processes that control energy flows and shape socioenvironmental systems—processes about which sociology has a good deal to say (Lutzenhiser, 1993). Although the efficiency of energy use has improved in the United States over the past 20 years—reversing a centuries-long trend of increasing energy consumption (Morrison, 1992), neither market nor policy interventions have been particularly successful in reducing energy flows to anywhere near the theoretical minima that energy analysts estimate can maintain quality of life (Cherfas, 1991). One important contribution of sociology, then, lies in its ability to investigate the micro-social processes that promote consumption and constrain changes in efficiency—a value repeatedly stressed by social scientists and sympathetic analysts working in and around the energy system (Farhar, 1991; Schipper, 1991; Lovins, 1992; Lutzenhiser, 1992a; Stern, 1986,1992a). It is also clear that macro-social processes involving the geopolitics of energy, global energy system-based pollution, and the energy technology dependencies of advanced societies will grow in importance in coming decades. A few relevant sociological analyses in this area have recently appeared (e.g., Dunlap, Kraft and Rosa, 1993, Hackett and Lutzenhiser, 1991, Lutzenhiser and Hackett, 1993, Short and Clark, 1992) as have sociological contributions concerning global environmental change (e.g., see B?ttel and Taylor, 1992; Schnaiberg, 1991; Dunlap, Lutzenhiser and Rosa, 1994; and Dunlap, Gallup and Gallup, 1993). But this literature represents a very small part of a rapidly growing body of research on large-scale environmental processes and problems—many rooted in the energy system. If sociology is so relevant, why does it play such a minor part? Because the discipline has defined the analysis of the energy and environmental bases of society as marginal to the sociological enterprise, and because the perspectives and projects of the environmental sciences have effectively marginalized the social in their analyses. External Constraints: Nonsocial Models Dominate, Marginalizing Sociological Perspectives Nonsocial disciplines have historical precedence in energy analysis, having defined the field and organized large-scale, energy-environment research pro grams before sociology arrived on the scene in the 1970s. The dominance of these disciplines, and their continued containment of the social is accomplished through distinctly nonsocial paradigms and a complex of institutional supports. In this section, I review the most widely used energy-environment models, and examine the ways in which their focus upon technical, economic and environmental variables overlooks and distorts macro-social processes and micro-social behav iors.9 I discuss their limits and empirical failures, as well as efforts to bring social institutions and human agency into energy-environment analysis. This is most often accomplished via the economic and psychological models preferred by natural scientists and engineers?although such amendments have their own empirical problems. Sociological improvements to existing paradigms are also discussed, along with several multidisciplinary approaches that seem to offer avenues of cooperation between the social and technical sciences. Global Ecologies: Big Nature and Little Humans At the most macroscopic level, energy-environment analysis involves models that are earth-focussed and nature-based. They concern geological (plate tec tonic, volcanism), biological (photosynthesis, ecosystem dynamics), and climatic processes (atmosphere-ocean interactions). The fundamental focus of analysis is change in large nonhuman systems, often over long time intervals (NAS, 1990). For example, one important model of the earth system focuses on the carbo? cycle ?a phenomenon that involves the interaction of geological, biological and cli matic processes and is of considerable importance in evaluating the consequences of global warming caused by increased carbon dioxide (C02) levels in the at mosphere. Treating global carbon flow as an input-output problem, a "sources and sinks" model (NAS 1991) can be used to inventory the release of carbon into the atmosphere (primarily from natural sources) and its subsequent removal (prima rily through the natural "sequestering" of carbon in sinks such as plant and animal bodies, tropical forests and ocean plankton). Human carbon releases (from industrial combustion, power plants, forest burning, etc.) are of crucial concern, but these are generally small in comparison to the volume of the atmosphere itself and the scale of naturally occurring contributions and withdrawals.10 Human atmospheric contributions work at the margins of large natural systems?which is one of the reasons that some controversy surrounds the importance of human effects on global warming. In "sources and sinks" and other global-scale environ mental models, human action does its work by amplifying and dampening the effects of larger natural processes. And despite the natural science consensus that these "anthropogenic" sources of environmental change are of the most serious sort, the bulk of scientific interest, funding and action is in the study of natural systems. In global warming research, for example, efforts are underway to produce more sophisticated models of the natural workings of the carbon cycle?earth system simulations that will employ several generations of natural scientists and engineers and will require the development of new generations of super com Lutzenhiser 63 ?ters (Kerr, 1990). In the natural science community, there is little interest in launching investigations of the human role in the energy-environment dynamic on anywhere near that scale. Even among those environmental advocates who have been historically most concerned about human effects on the earth system (e.g., Barry Commoner, Paul Ehrlich, Lester Brown), human action is painted in broad strokes and stereotyped in concepts such as "affluence," "consumerism," "technology," and "population"?obviously important clusters of variables and ones that are familiar to sociologists (Dunlap, Lutzenhiser and Rosa, 1994), but underdeveloped and in need of considerable elaboration before they can use fully contribute to debates about environmental change. While we should applaud the calls to action in response to anthropogenic change that are now emanating from the natural science community, it is clear that the participation of the social sciences has been minimal in their deliberations. The social sciences certainly bear some of the responsibility for this situation (discussed below), but they have hardly single-handedly created the institutionalized status ordering of the sciences. A quick reading of the list of 320 "prominent signatories to the world scientists' warning to humanity" (Union of Concerned Scientists, 1993) finds only seven social scientists?five economists and two geographers. Regional Models: Bringing Machines Into Natural Systems At subglobal geographies, a clearer focus on societal factors might be expected. The pollution and resource consumption impacts of industrial production, power generation, transportation systems, and dispersed energy use are most visible, for example, at the regional (nation, province or state, bioregion, watershed) scale, where human causes of environmental change can readily be seen to derive from the operations of complex sociotechnical systems. This is a topic about which sociology should have a good deal to say. But sociological models have not been applied in the environmental analysis of regional systems, while a number of engineering-based approaches have. An intriguing "industrial me tabolism" metaphor (Ayers, 1989), for example, is promoted by the National Academy of Engineering (NAE, 1989) as a device for depicting the flows of energy and materials within ecosystems. The model also illustrates the facility with which the social can be excluded through selective focus on the technical elements of regional systems. The "industrial organism" invoked in the model turns out to be composed entirely of technical elements (hardware, energy, materials, pollutants) and its "metabolism" interacts with the environment in ways that do not explicitly involve human control or consumption. When used as a descriptive tool for material flow accounting, the model clearly does useful work (Stigliani and Anderberg, 1991)- And recent discussions of regional "indus trial ecologies" do make reference to organizational learning, institutional con straints, culture and values (Thomas Dietz, personal communication, 1993). But, to date, these discussions seem to have done little to integrate the efforts of students of technology, environment and society in the analysis of regional systems. ergy Plows: Abstract Relations and Aggregate Effects Other models of society-environment dynamics focus more narrowly on en ergy flows. Most tend to operate at large geographical (societal or regional) scales, at which production, consumption, energy losses, and pollution, are analyzed in aggregate and abstract terms. For example, those models may focus on the relative energy contributions of various fuels (coal, petroleum, natural gas), on conversion technologies (hydro, thermal and nuclear electric generation), or on consumption in various (industrial, commercial, transportation, residential) "sec tors" of the society (e.g., see U.S. Department of Energy, 1993). Here too, the social role in consumption and the social organization of energy production, are subsumed and lost in aggregate flows of energy as it passes through various phases of conversion and distribution. Some systematic efforts have been made to better account for the shape of the present system and to predict future system changes (e.g, in fuels mix, technologies and consumption levels). These are embodied in various govern ment, corporate and academic policy models that take into account prices and changing energy supplies in predicting energy use. In these models, however, social processes of technical innovation and consumption behavior are seen as determined wholly by changing energy costs?which are believed to be set rather mechanically by markets for limited fuels (Starr, 1992). All social relations in these models are macro-economic, and human actions required to maintain or change the energy system are assumed to derive from the economic motivations of individuals and firms. The more likely socioeconomic relations of modern societies (Granovetter, 1985; Etzioni, 1988, 1991) and the effects of noneconomic influences on technology development, fuel choice, and consumption patterns, are definitionally excluded from consideration. Understanding Energy Use: Focus on Hardware Variables and Human Constants Some energy analyses also focus more narrowly on trends in energy use and pollution?a side of the system that involves fairly obvious social influences on production and consumption. Complex models of changing energy demand? that specify in detail various end-uses of energy?are widely used by energy regulatory agencies and utility companies (CEC, 1991; DOE, 1990). They too manage to sharply limit consideration of the social. In their "disaggregation" of household energy consumption, for example, these models additively combine estimates of "typical" energy flows through water heaters, furnaces, refrigera tors, televisions, stoves, washers, dryers, etc., to build up a picture of the total energy demanded by "stocks" of housing. Human occupants are subsumed by the built environment, their variable social behavior being embedded in the consumption averages assigned to various types of machines and houses. The basic unit in the analysis of human-object "artifact ensembles" (Bijker, 1993) is taken to be the physical object, while human behaviors required to activate objects and induce energy flows are assumed to be homogeneous. These models make the absurdly simple assumption that all humans are alike?an assumption challenged by a number of empirical studies that suggest that energy use behavior and consumption via appliances and buildings is actually highly variable and socially structured (Lutzenhiser, 1993). To date, however, this evidence has had little effect upon the specification or use of these policy models. Highly detailed models of this sort have also been developed to study "build ing performance" (e.g., the U.S. Department of Energy's DOE2 model, developed by Lawrence Berkeley Laboratory). These models provide micro-physical simula tions of the interactions of single buildings and their environments. Here too, human occupants have a ghostly status, being embedded in average appliance consumption estimates and perhaps, in a very detailed modelling, contributing heat to the system from metabolism and their use of small appliances and lighting. Humans are only physical objects in these micro-modelling efforts, although, to the extent possible, actors and action are banned from both simulated and ex perimental research on "building" energy use. Having eliminated social action, these models, despite their physical detail, do not fare well in empirical tests (Vine, et al., 1982).11 In forecasting the future, both housing stock and building-based models use engineering assumptions about likely changes in technology, along with esti mates of population growth and future energy prices, to estimate the changing energy use patterns from which further estimates of pollution and environmental impacts may be derived. Such models are widely used as guides for policy and regulation. The only social science influence in these efforts is from neoclassical economics; for example, in assumptions that choices to produce more efficient technologies or buildings and the decisions of consumers to purchase them are determined by self-interested economic calculation. Limited Efforts to Bring People Back In If energy flows were determined exclusively by weather, buildings and ma chines, and if societal-level energy and environmental impacts could be accurately predicted in aggregate terms, then sociologists would have little quarrel with these models. We might like them to be more fully specified, since human groups, after all, control hardware, respond to the weather, and take action in the face of price changes. But more than disciplinary turf or theoretical symmetry is at stake. Not only do these models not perform well empirically, but there is substantial evidence that their errors can be traced directly to their failure to consider human behavior. Although social action has been paradigmatically excluded from energy analy sis except at the margins, a good deal of social science has been done at those margins?and the literature is fairly accessible to energy analysts. For example, studies of energy-using behavior and of empirical variations in energy use, as well as thoughtful critiques of the "energy user as rational economic actor" formulation, have been offered.12 Social psychologists and cognitive anthro pologists have been the strongest critics of economism and rationalism in this literature?arguing that actors' understandings (of energy, technology and available choice) differ considerably from engineering understandings of these matters, and that lay economic calculations are not, in reality, made as assumed by economists (Kempton and Montgomery, 1982; Kempton and Layne, 1988; Archer, et al., 1984; Stern, 1986). Alternative attitudes based psychological models (e.g., of consumer willing ness to make energy conserving changes in behavior and technology) have not performed well, however, with attitudes proving to be weak predictors of en ergy action (Olsen, 1981; Ester, 1985). Attempts to amend attitude models by considering "context factors" (e.g., price, weather and available technology? the stuff of physical models) have been more successful (Black, Stern and Elworth, 1985), leading to a call for the fundamental revision of psychological models to incorporate a wider range of social and physical context variables (Stern and Oskamp, 1987). An important weakness in this work lies in the fact that, as in economic formulations, the individual actor (albeit under the influence of social others) is the basic unit of analysis. While a focus on the individual has provided insights into choice, values and commitments as these bear on consumption and ulti mately upon environmental pollution, it also obscures the actions of social groups? families, households, kin networks, neighborhoods, communities, organizations, and cultures?and their consumption and conservation of energy. A focus on groups is not simply a plea for more sociologically oriented analysis. It also represents a call for a more human-ecological focus, following from the observations that social groups construct and occupy buildings, that economic choice and technology use are socially constrained and culturally accomplished and that collectively constructed lifestyles are fundamental in the patterning of consumption. Sociological work undertaken from this perspective has shown clear associations between social structure, energy use and pollution (Dillman, Rosa and Dillman, 1983; Lutzenhiser and Hackett, 1993). There are some indications of convergence between physical-technical, eco nomic, psychological and sociocultural models?since all offer selective but useful views of the ecology of energy-environment systems. A few efforts have been made, for example, to design and test mixed models (Cramer, 1985; Parti, Sebald and Won, 1986; Lutzenhiser and Hackett, 1993). But physical/economic models clearly predominate and their partisans show few signs of publicly acknowledg ing their weaknesses or expanding the range of variables taken into account (Lutzenhiser, 1992b). Calls for rapproachment have come from sociologists working within the energy research and policy establishment (Farhar, 1991) and efforts to bring social science theory and research to bear on large-scale environmental problems have proposed that energy studies be used as a model for other in terdisciplinary collaborations (Stern, 1992b). But to date these have had little discernible effect. Accommodation in Environmental Analysis: Human "Driving Forces" A well-supported "second environmental science" could indeed promote needed interdisciplinary and cross-paradigmatic research. But even so, it might lack the theoretical coherence desirable in a science of society-environment relations. One such theoretical orientation has been proposed by the National Academy of Sciences/National Research Council panel on the Human Dimensions of Global Environmental Change (NAS, 1992)?itself an interdisciplinary group. The panel was charged with inventorying knowledge of human-environment interactions and, although it reviewed a wide range of scholarship in environmental sociol ogy, only one sociologist served as a panel member. Rather than explicitly adopting a human-ecological or environmental sociological framework, the panel opted to classify human causes of environmental change in five broad categories of "driv ing forces," calling for studies of their collective environmental effects.13 These "forces" (". . . a complex of social, political, economic, technological and cul tural variables. . ." [NAS, 1992, p. 75]) include: population change, economic growth, technological change, political-economic institutions, and attitudes and beliefs. One can hardly dispute the relevance of any item on the list, but in combining dissimilar elements (i.e., psychological states, population trends and social institutions) the model seems more a loosely coupled collection of per spectives than a theoretical synthesis. This is hardly a fatal flaw in what is fundamentally a research agenda (in the construction of which the panel showed considerable breadth of vision). This sort of compromise theorizing is probably inevitable when "... attempting to convince social scientists why energy and environment are important and bio logical and physical scientists why social science has something to say" (Thomas Dietz, personal communication, 1993); and, it must be said that the driving forces model is fairly congenial with socioecological perspectives (Dunlap, Lutzenhiser and Rosa, 1994). But it should concern sociologists who are inter ested in a theoretical integration of the social, technical and ecological that the model awkwardly couples disembodied sociopolitical institutions and neoclassi cal economic markets with consumers (as psychological individuals), whose nature is rather uncritically taken to be pan-culturally acquisitive. Toward a Sociological Model A more fully social account would, for example, point to the fact that energy technology-environment systems may have more coherence than the driving forces model implies?being socially structured at the macro level and cultur ally generated at the micro level. The relative importance of micro and macro processes and their interrelations in the ecology of industrial societies are not well understood, and represent important areas for research?e.g., concerning the degree to which "demand" can possibly be autonomous of supply (Schnaiberg, 1991). Production priorities and their environmental impacts are certainly shaped by political economy, while consumption is importantly constituted in moral (cultural) action. A more sociological research program would frame the human dimensions of environmental change as a problem involving, for example, the behavior of organizational systems (fields, sets, networks, industries), and their interactions with class, race, gender, and consumption cultures. This approach would yield a critical whole-system model, while more limited physical, economic and psychological models of human-energy-environment systems take on a narrow focus and consensual tone that necessarily embody system maintenance interests. Competition and conflict are treated as exogenous in conventional models because they are not designed for human-environment system analysis, but are intended more to be used by competing social interests to generate particular images of the world in order to secute particular outcomes. The broader socialanalytic frame takes these models and their modellers, along with the social/ political relations in which they are embedded, as themselves integral elements of the sociotechnical systems implicated in environmental change. Institutional Context: The Energy Establishment and Limitations of Academic Sociology The Power and Insularity of the Energy System The institutional milieu that supports narrow and asocial definitions of the energy-environment problem is one dominated by large energy firms, an elaborate regulatory complex, and a highly scientized policy process. This is particularly true in the case of costly and hazardous energy technologies (e.g., nuclear fis sion, fusion, and radioactive waste disposal). The energy system is interwoven with a dense web of regulations, laws, engineering standards, and bureaucratic procedures, all of which are encoded in the same physical and economistic terms used in energy research. Taken together, they embody a paradigm concretized in technical language and legal instruments with strong inertial qualities. The paradigm derives from specialized academic disciplines, which are closely related to the energy system. These include energy economics, electrical, chemical, mechanical, civil, and environmental engineering, systems analysis and operations research. A network of corporate and university-based national laboratories conduct federally sponsored research guided by the physical-economic paradigm, and a number of specialized energy associations and energy-related branches of scientific societies regularly hold professional meetings, publish journals, and sponsor special conferences that support the paradigm. Some of these groups are even empowered to set formal standards for engineering and architectural designs. A wide array of consulting firms, specializing in paradigm-supporting training and evaluation, also operate in the orbits of energy firms, state agencies and the national laboratories. Social scientists hold a tiny fraction of the professional positions in the energy system, and their influence is sharply circumscribed. The sociological study of the energy system's self-understandings, paradigmatic limitations, environmental constructions, and difficulties in communicating across system boundaries offer numerous opportunities to extend sociologial theories of organizational change and the evolution of large-scale social sys tems – e.g., along the lines indicated by Stinchcombe (1990) and Luhmann (1989). It is also an area rich in possibilities for the newly expanding sociologies of technology, innovation and technical occupations. For example, studies of the evolution of the system as it faces serious environmental problems related to nuclear power and radioactive waste, fossil fuel depletion, alternative energy sources, and energy-efficiency can contribute insights to a number of areas of environmental sociology. In fact, the relative lack of sociological work in the area would also seem to make actors in the energy system potentially important consumers of social science research. The Disciplinary Limitations of Sociology But the energy system has been far from solicitous of sociological views, and sociology has been surprisingly reticent about energy studies. A call to arms by one of the discipline's most influential observers—Duncan (1978) in "Sociologists Should Reconsider Nuclear Energy"—was virtually ignored. While sociologists enjoyed funding and produced a number of useful energy studies at the height of the energy crisis, they shifted their attention elsewhere as energy prices fell. Opportunism? Not entirely. These researchers often fondly recall the interdisciplinary projects in which they were involved. Factors internal to the discipline played a significant role in this shift, including the low status of interdisciplinary publication, and the loss of legitimacy that followed from loss of funding. The disciplinary costs of pursuing interdisciplinary interests continue to be high. A steep learning curve is involved in such work, since at least some technical knowledge must be acquired for even modest studies of energy-environment systems. As an illustration, the social historian Thomas Hughes (1983), for example, found that without an understanding of the importance of "load factor" (a measure of system utilization) among early electrical system builders, he could not adequately account for the particular ways in which late, nineteenth-century electrical utilities engineered their expansions. Whether the object of inquiry might be the macro-political economy of nuclear power plant siting, or the micro-social relations of engineering design groups, a time-consuming mastery of technical vocabularies is required. Gaining the necessary scientific and technical background is hardly an insurmountable task (science writers do it, more and less well, all the time). But even so, a significant investment in an unfamiliar field is required, since this knowledge is rarely gained incidentally by sociologists. Our formal associations and informal orbits on campus tend to be segregated from those of natural scientists and engineers, and few efforts are generally made on either side to exchange views. Economists seem more willing to acquire at least a first approximation of other discipline's theories and then search for ways to bring economic models to bear on the problems that they find there. This segregation is mirrored in the directorate structure of the National Science Foundation, the division of labor among private foundations, and the organizational makeup of multidisciplinary scientific associations. As a result, institutions with social science capabilities are generally disconnected from those with environmental responsibility (NAS, 1992). The unwillingness to venture into unfamiliar territory is strong even when boundary-spanning projects are undertaken. For example, efforts to stimulate interdisciplinary socioenvironmental research through NSF's Human Dimensions of Global Change (HDGC) program—a three year-old initiative whose funding is equal to that of the entire NSF sociology program—have been met with little interest from sociology. Just as natural science approaches tend to exclude human behavior, so too do sociological perspectives tend to exclude the physical and environmental from their accounts of social change. Contemporary sociologists concerned with environment and technology continue a long struggle with an intellectual division of labor that has narrowly circumscribed the theoretical domain of the social. As Catton and Dunlap (1980) point out, the problem derives from efforts to carve out a unique subject matter for sociology?—a process that has resulted in core conceptions that miscast social action as somehow disconnected from the physical and natural systems within which action is necessarily embedded, and toward which action routinely refers. And just as traditional sociological self-understandings are uneasy with "technical" and "biological" topics, we can now add emergent interpretivist perspectives that see natural environments largely as social-constructions—nature as a potentially important social variable risks becoming mere nature as socially variable.14 The general lack of familiarity with the sociological relevance of energy-environment research is clearly reflected in disciplinary publication patterns. While opportunities to publish energy-related research in sociology journals certainly exist, they are finite and limited by both real and perceived audiences for the work. As a result, only a small number of energy-related papers have appeared in the sociological literature during the past 20 years, with very few in first-tier journals. Publishing opportunities in refereed energy and environmental journals are somewhat more numerous—and, in fact, work reported there is more likely to influence research and policy in those fields than are papers published in sociology journals. Publications in energy and environmental literatures are difficult for sociologists to access and evaluate, however, and tendencies toward parochialism can result in a devaluation of work published outside of sociology. As a practical matter, the active engagement of sociologists within environmental and technical domains is—perhaps unintendedly—discouraged, and one concrete result is that the generation of sociologists who pioneered sociological energy studies is rapidly thinning. The failure to sustain a critical mass of energy sociologists is due partly to historical coincidence. As the energy crisis disappeared from center stage and the turn to market forces was made, funding for research groups declined and the opportunity for academic influence in the energy system passed. The discipline still had a contribution to make, but sociologists concerned about tenure and promotion did not persist since, in the words of one informant "... it was clear that the discipline wasn't interested and we needed to worry about review." Those who were able to find positions within the energy system have, over time, had some influence on policy. But it is little wonder that graduate students who might otherwise be interested in the area recognize the stigma associated with anything that can be cast as "applied" research, and steer a prudent course away from interdisciplinary specialities. The result is a sharply limited lack of sociological human resources that might be deployed in energy-environment studies—despite the expressed needs and desires of concerned natural scientists and environmental advocates. Although the market may be changing in modest ways, few sociology departments have actively recruited faculty in the areas of environment and technology. Few Ph.D. programs have offered training in these areas, and only a handful of land-grant institutions have developed strong research and teaching programs in environmental sociology. The NAS panel on the Human Dimensions of Environmental Change considered in some detail these and other institutional limitations to basic research on human-environment interactions. They concluded that existing disciplinary reward structures were unlikely to support the needed expansion of environmental social science training and research, and recommended that special efforts be made by the NSF and other federal science agencies to target fellowships and research funding in support of the effort (NAS, 1992, pp. 223-234). Disciplinary Agendas in Research, Training and Institution Building The promotion of such policies and the use of their benefits, to an important degree, depends upon the initiative of the discipline. If it is desirable to more aggressively cultivate sociological studies of energy and the environment—and I think that it clearly is for both theoretical and societal reasons—then it is necessary to open up otherwise closed environmental, technical and social paradigms to better secure legitimacy in all quarters for this sort of work. Simply negotiating access for sociologists to multidisciplinary teams offers no guarantee of legitimacy, however, either with the collaborators or with mainstream sociology. Social perspectives are regularly accorded only token status in multi disciplinary projects—a good example might be international development work. Multidisciplinary funding programs often limit the social sciences to small "high risk" projects, and social science graduate students are often disadvantaged in fellowships with applicants from the natural sciences and economics.

#### Forcing specific policy analysis is key – allows state institutions to be reclaimed and generates debater education necessary to create a left governmentality – necessary to create a public sphere

Ferguson, Professor of Anthropology at Stanford, 11

(The Uses of Neoliberalism, Antipode, Vol. 41, No. S1, pp 166–184)

If we are seeking, as this special issue of Antipode aspires to do, to link our critical analyses to the world of grounded political struggle—not only to interpret the world in various ways, but also to change it—then there is much to be said for focusing, as I have here, on mundane, real- world debates around policy and politics, even if doing so inevitably puts us on the compromised and reformist terrain of the possible, rather than the seductive high ground of revolutionary ideals and utopian desires. But I would also insist that there is more at stake in the examples I have discussed here than simply a slightly better way to ameliorate the miseries of the chronically poor, or a technically superior method for relieving the suffering of famine victims.¶ My point in discussing the South African BIG campaign, for instance, is not really to argue for its implementation. There is much in the campaign that is appealing, to be sure. But one can just as easily identify a series of worries that would bring the whole proposal into doubt. Does not, for instance, the decoupling of the question of assistance from the issue of labor, and the associated valorization of the “informal”, help provide a kind of alibi for the failures of the South African regime to pursue policies that would do more to create jobs? Would not the creation of a basic income benefit tied to national citizenship simply exacerbate the vicious xenophobia that already divides the South African poor,¶ in a context where many of the poorest are not citizens, and would thus not be eligible for the BIG? Perhaps even more fundamentally, is the idea of basic income really capable of commanding the mass support that alone could make it a central pillar of a new approach to distribution? The record to date gives powerful reasons to doubt it. So far, the technocrats’ dreams of relieving poverty through efficient cash transfers have attracted little support from actual poor people, who seem to find that vision a bit pale and washed out, compared with the vivid (if vague) populist promises of jobs and personalistic social inclusion long offered by the ANC patronage machine, and lately personified by Jacob Zuma (Ferguson forthcoming).¶ My real interest in the policy proposals discussed here, in fact, has little to do with the narrow policy questions to which they seek to provide answers. For what is most significant, for my purposes, is not whether or not these are good policies, but the way that they illustrate a process through which specific governmental devices and modes of reasoning that we have become used to associating with a very particular (and conservative) political agenda (“neoliberalism”) may be in the process of being peeled away from that agenda, and put to very different uses. Any progressive who takes seriously the challenge I pointed to at the start of this essay, the challenge of developing new progressive arts of government, ought to find this turn of events of considerable interest.¶ As Steven Collier (2005) has recently pointed out, it is important to question the assumption that there is, or must be, a neat or automatic fit between a hegemonic “neoliberal” political-economic project (however that might be characterized), on the one hand, and specific “neoliberal” techniques, on the other. Close attention to particular techniques (such as the use of quantitative calculation, free choice, and price driven by supply and demand) in particular settings (in Collier’s case, fiscal and budgetary reform in post-Soviet Russia) shows that the relationship between the technical and the political-economic “is much more polymorphous and unstable than is assumed in much critical geographical work”, and that neoliberal technical mechanisms are in fact “deployed in relation to diverse political projects and social norms” (2005:2).¶ As I suggested in referencing the role of statistics and techniques for pooling risk in the creation of social democratic welfare states, social technologies need not have any essential or eternal loyalty to the political formations within which they were first developed. Insurance rationality at the end of the nineteenth century had no essential vocation to provide security and solidarity to the working class; it was turned to that purpose (in some substantial measure) because it was available, in the right place at the right time, to be appropriated for that use. Specific ways of solving or posing governmental problems, specific institutional and intellectual mechanisms, can be combined in an almost infinite variety of ways, to accomplish different social ends. With social, as with any other sort of technology, it is not the machines or the mechanisms that decide what they will be used to do.¶ Foucault (2008:94) concluded his discussion of socialist government- ality by insisting that the answers to the Left’s governmental problems require not yet another search through our sacred texts, but a process of conceptual and institutional innovation. “[I]f there is a really socialist governmentality, then it is not hidden within socialism and its texts. It cannot be deduced from them. It must be invented”. But invention in the domain of governmental technique is rarely something worked up out of whole cloth. More often, it involves a kind of bricolage (Le ́vi- Strauss 1966), a piecing together of something new out of scavenged parts originally intended for some other purpose. As we pursue such a process of improvisatory invention, we might begin by making an inventory of the parts available for such tinkering, keeping all the while an open mind about how different mechanisms might be put to work, and what kinds of purposes they might serve. If we can go beyond seeing in “neoliberalism” an evil essence or an automatic unity, and instead learn to see a field of specific governmental techniques, we may be surprised to find that some of them can be repurposed, and put to work in the service of political projects very different from those usually associated with that word. If so, we may find that the cabinet of governmental arts available to us is a bit less bare than first appeared, and that some rather useful little mechanisms may be nearer to hand than we thought.

### 1NC 2

#### Debating policies is key to solve it – imaginative familiarity with nuclear power creates trust and overcomes public misunderstanding – creates tipping point for new facilities

Butler, Parkhill, & Pidgeon 11

(Catherine, Research Fellow at Cardiff University, Karen, Research Fellow at Cardiff University, Nicholas, Professor of Environmental Psychology at Cardiff University, “Nuclear Power After Japan: The Social Dimensions”, November-December 2011, http://www.environmentmagazine.org/Archives/Back%20Issues/2011/November-December%202011/Nuclear-full.html)

Nuclear power has, beyond its beginnings where “glamorous reactors” were anticipated with “a great sense of excitement,” had a tumultuous relationship with the public.18 It has been characterized as a “uniquely dreaded” technology due to its long-standing association with atomic weaponry, invisible and long-lasting effects of radiation, and concerns about waste disposal.19 In the 1980s after the nuclear incident at Three Mile Island (1979) and the disaster at Chernobyl (1986), public opposition to nuclear power was at an all-time high in many countries. Indeed, data from the United States even before Chernobyl suggested that public opposition to nuclear new build rose from around 20% in the 1970s to more than 60% in the early 1980s.20 Other research has identified public distrust of regulators, government, and the nuclear industry to manage risks responsibly and provide truthful information to the public as a key reason for erosion of support.21¶ Over the past 10 years opinion polling has indicated a reduction in opposition. For example, a global poll by the Organization for Economic Cooperation and Development (OECD) and the Nuclear Energy Agency showed in 2010 that support for nuclear energy had increased in countries such as the United States, Japan, Sweden, Finland, and the United Kingdom.22 Looking specifically at the United Kingdom, polling of the British public conducted in early 2010 found a very balanced picture, with 46% of those questioned favoring replacement or expansion of the existing nuclear capacity in Britain as compared to 47% who wanted it closed or phased out at the end of the existing program.23 However, a closer look at the national polling data shows a more complex picture, with a large proportion of recent national support remaining fragile—a conditional or “reluctant acceptance” at best.24¶ From such research we can posit that during the short to medium term following Fukushima, many “reluctant acceptors” may withdraw their support for nuclear power and in particular for nuclear new build. Thus opposition during this time would correspondingly increase. Early polling research suggests this is exactly the case, with many countries seeing a rise in opposition that outweighs support even by the thinnest margins; the United States is a notable exception where support for nuclear power is marginally higher than opposition (see Figure 1).25 In the case of Japan, more than half of those who indicated they now oppose nuclear energy to produce electricity do so due to the events in Japan; significant proportions of the public in other countries also state this is the case (see Figure 1). On the basis of such findings, we might expect that those communities who are proposed as hosts for a new reactor may now oppose such developments.¶ For communities with no experience with a nuclear facility, it is likely that within the short to medium term, potential public contestation surrounding nuclear power may indeed prove to be a stumbling block.26 However, this is not necessarily true of all proposed reactor sites. For example, in the United Kingdom proposed sites are either on or adjacent to an existing nuclear power station. Previous research tells us that the response of people in such communities does not always mirror that obtained from national samples. While reluctant acceptance may be a feature of discourse in such communities and Fukushima may prompt the “extraordinariness” of living close to a nuclear facility to cause momentary reframings of nuclear power as a risk and threat issue, there are some important qualitative nuances to public perceptions that may lead to differing medium- to long-trends following Fukushima.27 Examples include the importance of social familiarity, which through social networks connected to the power station (i.e., either being or knowing a power station worker) or through imaginary positioning (being able to imagine how workers think, feel, and follow working practices) demystifies the power station as a distant institutional organization.28 As such, trust in power station workers is engendered. Although hidden anxieties may come to the surface in light of Fukushima, these could also be moderated by the distancing of the events as irrelevant to localized contexts and working practices, serving to reify the perceived safety of local plants (and trust in plant operators) rather than undermining it.29

#### Imagining the plan specifically is key – public opposition is grounded in misunderstanding and ignorance about new tech like SMRs – reversing that trend is key to solve multiple scenarios for extinction that only nuclear solves

Kotler 11

(Stephen, Journalist covering the collision between science and culture, “Meltdown or Mother Lode: Is Nuclear Energy Safe?”, 19 March 2011, http://ecohearth.com/eco-zine/green-issues/391-meltdown-or-mother-lode-the-new-truth-about-nuclear-power.html)

In the past four decades, there’s been a nuclear revolution brewing. Most likely you haven’t heard about it. Most likely, if you’re reading this on an environmental website like EcoHearth.com, you tow the green “no nukes” party line. The problem with that is actually simple: overpopulation, global warming, resource scarcity and energy shortages are real. Many very smart scientists are saying that nuclear energy is the only way to deal with these issues. Perhaps you think they have their facts wrong. Unfortunately, the inverse is often true: those of us who firmly oppose nuclear power often don’t know all the facts.¶ Or worse—the facts we know are actually 40 years out of date.¶ What follows is a seven-part investigation into nuclear power, an attempt to put all those facts on the table so at least we can start having a reasonable discussion. After all, the clock is ticking. Part One: The Atom and Its Eve¶ First there was the atom. The idea of a fundamental particle from which all things are made came from India, dating to Sixth-century BCE Hindu philosopher Kanada. A hundred years later the notion emigrated to Greece, where Leuccipus of Miletus popularized it. His pupil, Democritus, gave us a word to describe the particle, taking atom from atomos, Greek for “indivisible.” This concept held fast until the late nineteenth century, then crumbled within four decades of the twentieth.¶ In 1895, German physicist Wilhelm Roentgen discovered x-rays. Next, Marie Curie found radium and polonium—the first two radioactive elements, while Ernest Rutherford gave us the mechanics of radioactive decay. In 1905, Albert Einstein’s Special Theory of Relativity suggested that a large amount of energy could be stored in a very small amount of matter. Twenty-seven years later Ernest Walton and John Cockcroft verified this suspicion and proved Democritus wrong. Turns out, the atom is divisible.¶ In 1935, Enrico Fermi and Leo Szilard leveraged this knowledge to build the Chicago Pile-1, the world’s first nuclear reactor. It went—and you’ve got to love this word—“critical” on December 2, 1942. (“Critical” refers to having the minimum amount of nuclear material necessary to create a sustained nuclear reaction.)¶ In 1951, an experiment in Idaho, dubbed EBR-1, became the first reactor to produce electricity. EBR-1 melted down in 1955—also another first—though not many people outside of Idaho noticed. Eisenhower’s 1953 “Atoms for Peace” speech and US Atomic Energy Commission Chairman Lewis Strauss’s promise of a nuclear future with electricity “too cheap to meter” had us dazzled. The nuclear age was upon us.¶ In 1956, Calder Hall, in Sellafield, England, started pumping out an annual 50 megawatts (MW) and the world had its first commercial nuclear power station. The following year, the US got reactors in Shippingport, Pennsylvania, and Santa Susana, California, and not coincidentally the Price-Anderson Act passed, limiting the financial risk of nuclear-plant owners in the event of a catastrophe.¶ 1957 marked the appearance of the International Atomic Energy Agency (IAEA), its 18 member countries committed to promoting the peaceful use of nuclear energy while curtailing the spread of nuclear weapons (and, um, good luck with that one, fellows). Many feel that the real future of the industry arrived on November 9, 1965, when a blackout left the Northeastern United States without electricity for about twelve hours. Add in the brownouts of the early 1970s and it’s no surprise that 1973 was a banner year for the industry: 41 new plants ordered and no end in sight. But then… “China Syndrome” is shorthand hyperbole for what happens when an American nuclear reactor melts down—it melts straight through to China. The disaster movie of the same name came out on March 16, 1979, twelve days before unit 2 at Pennsylvania’s Three Mile Island partially melted down; this wasn’t a winning combination. Not long after, when Mad magazine’s Alfred E. Newman posed in front of the cooling towers and said, “Yes, me worry,” he spoke for much of the country. In 1984, a Forbes magazine cover story called the nuclear industry “the largest managerial disaster in business history.” In 1986, Ukraine’s Chernobyl became a bigger disaster and, as Allan Winkler points out in his excellent book, Life under a Cloud: American Anxiety about the Atom, “Some Americans masked their concerns with black humor: ‘What’s the weather report from Kiev? Overcast and 10,000 degrees.’”¶ Popular wisdom holds that Three Mile Island slowed the industry down, while Chernobyl ground it to a halt, but nuclear experts feel that cost overruns were a much worse problem. In the end it didn’t matter. Dozens of new plants were cancelled. One became a coal factory. The last reactor to come online in the US was unit 1 of Tennessee Valley Authority’s Watts Bar. The original order was placed in 1973. It was completed in 1996. Construction on unit 2 was halted in 1988. No new plants have been ordered in the US in over thirty years. As far as most were concerned, that was the end of the story. Part Two: Atomic Phoenix Rising¶ This might have stayed the end of that story except, in the early 2000s, we started hearing a number of other tales. Global warming, peak oil, resource wars, a current species extinction rate 1000 times greater than ever before in history, to name a few. A year ago, Rajendra Pachuari, head of the UN Intergovernmental Panel on Climate Change, said: “If there’s no action before 2012, that’s too late. What we do in the next two to three years will determine the future.” And determining that future has put the nuclear option back on the table, a process well summed by Peter Schwartz and Spencer Reiss in a recent Wired magazine story: “Burning hydrocarbons is a luxury that a planet with six billion energy-hungry souls can’t afford. There is only one sane, practical alternative: nuclear power.”¶ Of course, back in 2001, when Dick Cheney’s energy task force reached similar conclusions, many dismissed those outright. By then, cases of cronyism were already dogging the Vice President and Bechtel, a company whose board of directors once included a significant portion of both Reagan and Bush Sr.’s cabinet and which had built more commercial nuclear plants than any other in the world. But after that task-force report, the VP got support from some strange places. Environmentalists like Whole Earth Catalog founder Stewart Brand, Gaia theorist James Lovelock, and early Greenpeace activist Patrick Moore (often, though mistakenly, referred to as a co-founder) all came out in favor of the technology.¶ In late 2007, Congress gave the nuclear industry $18.5 billion in loan guarantees for up to 80% of the cost of new units. The IAEA says there are 31 new nuclear power plants under construction in 13 different countries and even more promised. China has plans for 26. In the US, power companies are currently in the process of submitting applications for 30. All of this, experts say, might signal the end of our energy woes or may signal the end of the world. The problem is that no one is quite sure which. Disagreements are everywhere. Even something as seemingly straightforward as what happened at Three Mile Island remains in contention. In 2004, Patrick Moore wrote a now-famous article in the IAEA Bulletin entitled “Nuclear Re-think,” claiming: “Three Mile Island was a success story. The concrete containment structure did what it was designed to do: it prevented radiation from escaping into the environment.” Though, as Greenpeace Nuclear Analyst Jim Ricco points out, “It appears that Moore didn’t bother to check his facts. The US Nuclear Regulatory Commission’s (NRC) fact sheet acknowledges that the meltdown resulted in ‘a significant release of radiation (10 million curies according to the NRC).’ Even the IAEA, which published Moore’s article, acknowledges that the TMI meltdown released radiation into the surrounding community. As a result, they rank the accident as Level 5 on a scale of 7—an ‘Accident with Wider Consequences.’ Only Chernobyl and the Soviet nuclear-waste-tank explosion in 1957 rank worse.”¶ Among other things at stake in this debate are our fears about industry safety and security, and the boatload of regulations meant to allay those fears. Since the cost of licensing a new reactor in America is roughly $1 billion, “those regulations,” as pointed out by Heritage Foundation nuclear energy analyst Jack Spenser, “amount to an industry killer.” The debate is ongoing, but some believe it’s misdirected. “When most people argue about nuclear energy,” says Tom Blees, author of Prescription for the Planet: The Painless Remedy for Our Energy & Environmental Crisis, “they’re arguing about TMI and 1970s technology—which is about when the US nuclear industry ground to a halt. But research didn’t die off, just new construction. We’re two generations beyond that earlier tech and the changes have been massive.” In light of all this, the better question might be: What do we mean by safe?

#### Expanding the use of Small Modular Reactors and Nuclear energy globally is crucial to solve global warming

Rosner & Goldberg, Physics Prof @ U Chicago, ’11

[Robert Rosner, William E. Wrather, Distinguished Service Professor, Departments of Astronomy and Astrophysics, and Physics at The University of Chicago, Director, Energy Policy Institute, Harris School of Public Policy, Stephen Goldberg, Professor of Law Emeritus at Northwestern Law, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.,” Energy Policy Institute at The University of Chicago, November 2011]

As stated earlier, SMRs have the potential to achieve significant greenhouse gas emission reductions. They could provide alternative baseload power generation to facilitate the retirement of older, smaller, and less efficient coal generation plants that would, otherwise, not be good candidates for retrofitting carbon capture and storage technology. They could be deployed in regions of the U.S. and the world that have less potential for other forms of carbon-free electricity, such as solar or wind energy. There may be technical or market constraints, such as projected electricity demand growth and transmission capacity, which would support SMR deployment but not GW-scale LWRs.

#### On the brink of the tipping point for warming, if we don’t deal with it now we won’t be able to solve

Damian Carrington 11 is the head of environment at the Guardian "Mass tree deaths prompt fears of Amazon 'climate tipping point'" Feb 3 www.guardian.co.uk/environment/2011/feb/03/tree-deaths-amazon-climate

\*Citing Simon Lewis, a Royal Society research fellow at the Earth & Biosphere Institute, University of Leeds

Billions of trees died in the record drought that struck the Amazon in 2010, raising fears that the vast forest is on the verge of a tipping point, where it will stop absorbing greenhouse gas emissions and instead increase them.The dense forests of the Amazon soak up more than one-quarter of the world's atmospheric carbon, making it a critically important buffer against global warming. But if the Amazon switches from a carbon sink to a carbon source that prompts further droughts and mass tree deaths, such a feedback loop could cause runaway climate change, with disastrous consequences."Put starkly, current emissions pathways risk playing Russian roulette with the world's largest forest," said tropical forest expert Simon Lewis, at the University of Leeds, and who led the research published today in the journal Science. Lewis was careful to note that significant scientific uncertainties remain and that the 2010 and 2005 drought – thought then to be of once-a-century severity – might yet be explained by natural climate variation. "We can't just wait and see because there is no going back," he said. "We won't know we have passed the point where the Amazon turns from a sink to a source until afterwards, when it will be too late." Alex Bowen, from the London School of Economics and Political Science's Grantham research institute on climate change, said huge emissions of carbon from the Amazon would make it even harder to keep global greenhouse gases at a low enough level to avoid dangerous climate change. "It therefore makes it even more important for there to be strong and urgent reductions in man-made emissions."The revelation of mass tree deaths in the Amazon is a major blow to efforts to reduce the destruction of the world's forests by loggers, one of the biggest sources of global carbon emissions. The use of satellite imagery by Brazilian law enforcement teams has drastically cut deforestation rates and replanting in Asia had slowed the net loss. Financial deals to protect forests were one of the few areas on which some progress was made at the 2010 UN climate talks in Cancún. The 2010 Amazonian drought led to the declaration of states-of-emergencies and the lowest ever level of the major tributary, the Rio Negro. Lewis, with colleagues in Brazil, examined satellite-derived rainfall measurements and found that the 2010 drought was even worse than the very severe 2005 drought, affecting a 60% wider area and with an even harsher dry season. On the ground, the researchers have 126 one-hectare plots spread across the Amazon, in which every single tree is tagged and monitored. After 2005, they counted how many trees had died and worked out how much carbon would be pumped into the atmosphere as the wood rotted. In addition, the reduced growth of the water-stressed trees means the forest failed to absorb the 1.5bn tonnes of carbon that it would in a normal year. Applying the same principles to the 2010 drought, they estimated that 8 billion tonnes of CO2 will be released - more than the entire 7.7bn tonnes emitted in 2009 by China, the biggest polluting nation in the world. This estimate does not include forest fires, which release carbon and increase in dry years. "The Amazon is such a big area that even a small shift [in conditions] there can have a global impact," said Lewis. Lewis said that two such severe droughts in the Amazon within five years was highly unusual, but that a natural variation in climate over decade-long periods cannot yet be ruled out. The driving factor of the annual weather patterns is the warmth of the sea in the Atlantic. He said increasing droughts in the Amazon are found in some climate models, including the sophisticated model used by the Hadley centre. This means the 2005 and 2010 droughts are consistent with the idea that global warming will cause more droughts in future, emit more carbon, and potentially lead to runaway climate change. "The greenhouse gases we have already emitted may mean there are several more droughts in the pipeline," he said. Lewis said that the 2010 drought killed "in the low billions of trees", in addition to the roughly 4 billion trees that die on average in a normal year across the Amazon. The researchers are now trying to raise £500,000 in emergency funding to revisit the plots in the Amazon and gather further data. Brazilian scientist Paulo Brando, from the Instituto de Pesquisa Ambiental da Amazônia (Amazon Environmental Research Institute), and co-leader of the research said: "We will not know exactly how many trees were killed until we can complete forest measurements on the ground. It could be that many of the drought-susceptible trees were killed off in 2005. Or the first drought may have weakened a large number of trees so increasing the number dying in 2010." Brando added: "Our results should be seen as an initial estimate. The emissions estimates do not include those from forest fires, which spread over extensive areas of the Amazon during hot and dry years and release large amounts of carbon." Note: The original version of this article incorrectly reported the amount of carbon Lewis's team estimated would be released in 2010 as 8.5 billion tonnes of CO2: the actual figure is 8bn. Climate tipping points Scientists know from the geological record that the Earth's climate can change rapidly. They have identified a number of potential tipping points where relatively small amounts of global warming caused by human activities could cause large changes in climate. Some tipping points, like the losses to the Amazon forests, involve positive feedback loops and could lead to runaway climate change. Arctic ice cap: The white ice cap is good at reflecting the Sun's warming light back into space. But when it melts, the dark ocean uncovered absorbs this heat. This leads to more melting, and so on. Tundra: The high north is warming particularly fast, melting the permafrost that has locked up vast amounts of carbon in soils for thousands of years. Bacteria digesting the unfrozen soils generate methane, a potent greenhouse gas, leading to more warming. Gas hydrates: Also involving methane, this tipping point involves huge reservoirs of methane frozen on or just below the ocean floor. The methane-water crystals are close to their melting point and highly unstable. A huge release could be triggered by a little warming. West Antarctic ice sheet: Some scientists think this enormous ice sheet, much of which is below sea level, is vulnerable to small amounts of warming. If it all eventually melted, sea level would rise by six metres.

#### Climate mitigation is the only ethical choice – the effects of climate change are distributed disproportionately towards African-Americans and the global south, failure is complicit with massive environmental racism and produces structural inequality

Burkett 8 – Professor of Law

Maxine Burkett, Associate Professor, University of Colorado Law School, 2008, “Just Solutions to Climate Change: A Climate Justice Proposal for a Domestic Clean Development Mechanism,” 56 Buffalo L. Rev. 169, Lexis

The emerging field of "climate justice" is concerned with the intersection of race, poverty, and climate change. It takes, as a basic premise, that the disadvantaged in the [\*193] United States stand to suffer the risks of warming more severely than others, as do their counterparts in the global South. Climate justice also recognizes the direct kinship between social inequality and environmental degradation, which is not isolated to the global south. The most obvious example is the relatively ubiquitous siting of industrial power plants in environmental justice communities, negatively affecting the public health and welfare of those who live in proximity while greatly contributing to global warming. n102 As an ethical matter, an aggressive mitigation approach is virtually mandatory in light of the existing and predicted effects of climate change. n103 Extensive greenhouse gas emissions are a result of industrialization, and the byproduct of this lifestyle is great social, economic, and ecological destruction, unevenly distributed. The response of the industrialized world, however, suggests blindness to the moral imperative at base. n104 That it is wrong to harm [\*194] others, or risk harming others, for one's own gain is a universal ethical principle. n105 Paul Baer argues that the immorality of such action is justified by many moral frameworks, "from divine revelation to deontological ethics to social contract theory," if not common(sense) morality. n106 Further, the tenets of distributive justice make similar demands regarding immediate and aggressive mitigation. Donald Brown argues, because distributive justice demands that the burdens of reducing a problem either be shared equally or based upon merit or deservedness, there is no conceivable equitably based formula that would allow the United States to continue to emit at existing levels once it is understood that steep reductions are called for. n107 There is no plausible argument that merit and deservedness should favor the United States. Instead, the historical impacts of the lifestyle of the wealthy on the less well-off militate in favor of distribution bending steeply in favor of the poor.

### 1NC 3

#### THE REDUCTION OF CLASS TO A NEUTRAL LEVEL AMONG A LONG LIST OF OTHER OPPRESSIONS SUCH AS RACISM DESTROYS THE EMANCIPATORY POTENTIAL OF CLASS TO REACH ACROSS ALL LINES OF INDENTITY AND FORGE POLITICAL ACTION. CLASS MUST BE RECOGNIZED AS QUALITATIVELY MORE IMPORTANT—OTHERWISE THE SYSTEM IS ABLE TO SATISFY DEMANDS ON GROUNDS OF FORMAL EQUALITY, DESTROYING ATTEMPTS TO OVERCOME CAPITALIST OPPRESSION\*\*\*

gimenez 2001

[Martha, Prof. Of Sociology at CU Boulder, “Marxism and Class, Gender and Race”, Race Gender and Class, Vol. 8, p. online]

There are many competing theories of race, gender, class, American society, political economy, power, etc. but no specific theory is invoked to define how the terms race, gender and class are used, or to identify how they are related to the rest of the social system. To some extent, race, gender and class and their intersections and interlockings have become a mantra to be invoked in any and all theoretical contexts, for a tacit agreement about their ubiquitousness and meaning seems to have developed among RGC studies advocates, so that all that remains to be dome is empirically to document their intersections everywhere, for everything that happens is, by definition, raced, classed, and gendered. This pragmatic acceptance of race, gender and class, as givens, results in the downplaying of theory, and the resort to experience as the source of knowledge. The emphasis on experience in the construction of knowledge is intended as a corrective to theories that, presumably, reflect only the experience of the powerful. RGC seems to offer a subjectivist understanding of theory as simply a reflection of the experience and consciousness of the individual theorist, rather than as a body of propositions which is collectively and systematically produced under historically specific conditions of possibility which grant them historical validity for as long as those conditions prevail. Instead, knowledge and theory are pragmatically conceived as the products or reflection of experience and, as such, unavoidably partial, so that greater accuracy and relative completeness can be approximated only through gathering the experiential accounts of all groups. Such is the importance given to the role of experience in the production of knowledge that in the eight page introduction to the first section of an RGC anthology, the word experience is repeated thirty six times (Andersen and Collins, 1995: 1-9). I agree with the importance of learning from the experience of all groups, especially those who have been silenced by oppression and exclusion and by the effects of ideologies that mystify their actual conditions of existence. To learn how people describe their understanding of their lives is very illuminating, for "ideas are the conscious expression -- real or illusory -- of (our) actual relations and activities" (Marx, 1994: 111), because "social existence determines consciousness" (Marx, 1994: 211). Given that our existence is shaped by the capitalist mode of production, experience, to be fully understood in its broader social and political implications, has to be situated in the context of the capitalist forces and relations that produce it. Experience in itself, however, is suspect because, dialectically, it is a unity of opposites; it is, at the same time, unique, personal, insightful and revealing and, at the same time, thoroughly social, partial, mystifying, itself the product of historical forces about which individuals may know little or nothing about (for a critical assessment of experience as a source of knowledge see Sherry Gorelick, "Contradictions of feminist methodology," in Chow, Wilkinson, and Baca Zinn, 1996; applicable to the role of experience in contemporary RGC and feminist research is Jacoby's critique of the 1960s politics of subjectivity: Jacoby, 1973: 37- 49). Given the emancipatory goals of the RGC perspective, it is through the analytical tools of Marxist theory that it can move forward, beyond the impasse revealed by the constant reiteration of variations on the "interlocking" metaphor. This would require, however, a) a rethinking and modification of the postulated relationships between race, class and gender, and b) a reconsideration of the notion that, because everyone is located at the intersection of these structures, all social relations and interactions are "raced," "classed," and "gendered." In the RGC perspective, race, gender and class are presented as equivalent systems of oppression with extremely negative consequences for the oppressed. It is also asserted that the theorization of the connections between these systems require "a working hypothesis of equivalency" (Collins, 1997:74). Whether or not it is possible to view class as just another system of oppression depends on the theoretical framework within class is defined. If defined within the traditional sociology of stratification perspective, in terms of a gradation perspective, class refers simply to strata or population aggregates ranked on the basis of standard SES indicators (income, occupation, and education) (for an excellent discussion of the difference between gradational and relational concepts of class, see Ossowski, 1963). Class in this non-relational, descriptive sense has no claims to being more fundamental than gender or racial oppression; it simply refers to the set of individual attributes that place individuals within an aggregate or strata arbitrarily defined by the researcher (i.e., depending on their data and research purposes, anywhere from three or four to twelve "classes" can be identified). From the standpoint of Marxist theory, however, class is qualitatively different from gender and race and cannot be considered just another system of oppression. As Eagleton points out, whereas racism and sexism are unremittingly bad, class is not entirely a "bad thing" even though socialists would like to abolish it. The bourgeoisie in its revolutionary stage was instrumental in ushering a new era in historical development, one which liberated the average person from the oppressions of feudalism and put forth the ideals of liberty, equality and fraternity. Today, however, it has an unquestionably negative role to play as it expands and deepens the rule of capital over the entire globe. The working class, on the other hand, is pivotally located to wage the final struggle against capital and, consequently, it is "an excellent thing" (Eagleton, 1996: 57). While racism and sexism have no redeeming feature, class relations are, dialectically, a unity of opposites; both a site of exploitation and, objectively, a site where the potential agents of social change are forged. To argue that the working class is the fundamental agent of change does not entail the notion that it is the only agent of change. The working class is of course composed of women and men who belong to different races, ethnicities, national origins, cultures, and so forth, so that gender and racial/ethnic struggles have the potential of fueling class struggles because, given the patterns of wealth ownership and income distribution in this and all capitalist countries, those who raise the banners of gender and racial struggles are overwhelmingly propertyless workers, technically members of the working class, people who need to work for economic survival whether it is for a wage or a salary, for whom racism, sexism and class exploitation matter. But this vision of a mobilized working class where gender and racial struggles are not subsumed but are nevertheless related requires a class conscious effort to link RGC studies to the Marxist analysis of historical change. In so far as the "class" in RGC remains a neutral concept, open to any and all theoretical meanings, just one oppression among others, intersectionality will not realize its revolutionary potential. Nevertheless, I want to argue against the notion that class should be considered equivalent to gender and race. I find the grounds for my argument not only on the crucial role class struggles play in processes of epochal change but also in the very assumptions of RGC studies and the ethnomethodological insights put forth by West and Fenstermaker (1994). The assumption of the simultaneity of experience (i.e., all interactions are raced, classed, gendered) together with the ambiguity inherent in the interactions themselves, so that while one person might think he or she is "doing gender," another might interpret those "doings" in terms of "doing class," highlight the basic issue that Collins accurately identifies when she argues that ethnomethodology ignores power relations. Power relations underlie all processes of social interaction and this is why social facts are constraining upon people. But the pervasiveness of power ought not to obfuscate the fact that some power relations are more important and consequential than others. For example, the power that physical attractiveness might confer a woman in her interactions with her less attractive female supervisor or employer does not match the economic power of the latter over the former. In my view, the flattening or erasure of the qualitative difference between class, race and gender in the RGC perspective is the foundation for the recognition that it is important to deal with "basic relations of domination and subordination" which now appear disembodied, outside class relations. In the effort to reject "class reductionism," by postulating the equivalence between class and other forms of oppression, the RGC perspective both negates the fundamental importance of class but it is forced to acknowledge its importance by postulating some other "basic" structures of domination. Class relations -- whether we are referring to the relations between capitalist and wage workers, or to the relations between workers (salaried and waged) and their managers and supervisors, those who are placed in "contradictory class locations," (Wright, 1978) -- are of paramount importance, for most people's economic survival is determined by them. Those in dominant class positions do exert power over their employees and subordinates and a crucial way in which that power is used is through their choosing the identity they impute their workers. Whatever identity workers might claim or "do," employers can, in turn, disregard their claims and "read" their "doings" differently as "raced" or "gendered" or both, rather than as "classed," thus downplaying their class location and the class nature of their grievances. To argue, then, that class is fundamental is not to "reduce" gender or racial oppression to class, but to acknowledge that the underlying basic and "nameless" power at the root of what happens in social interactions grounded in "intersectionality" is class power.

#### Its try or die for the negative—capitalism makes multiple scenarios for extinction an inevitability.

Theory & Praxis 2009

<http://one-dimensional.blogspot.com/>

In a little over two-hundred years industrial capitalism's death-machine has inflicted a toxic holocaust upon the totality of earthly relations. Capitalism's attempt to reshape the planet to suit its accumulation demands has meant the wholesale clearing of continents for cultivation, resulting in endless 'meadows,' extensive deforestation, soil erosion, and desertification; the loss of biodiversity and therefore ecosystem integrity through the extinction of thousands of species for quick profits; the massive die-off of tens of hundreds of fish species through the damming of lakes, rivers and streams for irrigation and electricity production; the global collapse of fish stocks in the oceans through industrial trawlers; the conversion of agricultural plains into deserts or salt ponds through over irrigation and over harvesting, and; the forced eviction and subsequent resettlement of whole populations from the countryside into cities. In unison with treating the landbase primarily as a tap for resource extraction, capital also views the landbase secondarily as a place for the mass dumping of industrial chemicals and wastes originating from commodity production, a practice that has made vast swabs of the planet non-viable or extremely inhospitable for life. Corporations freely and willingly dump industrial pollutants from the extraction and manufacturing processes into the surrounding environment: PCBs, dioxin, uranium tailings, mercury, and arsenic are only a few of the common pollutants found in environmental testing. Today in the United States mothers milk is contaminated by dioxin's and PCBs and asthma and cancer rates are at historic highs due to industrial capitalism's toxification of land, air, water, animals, food, and people. Globally, the planetary ecosystem is in a state of decay, along with the aforementioned ecological catastrophes global warming, global dimming, depletion of the ozone layer, coral reef die-off, and melting of the polar ice caps compound the ecological crisis and threaten to annihilate the ecological flows that form the preconditions for life. The current configuration of everyday life cannot continue: it is socially and ecologically destructive to all life forms. It systematically degrades all life to the profane commodity-form and eradicates the conditions for autonomy and self-determination. The gospels of industrial consumption advocated by both capitalist and socialist orthodoxies are premised upon colonialism: “repression at home and conquest abroad.” No longer can we look to the models of our industrialized elders to solve the problems of industrialism: the aim is not to perfect industrial capitalism but to smash it.

#### Next, Our alternative

#### Vote Negative to validate and adopt the method of anti-capitalist structural/historical criticism in the 1NC.

#### method is the foremost political question because one must understand the existing social totality before one can act on it—grounding the sites of political contestation or knowledge outside of labor and surplus value merely serve to humanize capital and prevent a transition to a society beyond oppression

Tumino (Prof. English @ Pitt) 01

[Stephen, “What is Orthodox Marxism and Why it Matters Now More than Ever”, Red Critiqu]

Any effective political theory will have to do at least two things: it will have to offer an integrated understanding of social practices and, based on such an interrelated knowledge, offer a guideline for praxis. My main argument here is that among all contesting social theories now, only Orthodox Marxism has been able to produce an integrated knowledge of the existing social totality and provide lines of praxis that will lead to building a society free from necessity. But first I must clarify what I mean by Orthodox Marxism. Like all other modes and forms of political theory, the very theoretical identity of Orthodox Marxism is itself contested—not just from non-and anti-Marxists who question the very "real" (by which they mean the "practical" as under free-market criteria) existence of any kind of Marxism now but, perhaps more tellingly, from within the Marxist tradition itself. I will, therefore, first say what I regard to be the distinguishing marks of Orthodox Marxism and then outline a short polemical map of contestation over Orthodox Marxism within the Marxist theories now. I will end by arguing for its effectivity in bringing about a new society based not on human rights but on freedom from necessity. I will argue that to know contemporary society—and to be able to act on such knowledge—one has to first of all know what makes the existing social totality. I will argue that the dominant social totality is based on inequality—not just inequality of power but inequality of economic access (which then determines access to health care, education, housing, diet, transportation, . . . ). This systematic inequality cannot be explained by gender, race, sexuality, disability, ethnicity, or nationality. These are all secondary contradictions and are all determined by the fundamental contradiction of capitalism which is inscribed in the relation of capital and labor. All modes of Marxism now explain social inequalities primarily on the basis of these secondary contradictions and in doing so—and this is my main argument—legitimate capitalism. Why? Because such arguments authorize capitalism without gender, race, discrimination and thus accept economic inequality as an integral part of human societies. They accept a sunny capitalism—a capitalism beyond capitalism. Such a society, based on cultural equality but economic inequality, has always been the not-so-hidden agenda of the bourgeois left—whether it has been called "new left," "postmarxism," or "radical democracy." This is, by the way, the main reason for its popularity in the culture industry—from the academy (Jameson, Harvey, Haraway, Butler,. . . ) to daily politics (Michael Harrington, Ralph Nader, Jesse Jackson,. . . ) to. . . . For all, capitalism is here to stay and the best that can be done is to make its cruelties more tolerable, more humane. This humanization (not eradication) of capitalism is the sole goal of ALL contemporary lefts (marxism, feminism, anti-racism, queeries, . . . ). Such an understanding of social inequality is based on the fundamental understanding that the source of wealth is human knowledge and not human labor. That is, wealth is produced by the human mind and is thus free from the actual objective conditions that shape the historical relations of labor and capital. Only Orthodox Marxism recognizes the historicity of labor and its primacy as the source of all human wealth. In this paper I argue that any emancipatory theory has to be founded on recognition of the priority of Marx's labor theory of value and not repeat the technological determinism of corporate theory ("knowledge work") that masquerades as social theory.