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## Political Legitimacy and the Dynamics of Anti-Nuclear Protest in America

### I. PROLOGUE

1. Political legitimacy is a useful concept, not only for political and social philosophers, but also for social scientists. Recent events happening in the USA—for example, the 2000 Presidential election and the George W. Bush administration’s policies leading to the Iraqi war—allow us to raise issues about legitimacy, or the justifications of a polity’s right to govern. In those events, and indeed for many others, legitimacy is often analysed in terms of procedural norms. Is the national government accountable, in a liberal-democratic sense, to the electorate? Such a question is implied in surveys of public opinion on President Bush’s policies in Iraq. Or take another question: how do we resolve conflicts between competing claims to equal protection? That question was faced by the US Supreme Court when it was deciding the case, *Bush v. Gore*.<sup>1</sup> For some political commentators, the American polity is legitimate to the extent that it judiciously upholds procedural norms like due process and equal protection.

2. Yet I contend that the concept of political legitimacy is not, and should not, be only about procedural norms. This paper examines a way to theorise the implications for political legitimacy

which arise from popular protests against government policies. In brief, the paper provides a critically framed concept of legitimacy and applies it to nuclear energy policy in America. Nuclear energy itself had not captured much public attention before September 2001 (certainly not compared to the attention atomic power had received in previous decades). But in the wake of the 9/11 terrorist attacks the security of nuclear facilities, among others, has become of more concern to policymakers. Moreover, in the early 2000s the debate intensified as Congress and several states argued over where to secure the high-level radioactive waste produced as a byproduct of energy generation. The contentious issues pertaining to nuclear energy seem ready to be re-ignited.<sup>2</sup>

3. What I present in this paper is a historical study analysed via the method of immanent critique, a method inspired by the Marxism of the early Frankfurt School.<sup>3</sup> It is my hope that such an historical analysis can provide a useful tool for theorising current or future concerns over a polity's legitimacy.

## **II. INTRODUCTION**

4. In the best of worlds, so say the Panglosses among us, a government bases its authority on furthering the common good. A democratic government in the best of all modern worlds derives its authority and policy direction from a rational, informed populace. Thus, its legitimacy is manifested essentially in its policies and institutions, for these express (hopefully) the voices of the citizens. Along history's tortuous paths we spot the struggles, frequent and often bitter, over the legitimacy of polities. Since the 1950s the "Behavioral Revolution" in American political science has only fuelled those critiques. Its social-scientific rigour challenges the idealised notions of democracy and its legitimate grounding, for legitimacy's normative spirit is usually more evident than its manifestation in actual citizen activities. Yet the normative concerns of democratic theory persist within the operations of political science itself: for deep within these

measures, we find the ideal of legitimacy cached in the institutional routes of popular expression and in basic political freedoms.

**5.** This paper seeks to crystallise the concept of legitimacy by focusing on nuclear energy in America, relating nuclear development to its discontents. Much research on nuclear energy and its opponents, I contend, is too limited theoretically to approach a more robust sense of legitimacy: one which asks both about the nature of the participation grounding the policy process and about the hopes which yet remain on the horizon. That the current use of legitimacy is rather limited can be substantiated by perusing the literature. Most studies follow the institutional premise of legitimacy by, quite reasonably on its own terms, dividing anti-nuclear groups into two basic camps: the conventional and the unconventional, or which can otherwise be termed, the institutional and the extra-institutional. Their immediate differences (in the operational sense) pivot around their respective modes and sites of activity, as well as their guiding social visions.

**6.** Those using institutional means to voice dissent and influence policy (Critical Mass and the Union of Concerned Scientists, among others), comprise the political type. The site of their strategies revolved around the conventional channels of lobbying Congress, promoting nuclear moratoria on state-wide ballots, and so forth. They also intervened in power plant licensing hearings of the Atomic Energy Commission (AEC) and its successor, the Nuclear Regulatory Commission (NRC). Although their overall social vision may have criticised unsafe and non-ecologically sound industrial progress, they never seriously attacked industrialisation itself nor questioned the values inhering within representative democracy.

**7.** Those in the extra-institutional camp were noted for expressing their dissent outside the usual political avenues of voting or lobbying bureaucrats. Those groups characteristically used non-violent direct action, taking their stands, physically and ethically, at the sites of nuclear facilities

under construction or in operation. They promoted their cause within their local communities, usually mobilising them against a nearby facility. Certainly, this tactic bore some similarity to conventional politics. Yet it also embodied a typical extra-institutional strategy; it sought to fashion a battleground within society and outside established political institutions.<sup>4</sup> The term “extra-institutional” is not intended to convey the impression that direct action groups railed against politics *per se*—politics broadly defined as the way to pursue the ends of a “just society.” Although civil disobedience probes the “gray areas” of legality (like trespassing), such activities do not necessarily entail nihilistic politics. On the contrary, those groups acted extra-institutionally because conventional political channels did not permit them the means to practise their visions of a just order, one at once participatory, economically decentralised, and environmentally harmonious.

**8.** Certainly, the distinction between conventional and unconventional participation is analytically important—but typically it is not taken as problematic in itself. Recent research practice tends to treat them as separate objects of inquiry, each a flip side of the dissent lumped under the category of the anti-nuclear movement. Descriptions of the two forms of participation are often painted on a canvas rich in detail and texture.<sup>5</sup> Yet the distinction between conventional and unconventional also has its theoretical costs. The distinction weakens the concept of legitimacy because it relegates legitimacy to institutional conduits, and to the political freedoms granted to non-conventional participation. This relegation of legitimacy to institutions and political freedoms limits legitimacy to atomised, procedural rights, and does not address alternate forms of legitimacy based on more cooperative forms of decision making and political community. Moreover, most studies do not explain how the separation between protest forms arose—indeed, they do not even tackle the differentiating process itself. The studies offer no interpretations as to what those distinctions tell us about the legitimacy of the American polity and the nuclear policies fabricated therein. Why do we need to overcome the unconventional/conventional split? Without ways to link theoretically the forms of participation

to the larger (structural) conditions which occasioned them, then our understanding of the nature of American democracy is quite limited.

**9.** The key to uniting conventional and unconventional actions theoretically, and thus to framing a more robust sense of legitimacy, turns on understanding *how* the protest divided into two forms. I contend that, historically, legitimacy has been structured by the governmental promotion of the economic, political, and technical preconditions vital for nuclear energy's development. This paper thus concentrates on the structural context of the democratic polity in America: how the interplay between high technology and political institutions conditions citizen participation within a capitalist democracy.

**10.** By critically adapting the work of Claus Offe, I provide an analytical framework with which to examine the development of American nuclear energy and the popular opposition to it. The framework interprets the deep and abiding involvement of the major actors in the national government, public utilities, and industry; the effects of nuclear policy spreading into previously untrod private realms; and the influences on political institutions which have both promoted and constrained participation. I seek to illuminate a telling phenomenon which surfaced during the anti-nuclear actions of the 1960s and 1970s. *Even as more protest was occurring within the institutional channels of the political system, there emerged an extra-institutional form of opposition: the direct action groups.* Three conclusions follow: (1) the legitimacy of nuclear policy-making in a liberal democracy is impoverished on its own terms by the governmental pursuit of the preconditions necessary for the atom's development; (2) dissent split into conventional and unconventional forms due to the structural constraints imposed by America's capitalist-democratic system; and (3) a more complete conception of political legitimacy must encompass the extra-institutional avenues of democracy.<sup>6</sup>

**11.** The paper consists of two main sections. In the first section, I sketch the concept of legitimacy as a prelude to a brief discussion of several studies on anti-nuclear protest. I then set forth the analytical framework used in my interpretation of the opposition to the so-called peaceful atom. In the second section, I outline the history of nuclear energy in America. I interpret the dynamics of the policy process and citizen dissent by situating them within the totality of our political economy, a capitalist liberal democracy.

### **III. THE LEGITIMACY OF DEMOCRATIC POLITIES**

#### **Legitimacy Defined**

**12.** Defined broadly, legitimacy refers to the worthiness of a government to be recognised as just and right.<sup>7</sup> Accordingly, all governments seek to legitimate themselves in various ways. In the case of modern democracy, governance freed of personal and arbitrary domination by elites is governance of, for, and by the people. Such a democratic government is legitimated by popular sovereignty. To use a more operational definition, the legitimacy of modern democracy is grounded on two precepts: government accountability for its policies, and citizen participation in the general direction of policy (such as occurs in electoral systems with parties possessing different platforms). Such a form of democracy, especially in the industrialised countries is quintessentially a liberal democracy, with its emphasis on *individualised* political participation.

**13.** A liberal-democratic government is legitimate to the extent that it furthers the two precepts of modern democracy. Responsible policies should further the common good, melding particular interests with societal well-being. Also, any goal of fostering the common good must be served by the institutions promoting citizen participation. The specific linkages that constitute the legitimacy of the US polity revolve around connecting citizens with government. Such examples include the electoral routes of voting for representatives, and the institutional avenues for citizens (and others) to lobby their political representatives. Even the US federal system creates linkages

in that it was explicitly designed to facilitate compromise over economic interests between geographically dispersed groups.<sup>8</sup>

**14.** Despite such norms, it is always open to question whether any manifestation of democracy actually achieves government accountability and promotes citizen participation. Particular government agencies, bureaucrats, and politicians may seek to limit their own accountability. Political conduits may not necessarily further popular input; indeed, the institutions and their procedures may even obstruct popular expression. Legitimacy is never to be presumed.

**15.** Of course, a discussion of the legitimacy of democracy must situate it within an overarching societal context, specifically the interplay between liberal-democratic norms and capitalist production processes. Within leftist frameworks of analysis, capitalist principles stand in contradiction to (liberal) democratic values.<sup>9</sup> The former are based on self-interested maximisers (firms or consumers), while the latter are predicated on citizens, whose voices have an equal chance in principle to be meaningfully heard in the halls of political power. The two sets of principles clash insofar as capitalism generates distinct classes (or fractions thereof), creating the inequality of winners and losers, of rich and poor. Such inequalities, even if only temporary, put serious structural restraints on individuals being able to exercise their liberal-democratic rights of equality and freedom. This topic will be further addressed below.

### **The Research on American Nuclear Policy Making**

**16.** Social scientists typically operationalise political action in terms of the conventional and the unconventional. That very distinction is based on an implicit assumption about the nature of legitimacy: *i.e.*, an **institutional** slant characterises it. The legitimacy of policy and participation (both conventional and unconventional) denotes a consensus on the procedural norms followed within institutional routes of conventional action, or else it denotes the institutionalised set of political rights permitting even unconventional actions. From these two facets of legitimacy, it follows that a polity's openness, or the accessibility of its institutions to citizen input, becomes of paramount concern. Such an institutional premise also imbues the research on nuclear power in America.

**17.** Various studies concentrate on the rather distinctive openness of the American political system, and its consequences for nuclear policy and protest. Researchers like Barkenbus and Temples examined the swirl of nuclear policy-making that arose from the different actors (both public and private) contending against each other in the multiple political arenas.<sup>10</sup> Policy-making in America was thus distinctive when compared with countries (like France) that had fewer political access points for citizens to use. Other researchers, such as Kitschelt, and Joppke, and Wenner, considered that the relative permeability of nuclear policy-making institutions and the role of an oppositional political culture helped to explain the rise of anti-nuclear activities.<sup>11</sup> The decentralised nature of nuclear policy processes meant that there were more political (*i.e.*, institutional) sites in which activists could protest the atom's development. In a similar vein, Duffy emphasised the role of public participation in releasing the tight bonds that once united the nuclear industry and government agencies in their common promotion of US nuclear energy.<sup>12</sup>

**18.** Although useful, the institutional cast of such conventional analyses neither attends to the structural reasons which occasioned the genesis of dissent, nor distinguishes between the forms of protest. In their studies, institutional and extra-institutional protest are **theoretically** indistinguishable. Significantly, those inquiries do not tackle the legitimacy of nuclear policy and



its implications for the American polity. Campbell's research on the nuclear industry and its discontents, however, offers ingress into such topics.

**19.** Campbell labelled all anti-nuclear actions as "obstructionist politics." Initially, such tactics sought redress in the more decentralised arenas of policy implementation (as exemplified by Campbell: at hearings for site licensing and for public utility rate hikes). Later, obstructionist politics shifted to the more centralised arenas of policy formation (especially, following Campbell's examples, the generic rule-making hearings, like those on the Emergency Core Cooling System in 1971-72). He acknowledged that some anti-nuclear activists branched from a path of institutional tactics to one of direct action. It was a split prompted by the differential access between the arenas of policy formation and policy implementation.<sup>13</sup> The seething counter-nuclear movement itself thereby expressed a veritable crisis of political legitimation.<sup>14</sup> Campbell's work has many merits. However, he did not ask **why** the split in the movement arose due to the differential access between policy formation and implementation. Thus, he did not fully address the structural reasons that undergirded the rise of those two different forms of protest.

**20.** Social scientific research recognises, in a descriptive sense, that differences exist between protest forms. Yet it does not grasp, in a theoretical sense, what the differences tell us about the legitimacy of polity, policy, and dissent. By interweaving institutional and extra-institutional into the same cloth of opposition, such analysis is unable to approach a fuller concept of legitimacy. Because of its institutional focus, this research fails to appreciate how problematic is the separation of institutional from extra-institutional protest. Let me now frame the theoretical starting point for an inquiry into anti-nuclear protest.

### **Structuring of Legitimacy: A Theoretical Framework**

**21.** A broader view of legitimacy requires us to grasp the totality of nuclear policy processes. Accordingly, we must investigate the forces which influence the specific policies, frame the origins of dissent, and shape the procedural biases of the institutions. Historically, it is argued here, legitimacy has been structured by the federal government's fulfillment of the economic, political, and technical preconditions vital for nuclear energy's development. The preconditions encountered at the advent of the nuclear age shaped—and continue to shape, albeit in new institutional configurations—the policy-making, citizen input, and political conduits associated with this energy source.

**22.** Let me hasten to add that I do not consider such historical preconditions in a deterministic light. Rather, I view them as a mediating influence on the ways in which nuclear energy has developed. Such preconditions are not to be seen as autonomous forces beyond the ken and control of humans; they are to be understood in their historical context. Technology in itself (*i.e.*, “left to its own devices”) does not preordain particular arrangements of social and political institutions.<sup>15</sup> Capitalist economies do not impel, by virtue of some inner logic, an atomic-powered future. Liberal-democratic institutions indeed do foster many types of popular participation. Nonetheless, decisions on technology *do* shape the type of political institutions that are established; capitalist economies *do* influence the ways in which technologies are implemented; and liberal-democratic institutions *do not* promote democracy in the fullest sense, especially insofar as political elites and market forces can weaken meaningful participation on societal issues.

**23.** The work of Claus Offe provides a starting point from which we can fashion a structural interpretation of US atomic energy. I adapt critically three of Offe's concepts that he used to analyse social movements within capitalist democracies: namely, “broadening,” “deepening,” and the political-systemic.<sup>16</sup> Following the lead of Offe, my framework concentrates on three basic categories: (1) the “broadening” dimension focuses on the continuing involvement of the

chief policy-relevant actors (for the purposes of this paper primarily found in the Federal governmental apparatuses, the electric utilities, and the nuclear industry); (2) the “deepening” dimension conveys the popular experience of nuclear energy’s costs and benefits; and (3) the political-systemic dimension specifies the polity’s capacity (or incapacity) to articulate the spectrum of popular dissent. Let me briefly explain the three concepts.

24. \* “Broadening,” as I apply it to the development of US nuclear energy, indicates that no single actor has been, or is, sufficient to fully fund, legally uphold, or to provide technical expertise. The institutional sources of power over nuclear policy have been multiple, residing in the electric utilities, industry, and the various elements of the government. The broadening facet does not refer to any mere quantitative increase in the number of policy-relevant actors, or to the amount of funding invested or withdrawn. As the chief actors continued their promotion of nuclear energy, facilities increasingly dotted the nation.
25. \* The “deepening” dimension conveys the popular experiences of the positive and negative sides of the atom’s growth. The economic boom of a host community and (perhaps) cheaper electricity rates occurred along with various accidents, accumulating radioactive wastes, emitted radioactive gases, and environmental degradation. Nuclear energy touched, in ways never before experienced, in a magnitude never before felt, the hitherto untrammelled domains of people’s lives.
26. \* The political-systemic dimension conveys the notion that not all interests can be expressed within a given set of political institutions. I have appropriated Offe’s concept of the *general selectivity* of political institutions within capitalist societies:<sup>17</sup> certain actors (here the nuclear industry and the electric utilities) and certain interests (material, divisible, compromisable) are relevant to the furtherance of specific policies, while other actors (*e.g.*, anti-nuclear groups) and other interests (participatory and egalitarian values)

are not salient, perhaps even a hindrance to the pursuit of an atomic-powered America. Because of such “structural selectivity,” the policy-relevant actors would tend to enjoy greater access into, and greater influence, within all phases of the nuclear policy process.

**27.** Through those three categories we can grasp the structural features of nuclear policy-making. But to understand more fully the totality of nuclear policy requires us to study the dynamics of the policy making structure, otherwise we have nothing but a static conceptual skeleton devoid of the sinew and muscle that animate the total body. Thus, to link policy-making to anti-nuclear protest (both types) we must frame our analysis in terms of the overall dynamics of *politicisation* and *depoliticisation* which have coursed throughout the history of US nuclear power. Again, I turn to Offe.

**28.** Offe’s formulation of de/politicisation differs markedly from conventional usage.<sup>18</sup> Traditionally understood, an issue is politicised when some group has captured it; partisan interests thereby obscure the larger societal good.<sup>19</sup> Depoliticisation, according to standard usage, indicates the withdrawal of narrow, self-seeking concerns, thus allowing for an objective, dispassionate appraisal of a given situation. For Offe, however, politicisation and depoliticisation do not primarily focus on the actors or their machinations, but rather on the prerequisites of policy which aid in its formation and implementation. Both politicisation and depoliticisation are integral to the policy processes of capitalist democracies. Broadly speaking, politicisation refers to the tendency of the government (or the capitalist state through its various apparatuses) to intervene in society and the economy whenever market mechanisms fail, or are deemed insufficient to promote some policy. Depoliticisation refers to the concomitant tendency wherein those demands and/or activities that might impede some policy are themselves constrained, either intentionally by bureaucrats or politicians, or passively by the nature of the demands that the political system can accept (or “process”). As will be elaborated in a later section, depoliticisation is expressed in the shackles on the language of debate, and in the institutional

constraints on the types of acceptable participation. The politicisation of the atom's growth is the flip side of the depoliticisation of popular input (including protest) into its development. Both tendencies stem from the situation of nuclear policy-making within the larger political-economic context of US liberal-democratic capitalism.

**29.** The theoretical framework inspired by Offe—with its concepts of broadening, deepening, and political-systemic animated by the notion of de/politicising processes—provides a heuristic tool. As such, my use of it will not be to highlight a chronological ordering in the narrowest sense, but rather to interpret the processes involved in US nuclear policy-making. Let me briefly interpret that history here as a prelude to the next section. The broadening of the major actors and the attendant federal intervention into nuclear energy politicised its development. With each new plant constructed and brought on line, the realms of the economy, the environment, and public health and safety provided ample space for problems to emerge; the potential for conflict became displaced into those many divergent areas. The consequent deepening effects were experienced in the everyday worlds of America's communities. Seeking redress, opponents mobilised through the institutional conduits of the political system. Yet participation faced certain impediments within those very channels. Such constraints are manifested in the depoliticisation found within nuclear policy-making. As a result of the depoliticising tendencies, some opposition mounted extra-institutional actions. The direct action groups pursued other routes to democracy, and the “good and just life.”

**30.** With such an analytical framework we can discern the contours of the US polity's legitimacy as it pertains to the rise of extra-institutional protest during the period when so much dissent had become institutionalised. Let me detail the dynamics by sketching an interpretation of the peaceful atom.

#### **IV. A SHORT HISTORY OF AMERICAN NUCLEAR ENERGY**

##### **The Historical Preconditions of Nuclear Energy**

**31.** At the dawn of the atomic age in 1945 the world seemed ready to embrace the atom of peace. The military uses had been horrifically demonstrated. The goal of the American government was just as graphically to demonstrate the salutary uses of the atom through civilian nuclear energy.<sup>20</sup> However, the technological, economic, and political context was not propitious.

**32.** Sketching the technological landscape of these early days, the sheer complexity entailed in domesticating the atom daunted the public utilities and budding nuclear industry. The nuclear fuel cycle was complex, with many of its problems needing to be resolved.<sup>21</sup> Imponderables were generated, from the first stages of the fuel cycle, the mining and enrichment of uranium, to the final stages, the reprocessing and storage of radioactive wastes. In the years before government indemnification and actual operating experience, the various risks could not be calculated and factored into the “bottom line.” Therefore, lacking sufficient expertise in a young technology, the private sector could hardly be faulted for its initial lacklustre response.<sup>22</sup>

**33.** Nuclear power confronted at least two economic hurdles. First, in the early years the demand for electricity had not yet soared, rendering it difficult to justify the need for a new energy source.<sup>23</sup> Second, using fission-generated steam to drive turbines was an untried means of power generation. Coal-fired and hydroelectric plants, however, had already proven themselves, enticing all the more because of their lower costs and shorter construction times. Clearly, the economics of nuclear energy were unfeasible.<sup>24</sup> The electric utilities in the early years, thus, did not rush to build atomic power stations.

**34.** In the political arena, the peaceful atom encountered at least two initial problems. First, a debate revolved around who would control the new energy source. Those favouring military

domination of the technology (including, not surprisingly, the former Department of War) joined combat with those seeking a strong civilian role, one to be monitored by federal agencies and Congress. Second, there arose the issue of public power generation versus private generation. New Dealers in Congress pushed for a federal role in electricity production, while *laissez-faire* Republicans dissented.<sup>25</sup> That debate raised an essential question about the role of private enterprise within the foremost bastion of capitalism, the United States of America.

**35.** Here a question confronted policy makers: how to turn those inauspicious preconditions into a nuclear energy programme? Or, more to the point, how were those preconditions to be converted into nuclear energy within a liberal-democratic capitalist environment? To overcome the bedevilling preconditions of technological unviability and economic unfeasibility, the federal government assumed the initiative. Accordingly, the year 1946 witnessed the passage of the Atomic Energy Act (AEA)<sup>26</sup> which established the requisite institutional apparatuses: the AEC and, in a watchdog role, the Congressional Joint Committee on Atomic Energy (JCAE). Although the pacific atom was to be subject to civilian authority, the military served in an advisory capacity under the 1946 AEA. Such institutional fragmentation among various governmental levels, agencies, and branches led to the later internecine struggles so typical of the liberal-democratic tone of the American polity.<sup>27</sup> Moreover, the AEA of 1946 circumscribed free-market principles because the national government controlled the nuclear information and fissile materials needed by the private sector. Such governmental restrictions were to be eventually attacked by some Congresspersons and business leaders, who agitated for fewer controls so as to “capitalise” on the pacific atom.

### **36. The Politicisation of the Atom**

**37.** Capitalist ideology maintains that the free market, not the government, should be the engine of all things economic. The development of nuclear energy was no exception. Through the late-1940s and into the 1950s the federal government (via the JCAE and AEC) sought to entice the private sector to develop the peaceful atom. For their part, the public utilities and industrial firms also generally supported an atom promoted by free enterprise, voicing their interest in Congressional hearings in the early-1950s.<sup>28</sup> The resulting Atomic Energy Act of 1954 enshrined the role of the private sector.<sup>29</sup> It prohibited direct governmental involvement in supplying capital for power plant construction. The injection of private capital would spare Federal coffers as well as help to legitimate the civilian uses of the atom.

**38.** Nevertheless, during the 1950s the atom's preconditions still were not favourable; they did not entice wide-spread private sector involvement. To spur free enterprise, the federal government intervened in many ways in the economics of nuclear energy. For example, under a government-sponsored programme (the Power Demonstration Reactor Program), several plants were constructed without government funding.<sup>30</sup> But the few nuclear power plants built did not make atomic growth self-propelling. More was required: via market incentives like increased electricity demand, via governmental inducements, or via both (which did historically occur).<sup>31</sup>

**39.** Thus, although no single institutional source (private or public) was totally and historically sufficient to promote nuclear energy, the governmental institutions of Congress and the AEC provided the necessary arenas in which nuclear policy was fashioned, promoted, and regulated. Certainly, governmental institutions altered as time passed; to be sure, fragmentation occurred as more arenas were created. The AEC was dissolved in 1974, its functions decentralised into two new agencies: the NRC became responsible for regulation while the Energy Research and Development Administration (ERDA) assumed the promotion tasks (which later fell to the Department of Energy). The JCAE also was dissolved; its oversight tasks devolved to a host of Congressional committees. Despite such institutional changes over time, the federal government



has long provided the sites wherein crucial pro-nuclear policies were crafted and implemented in a type of public-private “partnership.”<sup>32</sup>

**40.** The various governmental apparatuses of the executive and legislative branches historically have initiated and maintained many supports which overrode the barriers to civilian nuclear energy.<sup>33</sup> Those federal supports over time have included the following: promoting the ideological thrust for commercialisation, legalising civilian ownership of fissile materials (the amended AEA of 1954), creating a market for uranium mining via procurement policies,<sup>34</sup> offering technical facilities and funding for reactor development (initially for the nuclear propulsion of Navy vessels), providing tax policies in the form of depreciations and investment deductions, establishing federal pre-emption of radiological hazards and safety standards in the 1954 Atomic Energy Act,<sup>35</sup> indemnifying nuclear vendors since 1957 via the Price-Anderson Act,<sup>36</sup> assuming responsibility for the reprocessing and storage of radioactive wastes<sup>37</sup>—to list a few examples. Although some of the above-mentioned direct subsidies have declined over time, governmental indirect support, like tax incentives and research on reactor safety, has remained.<sup>38</sup>

**41.** Such governmental involvement points to the politicisation of nuclear energy policy-making. Indeed, as an energy source intended to foster the social good, nuclear power could not have overcome its technical and economic hurdles without its politicisation. The politicisation has its economic, political, and scientific manifestations.

**42.** No “invisible hand” stirred the market-place for atomic power. Rather, a very noticeable hand manipulated the economics of nuclear energy. That hand, even from quite a distance from Washington, was seen to belong to Uncle Sam. Moreover, in political arenas the equal participation of all (firms, utilities, and citizens) did not come to the fore. Citizens not only enjoyed less access to governmental arenas than the utilities and nuclear industry, but they also faced various procedural biases militating against their participation.<sup>39</sup> In addition, the debates

over technical issues indicated that “omniscient” scientists, once comforting us with the march of technological progress, no longer remained indisputable. Too many uncertainties remained for scientists and engineers to reach a favourable consensus on atomic power. All in all, the economic, political, and technological events highlighted the extent of the politicisation of nuclear policy. Such a politicised atom would seem in later years to generate at least as much dissent as electricity.

### **Institutional(ised) Protest**

**43.** We witness the consequences of a politicised nuclear energy policy in the ever-widening ripples of the “deepening” effects. Increasing numbers of people experienced the positive and, more to the point, the negative repercussions of nuclear facilities.<sup>40</sup> The politicised nuclear policy helped to evoke negative reactions in the populace. Those reactions were corroborated by the existence of protestors, and of increasingly unfavourable public opinion. Although opinion varies by poll, numerous citizens no longer seemed to accord an “autonomous” status to technology and technological progress, especially of the atomic variety.<sup>41</sup> Governmental bodies were at the centre of the controversy, overriding the free market in a quarrelsome but unabashed quest to promote nuclear energy. Heretofore intangible forces of modern technology did not appear quite so impalpable or so beneficial. Previously, such concerns went unacknowledged or else had been deemed illegitimate to protest—quite possibly because traditional American culture had placed technology outside the pale of human control.<sup>42</sup>

**44.** During the 1950s and early 1960s, dissent over nuclear power was typified by intra-elite quarrels, focusing on the specific, often breakneck, ways in which it was promoted.<sup>43</sup> In these debates technical issues prevailed, with scientists launching vociferous and unrelenting assaults on each another. For example, tensions between academic geologists (hired by the public utilities) and those of the US Geologic Service erupted repeatedly over seismic problems at various California sites.<sup>44</sup> As an additional example, there ensued a virtual war in 1962 between

scientists and engineers over the containment structure of a proposed nuclear plant to be sited near New York City.<sup>45</sup> Over time, the broadening and deepening of nuclear energy have illuminated its politicisation. As the invisible was rendered ever more manifest, dissent mobilised through institutional channels. Indeed, the bickering among elites often galvanised local communities to mobilise against nearby facilities.<sup>46</sup>

**45.** The decade of the sixties witnessed the transmutation of the counter-nuclear debate: purely technological issues gave ground to political concerns.<sup>47</sup> Local groups organised to contest siting decisions specifically affecting them, especially in terms of community safety and property values. Since the late 1960s, the anti-nuclear movement assumed its characteristic mass base and broad concerns about the environment and general power plant safety. During that period, protest began to mobilise on a national scale, although small local organisations still provided the enduring spark for counter-nuclear activities.

**46.** By the early 1970s, political institutions at the national level were approached. Congress became a frequent battlefield as it hosted hearings on reactor safety and on the extension of the Price-Anderson Act.<sup>48</sup> Also embroiled in atomic polemics was the court system. One landmark case was the 1971 US Court of Appeals decision holding that environmental impact analyses were mandatory for all plant licences.<sup>49</sup> The nation's courts, even the US Supreme Court, regularly witnessed clashes between the federal government and anti-nuclear groups.<sup>50</sup> Also, the numbers of citizen interventions into AEC/NRC licensing hearings increased during the period of the late-1960s and 1970s.<sup>51</sup> In addition, state-wide events occurred: in 1976 the activists in several Western states worked through the electoral conduits in unsuccessful referenda attempts to halt the construction of more facilities.<sup>52</sup> The history of anti-nuclear dissent thus shifted, from a primarily scientific focus and localised base, to a wider focus which also encompassed general concerns and a national constituency. Governmental institutions, at the federal and state levels,

became the arenas wherein conventional protest battled the pro-nuclear forces (both private and public).

**47.** The protests that mobilised through institutional channels met with varying degrees of success. Victories in the AEC and NRC tended to be limited to lengthening the licensing process, thereby delaying plant construction and helping to heap further financial burdens on the utilities. Public contestation via the Congress, the AEC/NRC, the courts, and state referenda vented important issues. Yet it would be contentious to attribute a direct (unqualified) causal relationship between anti-nuclear activities and the overall decline of nuclear power. Institutional protests set in motion the furore which prompted more regulations and the retrofitting of enhanced safety features.<sup>53</sup> Such protests were arguably necessary, but not sufficient in themselves, to cause the decline of atomic power. Other factors in the 1980s intervened between dissent and nuclear energy's descent—especially the reassertion of market forces in the form of increasingly scarce investment capital, and in the diminishing need for electricity (in the wake of energy conservation measures). Thus, the various assaults did not incapacitate atomic power in general. The atomic genie has continued to shuffle along into the present, amidst economic problems and negative public opinion.

**48.** It is precisely the lack of an immediate, measurable impact on nuclear power as a whole that refocuses our gaze on the concept of nuclear energy's legitimacy. In the midst of the newer and tighter regulations there flowered extra-institutional protest. Why did this oppositional form arise just when important regulatory gains were occurring? An inquiry into such a question leads us to conclude that the variegated dissent cannot be encompassed by a concept of institutionalised opposition. To differentiate between the protest forms—and to pursue the attendant concern of legitimacy—requires us to interrogate the depoliticising currents which have coursed throughout the history of US nuclear power.

## **Depoliticising Pressures**

**49.** The depoliticising tendencies of nuclear energy policy have occurred along with the growth of politicised nuclear policy. Depoliticisation, as discussed above, refers to the constraints which narrow the range of views and interests that can be expressed through the polity. Such a narrowing thereby tends to circumscribe the possible outcomes that can result from the nuclear policy processes. Depoliticisation refers not only to procedural biases hindering popular participation, but *a fortiori* to the sources of those barriers located within nuclear energy technology and the associated structure of policy-making. Such depoliticising trajectories have affected two basic, yet intertwined realms: citizen participation in policy-making, and the discourse on policy issues.

**50.** Not all viewpoints have been, or can be, heard because not all interests were structurally significant to the development of nuclear power. The nature of nuclear energy established centralising tendencies which belied the polity's relative openness, and which conditioned the pluralism of the vying groups, both for and against. Due to its extreme complexity, high cost, and high safety requirements, decisions were made to vest authority in the fewer, "more savvy" hands of federal agencies, industry, and the utilities.<sup>54</sup> Thus, the preconditions occasioning the formation of nuclear energy in America tended to impel, or at least made more likely, the coalescence of certain actors into a hegemonic bloc, with the government providing the centre-stage. In short, the preconditions were conducive of a sort of structural selectivity: despite skirmishes among the major actors, only they were the ones relevant to the promotion of nuclear policy.

**51.** Charged with nuclear energy's promotion, but burdened with its regulation, political elites succumbed to the structural pressures of the capitalist system. The political elites in Congress and the bureaucracy took various actions over time that weakened, or depoliticised, citizen

participation. Such a weakening of citizen input is manifested in the collaborative, if not always harmonious, relationship between many in Congress and the government bureaucracies, on the one hand, and those in the utilities and nuclear industry, on the other.<sup>55</sup> Depoliticising tendencies exerted tremendous force on institutional conduits by channelling both citizen and industry/utility participation along certain routes within the nuclear policy process. Popular input into policy, particularly dissent, was constrained insofar as the dissenting groups were forced to contend against the, structurally speaking, “better placed” businesses and utilities. The proponents of nuclear power in the private and public realms were better funded and generally more cooperative with each other than with those who opposed such facilities.

**52.** Examples of the structural selectivity impeding popular participation can be found in the areas of policy formation, implementation, and adjudication. The diminution of citizen input in matters nuclear had long existed in the halls of Congress, the arena of policy formation. For example, perusal of the many hearings during the early years of atomic power only serves to document my contention. The preponderance of emphasis lay on how to commercialise the atom, not on how to democratise it. Further evidence of diminished citizen participation can be found in the arenas of policy implementation and adjudication: namely, in the AEC (later NRC). The procedural biases on popular input, especially in the site licensing hearings of the AEC/NRC, have been well documented. Procedural rules tended to be pro-nuclear: accordingly, constraints were placed on who could intervene in the hearings, and on the type of admissible evidence.<sup>56</sup> Scientists girded with facts, and those whose property abutted nuclear facilities, were more readily admitted than were public interest lobbies or even local groups who voiced ethical and environmental stances. Airing views of the latter type only contributed to the perception that “no-nukers” were neo-Luddites, as irrational as they seemed irrepressible.<sup>57</sup>

**53.** The preceding has already intimated the second realm of depoliticisation: discourse. This is not simply a matter of elites dissembling, although of course such has occurred.<sup>58</sup> More to the

point, the depoliticisation of debate refers to the ways in which controversial issues are conceived. When anti-nuclear conflict was viewed, even implicitly, as a tension between technical expertise and popular (perhaps ill-founded) input, then pivotal issues remained unaddressed.<sup>59</sup> Most tellingly, an analysis of the ultimate validity of nuclear power could not probe into the ways in which the governmental fulfillment of the atom's preconditions had constrained democracy. Technical jargon often dominated the discussions on the risks of plant accidents, and of environmental and human side-effects.<sup>60</sup> The term "ALARA" (meaning "As Low As Reasonably Achievable") captured the *argot* of technical rationality which infused the debate over the safe level of ionising radiation.<sup>61</sup> Despite the general decline of US nuclear energy, or perhaps because of it, depoliticised forms of discourse have persisted.<sup>62</sup>

**54.** Certainly, debates over a topic like risk probability broached pertinent, technical considerations. Certainly, the tactic of using economic arguments at hearings of a public utilities commission or in the courts met with some success.<sup>63</sup> Yet such attacks betrayed the extent of depoliticisation prevalent: for even when citizen groups took up the cudgel of brute facts, their rebuttals were couched in the same language as that wielded by the pro-nuclear groups. That is quite understandable; arguments set in an economic and technical language had greater credibility. But the use of economic rationality and "scientific objectivity" shrouded the politicised nature of policy, even at those moments when the "invisible forces" at work became manifested in our deepening experiences of the atom.<sup>64</sup> Whenever those lexicons dominated the scene, with value statements considered mere opinion, then discourse became depoliticised. Rendered unspeakable, and indeed not even theorisable, were issues of the legitimacy of polity and policy, because the structural context linking policy preconditions to their political-systemic effects had been excluded. Thus, the depoliticising tendencies of nuclear policy-making have undermined the legitimate bases of America's liberal-democratic polity, especially its norms of accountability and participation. But they also helped to set in motion the rise of new types of participation which were informed by a different sense of political legitimacy.

### **Extra-Institutional Protest**

**55.** The depoliticising trajectory of nuclear energy policy, of course, did not signal the demobilisation of dissent. But the depoliticising currents did have their impact; certain practical consequences did surface. In the midst of expanding institutional protest and improved reactor safety, some issues nonetheless eluded the capability of conventional political channels. Such concerns included participatory democracy and socio-economic decentralisation, concerns that the US political-economic system could not structurally address. That protest struck an extra-institutional course illuminates the political-systemic dimension of my analysis, as well as the nature of the legitimacy of the nuclear policy processes. Although it is true that the US political system is more open than in other countries, we are reminded also that it is only relatively more open. It is at this theoretical and historical juncture in the chronology of nuclear energy that we note the differentiation of protest into two distinct forms.

**56.** The period from 1976—the occupation of the Seabrook nuclear power plant (New Hampshire)—to the early 1980s, bore witness to the rise and proliferation of the direct action protestors.<sup>65</sup> Their names were both colourful and evocative: consider the Catfish, Crabshell, and Palmetto Alliances, as well as the first, the Clamshell Alliance. Such names conveyed their intimate bonds with the environment, and the inextricable ties which bound humans with the non-human world.

**57.** Like the institutional form of dissent, the direct action groups certainly sought to influence policy, especially its concrete implementation. Nuclear plants under construction were prime targets for non-violent acts of civil disobedience. Trespassing, sit-ins, and obstructing construction were all common tactics.<sup>66</sup> Examples of direct actions abound throughout the late-1970s. In addition to the Clamshell Alliance actions at Seabrook in 1976 and 1977,<sup>67</sup> other direct action alliances organised civil disobedience at the Satsop facilities in Washington (the Crabshell



Alliance), and at Diablo Canyon (the Abalone Alliance of California). Other direct actions occurred at the construction sites for the Bailly (Indiana) and Limerick (Pennsylvania) plants. The Palmetto Alliance in 1978 practised civil disobedience at the Barnwell Spent Fuel Reprocessing Facility in South Carolina.

**58.** By the early 1980s, however, many of the direct action groups lost much of their characteristic drive.<sup>68</sup> A few groups continued into the 1980s: *e.g.*, the Shad Alliance protested the Shoreham Nuclear Power Plant on Long Island,<sup>69</sup> and the Clamshell Alliance in some form continued its opposition at Seabrook.<sup>70</sup> A few alliances redirected their energies to issues of peace and war (like the Freeze Movement), opposing nuclear weapons and Reagan-era foreign policy in the same way that they had opposed the peaceful atom. Many anti-nuclear groups nowadays use the internet as a tool for struggle, both as a way to distribute information and their criticisms, and also as a way to mobilise their grassroots constituents and the public at large.<sup>71</sup> Nonetheless, for many direct action groups, the limited success in halting plant construction had deleterious effects on their survival. In addition, problems associated with their participatory style of decision-making created organisational dilemmas and internal rifts.<sup>72</sup> Using consensual forms of decision making proved difficult to sustain when some members deemed political effectiveness to be the touchstone by which to gauge their success.

**59.** The central theme of this paper, however, does not depend on direct-action victories or on their continued existence as organised groups. Accordingly, I have concentrated on discerning the reasons for their emergence and on depicting the context in which they pursued their *raison d'être*. The sites of extra-institutional protest differed essentially from those used chiefly by conventional dissent. It was only in the space outside established institutional channels that the direct action groups could practise the participatory democracy, egalitarianism, and non-hierarchical organisation which the traditional institutions precluded. When viewed from the specific historical configuration of nuclear technology arising within a capitalist setting, the

conventional political channels did not, and have not, sufficed to eradicate nuclear energy. Thus, from a political-systemic incapacity to articulate and to respond to certain types of legitimate concerns, there arose unconventional dissent. Such dissent pursued an extra-institutional strategy for its politics, thereby seeking an unconventional grounding for the legitimacy of its democratic and egalitarian values.

## V. CONCLUSION

**60.** This paper defined the legitimacy of American democracy in terms of governmental accountability and popular participation. Necessarily savaged by “reality,” legitimacy is ever the ideal—for even when most beleaguered, its normative spirit has persisted. Legitimacy is a crucial concept precisely because its ideals are derived from (*i.e.*, are immanent within) the very norms purportedly upheld in democratic institutions. Normative in that sense does not necessarily mean abstract. As such, legitimacy allows us to evaluate the often unexplored assumptions, and perhaps unintended consequences, of actual institutional practices within democratic polities. Three general conclusions emerge from our scrutiny of nuclear power and the legitimacy of policy, polity, and dissent. They concern the relationships between atomic energy’s preconditions and its policy, between nuclear policy and the US political system, and between anti-nuclear dissent and the American polity.

**61.** The first conclusion points to the connections between nuclear energy’s preconditions and policy-making. The preconditions necessary for transforming the military uses of the atom into the civilian ends of power generation were not fully conducive to the democratic goals of citizen participation. Economically unfeasible and technologically young, nuclear energy required the institutionalisation undertaken by the federal government before a single kilowatt could be generated. Such institutionalisation constituted the broadening feature of nuclear policy. Given the paramount goal of nurturing the growth of atomic energy, the preconditions tended toward structurally favouring the sites of policy formation within Congress. As a consequence, the

arenas of implementation and adjudication—the historical loci of citizen participation—were rendered less significant to overall policy-making. The legitimacy on which a liberal-democratic polity like the USA is based (*i.e.*, governmental accountability and citizen input) was thus contravened by the nuclear policy processes themselves.

**62.** The second conclusion illuminates the contradictory relationship between nuclear energy policy and the US polity. The stress on policy formation, and the complex nature of the atom, translated in practice into a structural selectivity, which as much conditioned citizen participation as it favoured the industrial firms, government bureaucrats, and utility companies. Nuclear policies engendered “deepening” effects whenever their repercussions were experienced in the everyday lives of the communities situated near the facilities or by citizens concerned with the consequences of nuclear technology. The ensuing popular clamour found ingress into the policy process chiefly through the fragmented byways of policy implementation and adjudication. Nuclear policy-making has slowly, haltingly, expanded its institutional avenues to include more citizen input. Certainly, such an expansion of avenues upheld the liberal-democratic form of legitimacy: the political conduits historically have conduced towards the articulation of divisible, material, and particular interests. Amidst the noise of policy-making, the depoliticising tendencies of policy formation were reinforced. And when conflict moved into the halls of policy implementation, technocratic hues coloured the permissible views. The polity was constrained systemically by a technological undercurrent which narrowed the scope of what could be articulated. Because the polity suffered those restrictions, meaningful political participation became circumscribed, even as the foundation for an atomic future was laid. Accordingly, the legitimacy on which a liberal-democratic polity is based was impoverished. Thus, even though participation on some nuclear matters had institutionally expanded, participatory democracy had not. Under such constraints the direct action groups chose extra-institutional paths.

**63.** The third conclusion highlights the relationship between the American polity and anti-nuclear dissent. It also illuminates the contentious, expanding “nature” of legitimacy. Because the historical structures of nuclear energy’s development influenced the origins and differentiation of protest, as well as conditioned the arenas of participation, it becomes understandable why direct action groups would act outside the delegitimated channels of traditional representation. By so doing, extra-institutional groups pursued a form of democracy not able to be practised in the current political order, and thereby lived another set of legitimating norms. By demonstrating that anti-nuclear protest in general sprang quite rationally from the social consequences (*i.e.*, deepening effects) of the central actors’ decisions and abiding involvement, we can refute presumptions of its *prima facie* irrationality. Given the dissent surrounding nuclear energy, the many worries expressed about it were neither irrational at first blush, nor technically unfounded (especially given the uncertainties that still persist in the areas of reactor decommissioning and radioactive waste disposal). Indeed, conflicts over nuclear issues were not simply grounded in discrete, self-interested entities, whether groups or communities. Because both types of dissent were themselves socio-politically conditioned, emerging from not-so-neutral institutions and policies, opposition to the pacific atom did not merely express the particularistic interests of groups at specific locales. Rather, opposition manifested the totality of nuclear policy process, including the widespread consequences of atomic power for American society and polity. Hence, from that perspective, the rise of unconventional protest in the midst of growing institutional participation reveals the weaker sense of legitimacy which informs the policy and polity in the case of American nuclear energy.

**64.** The ephemeral life span of many of the direct action groups should not prohibit us from seriously analysing their structural origins and their implications for an understanding of political legitimacy. Indeed, a relatively short existence is insignificant when we consider that democratic capitalist countries could easily generate more stimuli for extra-institutional activities in the future. Unconventional politics quite tellingly discloses the subtle and changing countenance of

legitimacy in capitalist democracies. Extra-institutional protest against nuclear energy was not merely an application of political freedoms; it challenged the basis of liberal-democratic capitalism by calling into question the material interests, the technological rationality, and the representativeness of political elites which have typified the American polity and society. Extra-institutional dissent expressed a form of direct participation in spheres heretofore considered to lie within the realm of atomised individuals, not community-minded citizens. Any concept of legitimacy cast in institutional terms should also acknowledge a complementary set of participatory practices in the spaces outside formal representative democracy.

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  2. See Carl Behrens and Mark Holt, "Nuclear Power Plants: Vulnerability to Terrorist Attack," *CRS Report for Congress*, No. RS21131, updated 4 February 2005 (U.S. Library of Congress, Congressional Research Service, 2005); Mark Holt, "Civilian Nuclear Waste Disposal," *CRS Issue Brief for Congress*, No. IB92059, updated 8 March 2005 (U.S. Library of Congress, Congressional Research Service, 2005); and Skip Orser, "A New Lease on Life," *Electric Perspectives* (1 July 2005), 16-24.
  3. See Robert J. Antonio, "Immanent Critique as the Core of Critical Theory: Its Origins and Developments in Hegel, Marx and Contemporary Thought" (*British Journal of Sociology* 32, 1981), 330-345; and Thomas McCarthy, "The Idea of a Critical Theory and Its Relation to Philosophy" in Seyla Benhabib, Wolfgang Bonss and John McCole, eds., *On Max Horkheimer: New Perspectives* (Cambridge, MA: MIT Press, 1993), 127-151.
  4. Jean L. Cohen, *Class and Civil Society: The Limits of Marxian Critical Theory* (Amherst, MA: University of Massachusetts Press, 1982); Charles Euchner, *Extraordinary Politics: How Protest and Dissent Are Changing American Democracy* (Boulder, CO: Westview Press, 1996); Anna Gyorgy and Friends, *No Nukes: Everyone's Guide to Nuclear Power* (Boston: South End Press, 1979); Harvey Wasserman, *Energy War: Reports from the Front* (Westport, CT: Lawrence Hill, 1979).
  5. See, e.g., Steven Barkan, "Strategic, Tactical and Organizational Dilemmas of the Protest Movement Against Nuclear Power" (*Social Problems* 27, 1979), 19-37; Gary Downey, "Ideology and the Clamshell Identity: Organizational Dilemmas in the Anti-Nuclear Power Movement" (*Social Problems* 33, 1986), 357-73; Leslie Freeman, *Nuclear Witnesses: Insiders Speak Out* (NY: W. W. Norton, 1982); Anthony Ladd, Thomas Hodd and Kent Van Liere, "Ideological Themes in the Antinuclear Movement: Consensus and Diversity" (*Sociological Inquiry* 53, 1983), 252-72; James Scaminaci and Riley Dunlap, "No Nukes! A Comparison of Participants in Two National Antinuclear Demonstrations" (*Sociological Inquiry* 56, 1986), 272-82; Edward Walsh, *Democracy in the Shadows: Citizen Mobilization in the Wake of the Accident at Three Mile Island* (Westport, CT: Greenwood Press, 1988); and Wasserman, *Energy Wars*.
  6. Such themes occupy the attention of scholars who find that the notion of citizenship is often inseparably bound to conventional political institutions. See those who research the "new social movements," like J. Cohen, *Class and Civil Society*; Alberto Melucci, *Nomads of the Present: Social Movements and Individual Needs in Contemporary*

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- Society* (Philadelphia: Temple University Press, 1989); Claus Offe, “New Social Movements: Challenging the Boundaries of Institutional Politics” (*Social Research* 52, 1985), 817-67.
7. Jürgen Habermas, “Legitimation Problems in the Modern State” in J. Habermas, *Communication and the Evolution of Society* (Boston: Beacon Press, 1979), 178-205; and Dolf Sternberger, “Legitimacy” in *International Encyclopedia of the Social Sciences*, vol. 9 (NY: Macmillan Co. and The Free Press, 1968), 244-248.
8. Fred Shelley, “Structure, Stability and Section in American Politics” (*Political Geography Quarterly* 7, 1988), 153-60.
9. Ellen Meiksins Wood, *Democracy Against Capitalism: Renewing Historical Materialism* (Cambridge, UK: Cambridge University Press, 1995).
10. Jack Barkenbus, “Nuclear Power and Government Structure: The Divergent Paths of the United States and France” (*Social Science Quarterly* 65, 1984), 37-47; and James Temples, “The Politics of Nuclear Power: A Subgovernment in Transition” (*Political Science Quarterly* 95, 1980), 239-260.
11. Herbert Kitschelt, “Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies” (*British Journal of Political Science* 16, 1986), 58-85; Christian Joppke, “Decentralization of Control in U.S. Nuclear Energy Policy” (*Political Science Quarterly* 107, Winter 1992-93), 709-25; Christian Joppke, *Mobilizing against Nuclear Energy* (Berkeley: University of California Press, 1993); and Lettie McSpadden Wenner, “Decentralization of the Nuclear Power Debate” in Richard L. Ender and John Choon Kim, eds., *Energy Resources Development: Politics and Policies* (NY: Quorum Books, 1987), 171-82.
12. Robert J. Duffy, *Nuclear Politics in America: A History and Theory of Government Regulation* (Lawrence, KS: University Press of Kansas, 1997).
13. John L. Campbell, “The Antinuclear Movement in the United States: A Case Study” in Robert Wolensky and Edward Miller, eds., *The Small City and Regional Community* (Stevens Point, WI: University of Wisconsin, Stevens Point, 1982), 291-96; and John L. Campbell, *Collapse of an Industry: Nuclear Power and the Contradictions of U.S. Policy* (Ithaca, NY: Cornell University Press, 1988).
- I use the tripartite scheme of policy formation, implementation, and adjudication (of specific cases). According to that scheme, Congress (and to a lesser extent in the case of atomic energy, the Presidency) is the central site of policy formation. The AEC/NRC chiefly implements nuclear policy (although other agencies, like the Department of Energy and the Environmental Protection Agency, have important roles). Policy adjudication is conducted not only by the AEC/NRC through the Commission’s licensing boards for individual reactors, but also through the US court system. Campbell’s notion of differential access between the sites of policy formation and implementation is nonetheless useful, regardless of whether the policy-making process is conceived as two or three phases.
14. John L. Campbell, “Legitimation Meltdown: Weberian and Neo-Marxist Interpretations of Legitimation Crisis in Advanced Capitalist Society” in Maurice Zeitlin, ed., *Political Power and Social Theory*, vol. 6 (Greenwich, CT: JAI Press, 1987), 133-58; and J. L. Campbell, *Collapse of an Industry*.
15. Henry Etzkowitz, “Solar Versus Nuclear Energy: Autonomous or Dependent Technology” (*Social Problems* 31, 1984), 417-34; and Joseph Morone and Edward Woodhouse, *The Demise of Nuclear Energy? Lessons for Democratic Control of Technology* (New Haven: Yale University Press, 1989).
16. It should be noted that in borrowing Offe’s concepts I have taken the liberty of modifying them for the present study. This is most evident in my use of the term “political system” instead of his broader concept of structural irreversibility (Offe, “New Social Movements”). By that term Offe embraces not only the political system, but all social and economic institutions faced with the contradictions of reconciling policy and social control in the grip of global crises. I, however, seek to narrow my analysis to the political institutions and actors that were involved in nuclear policy-making.
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18. Claus Offe, “The Separation of Form and Content in Liberal Democracies” in C. Offe, *Contradictions of the Welfare State* (Cambridge, MA: MIT Press, 1984), 162-78.
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  22. Lee Clarke, "The Origins of Nuclear Power: A Case of Institutional Conflict" (*Social Problems* 32, 1985), 474-87.
  23. George Mazuzan and J. Samuel Walker, "Developing Nuclear Power in an Age of Energy Abundance, 1946-1962" (*Materials and Society* 7, 1983), 307-19.
  24. Etkowitz, "Solar Versus Nuclear Energy."
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  26. PL 585, 79th Congress, 2d Session, codified at 42 U.S.C. §§ 1801 *et seq.* (1946).
  27. Joseph Zimmerman, "Regulating Atomic Energy in the American Federal System" (*Publius* 18, 1988), 51-65.
  28. U.S. Congress, Joint Committee on Atomic Energy, *Atomic Power Development and Private Enterprise*, Hearings Before the JCAE, 83d Congress, 1st Session, June and July 1953 (Washington: GPO, 1953); and U.S. Congress, Joint Committee on Atomic Energy, *S. 3323 and H.R. 8826, To Amend the Atomic Energy Act of 1946*, 2 Parts, Hearings Before the JCAE, 83d Congress, 2d Session, May and June 1954 (Washington: GPO, 1954).
  29. PL 83-703, 83d Congress, 2d Session, codified at 42 U.S.C. §§ 2011 *et seq.*
  30. Harold P. Green, "The Strange Case of Nuclear Power" (*Federal Bar Journal* 17, 1957), 100-28; and George Mazuzan and J. Samuel Walker, *Controlling the Atom: The Beginnings of Nuclear Regulation 1946-1962* (Berkeley: University of California Press, 1984).
  31. A further inducement for the public utilities to go nuclear in the 1960s can be found in how they maximized profits (Campbell, *Collapse of an Industry*). Being regulated, the utilities were entitled to a fair return on investment based on the amount of capital they had invested in generating capacity. The more capital-intensive facilities (like nuclear power plants) they built, the more profits could be made by the utilities.
  32. Cecilia Martinez and John Byrne, "Science, Society and the State: The Nuclear Project and the Transformation of the American Political Economy" in John Byrne and Steven M. Hoffman, eds., *Governing the Atom: The Politics of Risk* (New Brunswick, NJ: Transaction Publishers, 1996), 67-102.
  33. Joseph Camilleri, *The State and Nuclear Power: Conflict and Control in the Western World* (Seattle, WA.: University of Seattle Press, 1984); Steven Mark Cohn, *Too Cheap to Meter: An Economic and Philosophical Analysis of the Nuclear Dream* (Albany, NY: State University of New York Press, 1997); Gregory Daneke, "The Political Economy of Nuclear Development" (*Policy Studies Journal* 7, 1978), 84-90; Etkowitz, "Solar Versus Nuclear Energy;" and Komanoff Energy Associates, *Fiscal Fission: The Economic Failure of Nuclear Power* [A Greenpeace Report on the Historical Costs of Nuclear Power in the United States] (Washington: Greenpeace, USA, 1992).
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51. James Quirk and Katsuaki Terasawa, "Nuclear Regulation: An Historical Perspective" (*Natural Resources Journal* 21, 1981), 833-55.
52. Robert Benedict, Hugh Bone, Willard Leavel and Ross Rice, "The Voters and Attitudes Toward Nuclear Power: A Comparative Study of 'Nuclear Moratorium' Issues" (*Western Political Quarterly* 33, 1980), 7-33; and Lettie Wenner and Manfred Wenner, "Nuclear Policy and Public Participation" (*American Behavioral Scientist* 22, 1978), 282-308.
53. J. L. Campbell, "The State, Capital Formation, and Industrial Planning;" J. L. Campbell, *Collapse of an Industry*; and Elizabeth Nichols, "U.S. Nuclear Power and the Success of the American Anti-Nuclear Movement" (*Berkeley Journal of Sociology*, Nr. 32, 1987), 167-92.
54. Of course, nuclear energy was not the only technology that some scientists and government politicians claimed as their own fiefdom in the interests of complexity and national security. See David Dickson, *The New Politics of Science* (Chicago: University of Chicago Press, 1988).
55. My argument on depoliticisation, thus, takes to task those analyses (e.g., Joppke, "Decentralization of Control") which assume that the multiple access points of the fragmented US polity have permitted all types of citizen participation to be meaningfully expressed against nuclear energy. Following my analysis, meaningful input was not always possible in the arenas of the U.S. political system. Such is evidenced in (1) the various biases and barriers to participation faced by conventional and unconventional protest; and (2) the values upheld by the direct action groups (like consensus-building and egalitarianism) were not expressible through political conduits where material, negotiable interests have prevailed.
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61. Gofman and Sternglass, *Shut Down: Nuclear Power on Trial*.

62. Witness the various reactions of Western governments and the nuclear vendors to the 1986 accident at the Chernobyl nuclear power plant. They quickly sought to reassure the public that Western reactors were safer than Soviet models. See Timothy Luke, "Chernobyl: The Packaging of Transnational Ecological Disaster" (*Critical Studies in Mass Communication* 4, 1987), 351-75.

63. J. L. Campbell, *Collapse of an Industry*.

64. Ulrich Beck offers us a related facet of depoliticisation with his concept of the "risk society." He argues that in the political debates of the last few decades, a normalisation of hazards is occurring in public pronouncements and public policy (or is at least attempted in "struggles over the definitions" of risk). Hazards are said to arise, not from any particular industry or government agency, but from industrial progress in general. Moreover, ecological problems derive from consumers using the products, and are not traceable to industries or the production process itself. Such normalisation contributes to an "organized irresponsibility" for environmental problems, and thereby obscures the real societal processes taking place. See Ulrich Beck, *Ecological Politics in an Age of Risk*, trans. Amos Weisz (Cambridge, UK: Polity Press, 1995 [1988]), 60, 63-5, 142-4.

65. Mitchell, "From Elite Quarrel to Mass Movement."

66. Barbara Epstein, *Political Protest and Cultural Revolution: Nonviolent Direct Action in the 1970s and 1980s* (Berkeley, CA: University of California, 1991); Wasserman, *Energy War*; Fred Wilcox, ed., *Grass Roots: An Anti-Nuke Source Book* (Trumansburg, NY: Crossing Press, 1980).

67. Henry Bedford, *Seabrook Station: Citizen Politics and Nuclear Power* (Amherst, MA: University of Massachusetts, 1990).

68. Christian Joppke, "Social Movements During Cycles of Issue Attention: The Decline of the Anti-Nuclear Energy Movements in West Germany and the USA" (*British Journal of Sociology* 42, 1991), 43-60.

69. Regina Axelrod and Hugh Wilson, "Citizen Participation and Nuclear Power: The Shoreham Experience" (*Journal of Energy and Development* 11, 1986), 311-31.

70. Paul Gunter, "Clamshell Alliance: Thirteen Years of Anti-Nuclear Activism at Seabrook, New Hampshire, U.S.A.," ECOLOGIA Newsletter, Issue 3 (January 1990). [ECOLOGIA NEWSLETTER Archive online: <http://www.ecologia.org/newsletter/year90/jan90c.html>. Accessed 21 June 2006].

71. Anti-nuclear groups—although not necessarily involved in direct actions—with an active online presence include the Abalone Alliance Clearinghouse, which has widened its scope to encompass other environmental issues in California and the U.S.A. as a whole (< <http://www.energy-net.org> >); the Blue Ridge Environmental Defense League, which is protesting Duke Energy's Early Site Permits for building nuclear plants (< <http://www.bredl.org> >); the Nuclear Energy Information Service, which scrutinizes Illinois's nuclear facilities (< <http://www.neis.org> >); and the Citizens Awareness Network Home, which is protesting the licence renewal for the Vermont Yankee nuclear plant (< <http://www.nukebusters.org> >). For a web site with links to anti-nuclear organizations, see the Nuclear Information Resource Service (< <http://www.nirs.org/links.htm> >).

72. Barkan, "Strategic, Tactical and Organizational Dilemmas;" Downey, "Ideology and the Clamshell Identity;" and Epstein, *Political Protest & Cultural Revolution*.