

Chapter 5

CLASS ANALYSIS OF THE ANTINUCLEAR MOVEMENT

In this final chapter I analyze the movement from a working class perspective with the express purpose of looking at both its accomplishments and limitations. Such an analysis requires an understanding of the ways in which struggles circulated from one sector of the class to another, thus becoming complementary. The antinuclear movement underwent multiple recompositions, which moved the struggles to higher terrains; each recomposition increased the severity of the crisis for nuclear capital. To understand that process and the moments at which the movement recomposed itself, we need to examine the defining characteristics of the movement, i.e., its autonomy, class composition, organization, and methods. In the end, we can draw some positive and negative lessons that can be useful in other struggles.

5.1 Autonomy

One of the greatest strengths of the antinuclear movement has been its autonomy—from business, the State, *class* organizations, political parties, and other sectors of the class. That autonomy has helped the movement insure itself against co-optation. Moreover, the movement has been completely autonomous from the State that has done everything short of severe repression to ensure a viable nuclear industry.

In the first place, the antinuclear power movement has been largely autonomous from partisan party politics. Neither of the two major parties ever sought, in any systematic way, to adopt the program of the antinuclear movement as its own. Of the two, only the Democratic Party has distanced itself from nuclear power. For instance, Michael Dukakis's opposition to the startup of the Seabrook plant and Mario Cuomo's opposition to the Shoreham plant have strengthened the movement. On the other side, the antinuclear movement itself never sought to use electoral politics as a central vehicle of its campaign. For instance, the Citizens Party, a short-lived offshoot of the antinuclear movement, was largely ignored by the movement itself and rejected at the polls. The Citizens' Party failed to attract minority women's or citizens' action groups in large numbers. Moreover, the Citizens Party was an ill-fated attempt to fit the movement into traditional political forms.(1) In short, the American antinuclear movement has built its strength on extraparliamentary politics and does not seem inclined to abandon them. Furthermore, its autonomy from electoral politics enabled the movement to escape the inevitable dilution of its demands that is characteristic of parliamentary politics. By maintaining its distance, the movement has been able to fight for an uncompromising elimination of nuclear power.

In the second place, the antinuclear movement has been independent of both the orthodox old Left as well as the new Left. Historically, the old Left has ignored the environmental problems created by industrialization. Indeed, at least part of the old Left embraced nuclear power because it viewed technology as a way to more quickly arrive at a socialist society.(2) On the other hand, New Left ideologists have been critical of the environmental movement on the grounds that it was reformist rather than radical and elitist rather than populist.(3) Nonetheless, the antinuclear power movement became the first major environmental campaign in which large numbers of what we might call *rank and file* Leftists participated in.

Even in Europe it was only *after* the movement had been successful in blocking the expansion of the industry that the *official* Left climbed on the antinuclear bandwagon. By 1982 the Communist parties of Australia, Sweden, and Ireland, as well as the Labour parties of Australia and the Netherlands had become antinuclear after many years of supporting nuclear power. The Chernobyl accident accelerated that shift, especially in Italy where all political parties to the left of the Christian Democrats now oppose nuclear

power. In Britain, the Labor Party has proposed the phasing out of nuclear power over several decades and in West Germany the Social Democrats have proposed its abolishment within 10 years.(4)

In the third place, the antinuclear movement has been autonomous from the unions. While much of the union leadership continues to favor nuclear power, a few locals, districts, and Internationals oppose it. Here again, as in the case of political parties, the movement, because of its autonomy, has not had to contend with a bureaucratic leadership and has avoided being transformed into an instrument of capitalist control. In general, we can say that the movement has been autonomous from the traditional blue-collar working class. Moreover, because of the nature of nuclear power, it has been impossible to organize effective opposition from inside the plants. For example, Silkwood's labor activism at the Kerr McGee plant ultimately resulted in her death. On the other hand, strikes have been used successfully against the State only because it was subject to public pressure such as at the Piketon diffusion plant in 1977 and at the Frenald weapons plant in 1988. Nevertheless, in most cases the right to strike and agitate has been effectively taken away because of the dangerous technology. Such actions, it is claimed, could easily cause an accident. Therefore, nearly all of the struggles have been waged outside the plant—i.e., outside the production sphere.

In the fourth place, despite the heavy involvement of church members, the antinuclear movement as a whole has been independent of official church groups. Perhaps the only religious group to have had a major influence on the movement was the Quakers. For instance, in the early 1960s they joined the fight to prevent the first commercial breeder reactor from being built in Meshoppen, Pennsylvania. More importantly, the Quakers convinced the Clamshell Alliance to use nonviolent civil disobedience and direct action in the late 1970s and subsequently helped to train many protesters in the politics of nonviolent civil disobedience. Certainly the decision by the National Council of Churches in 1976 in favor of a nuclear moratorium on moral grounds brought in new members into the movement. Nevertheless, this limited official involvement pales in contrast to the much greater role played by the church in the peace and the sanctuary movements.

In short, the antinuclear movement has been largely independent of pre-existing organizations and has been made up of various separate and discrete entities, acting autonomously but sharing a common cause. Indeed, even within the movement itself, local groups have acted autonomously from national groups such as Critical Mass and the Mobilization for Survival. The activist wing of the antinuclear movement has also been autonomous from legalistic and reformist national environmental groups such as the Sierra Club and Friends of the Earth.

5.1.1 Circulation and Complementarity of Struggles

Antinuclear power struggles circulated slowly and began to accelerate in the late 1960s and 1970s. By the mid-1970s hundreds of citizens groups had sprung up at the community level, where they were primarily engaged in legal intervention. And by the late seventies a more activist wing had emerged whose tactics were those of direct action and civil disobedience. After the mass arrests of members of the Clamshell Alliance at Seabrook, New Hampshire in 1977, struggles circulated rapidly. Overnight new groups emerged patterning themselves after the Clamshell Alliance. The Clamshell Alliance itself had drawn inspiration from the mass occupation at the proposed Wyl reactor site in West Germany in 1975. More importantly, the Seabrook occupations brought into the movement other sectors of the class such as antiwar activists, the new Left, people engaged in alternative forms of production, people from rural areas living near a reactor, and pro-solar and appropriate technology proponents.

Nuclear struggles were primarily confined to the East and West Coasts, but eventually circulated to other parts of the country, such as the South and Southwest. Texas became a focal point of antinuclear struggles in the late seventies and eighties, e.g., the South Texas Nuclear Project and the Comanche Peak reactor. For a time after the mass occupation of Seabrook in 1977, the movement was highly spontaneous with protests surfacing in first one geographical region then another. Struggles circulated to public utility commissions, to city councils, and to state legislatures as the movement sought to halt the funding of nuclear plants, to prevent the passing along to consumers of cost overruns, to stop the creation of local

nuclear waste dump sites, and to block plant openings. By the late 1970s, the antinuclear movement had become an international one. Struggles not only occurred in industrialized countries such as West Germany, France, Sweden, but also in developing countries such as the Philippines.

The antinuclear power movement was complementary to the test-ban movement of the 1950s and the early 1960s, the environmental movement, the women's movement, the Native American movement, the labor movement, the soft energy movement, and the freeze-peace-nuclear free zones movements of the 1980s. The disarmament and the antinuclear movement have been complementary since the 1950s. While the ban the bomb movement of the 1950s and early 1960s had nurtured the nascent antinuclear power movement, the antinuclear power movement of the late 1970s nurtured the resurgent peace-freeze movement of the 1980s.(5)

The movement has used various methods to circulate its struggles such as the media, conferences, publications, demonstrations, rallies, and teach-ins. Because the industry and the State had a monopoly on nuclear information and engaged in secrecy, the antinuclear movement began with virtually zero information; it literally has had to educate itself about the dangers of nuclear power. In the beginning, the movement found it difficult to attract knowledgeable scientists who were willing to speak against the hazards of nuclear power because, for the most part, they were employed by the industry or the State. Barry Commoner's St. Louis Committee was the beginning of the process of collecting and then disseminating data to the public. Many women without any previous experience in scientific matters also had to educate themselves about nuclear power to become effective spokespersons and intervenors in the licensing process. Conferences such as the Critical Mass Conference of 1974 and 1975 and teach-ins helped to speed up the circulation of information.

In the late 1960s the mainstream press had denigrated the new Left, categorizing it as illegitimate. Therefore, the mainstream media could not be relied upon to build a movement because of the problem of getting over the high threshold for media coverage as well as its treatment of opposition movement activities. When it did cover the movement, coverage was a mixture of trivialization, respect (for the movement's use of nonviolent civil disobedience), undercoverage, and disparagement. For example, the 1976 resignations of three GE reactor design engineers and the 1976 Proposition 15 (nuclear safeguards) in California received unprecedented coverage, while the arrests of 177 demonstrators of the Clamshell Alliance at the Seabrook reactor site in 1976 and the radioactive waste spill on Navajo land at Church Rock, New Mexico in 1979 went largely unreported.(6) Moreover, when oil prices dropped, the media virtually dismissed the solar energy movement as a newsworthy item.

Given those constraints, the movement was forced to build its own press as well as to rely on the presses of its allies such as the environmental press, the women's and feminist press, the liberal press, the alternative press and New Left press, the native American press, and the appropriate technology and solar press.(7) While New Left journals have published some articles on the antinuclear movement such as *Ramparts*, *Review of Radical Political Economy*, *Radical America*, *Socialist Review*, *Telos*, and *Dollars and Sense*, the movement has published somewhat more in liberal magazines such as *The Nation*, *The Progressive*, environmental magazines such as *Environment*, *Environmental Action*, *The Ecologist*, *Sierra*, and solar and appropriate technology magazines such as *Solar Times*, *Rain*, and *New Age Magazine*. Support from women's and feminist magazines has come from *Redbook*, *Ladies Home Journal*, *Ms.*, and *Off Our Backs*. More specifically, the movement has relied heavily on alternative presses such as *Win*, *Radical Science Journal*, *Science for the People*, *Fifth Estate*, *Akwesasne Notes*, (American Indian Movement), *In These Times*, and *Mother Jones*.

At the height of antinuclear/pro-solar activity in the late 1970s and early 1980s many antinuclear newsletters and journals flourished, such as *Critical Mass Journal*, *Nuclear Free Press*, *Power Line*, *Not Man Apart* (Friends of the Earth), *Nucleus* (Union of Concerned Scientists), *Groundswell* (Nuclear Information and Resource Service), *No Nuclear News* (Boston Clamshell Coalition), *Connections* (Public Citizen's Critical Mass Energy Project), *People & Energy* (Citizens Energy Project), and numerous regional alliance newspapers and newsletters such as *The Clamshell Alliance News*, *It's About Times* (Abalone Alliance), and *Hot Times* (Texas Mobe), many of which are now defunct. Out of the New England direct action movement came two books *No Nukes* by Anna Gyorgy and friends and *Energy War* by Harvey Wasserman, and two documentaries, "The Last Resort" (on the Clamshell Alliance) and

“Lovejoy’s Nuclear War,” which had hundreds of public viewings.(8) *Alternative Views* (on the public access channel) has kept Austin viewers abreast of antinuclear-solar issues and struggles since late 1978. Its documentary “On to Matagorda” covered the demonstration against the South Texas Nuclear Project in June of 1979.(9) Other antinuclear books that attempted to demystify the technology or showed how people can take control of their own energy needs were *The Nuclear Power Rebellion*, *The Electric War*, *Nuclear Power: The Unviable Option*, and *Unacceptable Risk*. (10)

The Hollywood film “The China Syndrome” also helped to circulate the struggles because of the timing of its release, within a few days of the TMI accident. Furthermore, music became a tool for circulating the struggles. For example, Holly Near’s Fall 1979 tour, “Holly Near—On Tour for a Nuclear Free Future,” carried the message of the campaign into many communities and raised money for antinuclear grassroots organizations. Musicians United for Safe Energy (MUSE) organized five large concerts in 1979 at Madison Square Garden in New York City, attracting hundreds of thousands of people. Nevertheless, MUSE’s primary goal, which was to help urbanize the movement and to attract blacks, was never achieved.(11)

5.1.2 Recomposition of the Antinuclear Power Movement

Since the days of the *ban the bomb* movement of the late 1950s, the antinuclear movement has undergone a changing composition. The ban the bomb movement was primarily the creation of scientists, artists, and intellectuals, though it did attract thousands to its rallies, marches, and demonstrations. The antinuclear power movement of the late 1950s and early 1960s had basically the same composition as its predecessor, but was able to grow rapidly by drawing in ordinary individuals who knew little about nuclear power, but who lived near the proposed sites.

With the emergence of the environmental movement in the 1960s, the antinuclear movement recomposed itself, bringing in a new sector of the class. Some environmentalists began to turn their attention to the environmental effects of nuclear power. For example, David Brower had quit the Sierra Club over the issue of nuclear power and created Friends of the Earth, which focused its research on and lobbied for antinuclear and solar power. It is clear that the environmental sector of the antinuclear movement had a significant impact on the nuclear power industry in terms of imposing safety and environmental standards that made the cost of nuclear power too costly and delayed the ambitious nuclear power program. However, it would take several more recompositions before the movement could bring the industry to a halt. In addition, some sectors of the environmental movement would link with eco-feminists in the late 1970s.

The labor-antinuclear recomposition that began in the mid-1970s has not gone far enough, because it has been stymied by an industry that has used *job blackmail* to keep labor on its side and a pronuclear union leadership. Nevertheless, it remains a vital link. If labor were to join the antinuclear camp, it would be a significant recomposition because environmentalists and antinuclear activists have fought each other for many years rather than fighting against capital.

The emergence of a more activist wing of the antinuclear power movement in 1976 whose use of nonviolent civil disobedience and direct action were aimed at shutting down all nuclear plants constituted yet another recomposition that moved the conflict to a higher terrain of class struggle. The Clamshell occupation of the Seabrook reactor in the spring of 1977 helped to spawn a new kind of social movement. Seabrook became a worldwide symbol of citizen resistance to nuclear power. The new alliances patterned after the Clamshell Alliance gave breadth and depth to the movement. The previously reformist movement had become an out and out *No Nukes* movement.

During that period as the movement was shifting to more confrontational tactics, it was able to coalesce with the Native American movement, resulting in a broadening of the class base and a new recomposition. The new alliance sought to stop multinationals and the State from turning reservations into radioactive wastelands and to circulate and to implement solar technologies. Both movements have been working towards the elimination of domination—that of internal colonialism and that of a state of nuclear

terror and the hierarchies associated with it. The native American movement helped to reinforce several strands of thought that are basic to the antinuclear power movement such as an ecological perspective that is part of the Indian way of life—i.e., worshiping rather than exploiting the earth, living in harmony with nature. According to J. Donald Hughes “part of the strength of the conservation-ecology concern in America comes from the American Indians’ presence here and their influence on our national life and thought.”(12) Similarly, Native American’s greater reliance on the sun, such as its use of passive solar architecture has also influenced the movement. The struggles against uranium mining have been important to the rest of the movement because they brought to light the first large-scale exposure to radioactivity. Many are convinced that continued expansion of nuclear power will mean the removal of Native Americans from their own land. Already the Lapps (Samis) of Sweden are facing economic disaster as their main source of food, the reindeer, was contaminated by the Chernobyl fallout.

The coalescing of the soft energy movement with the antinuclear movement in the latter half of the 1970s was a significant recomposition because it provided the movement with an alternative to nuclear power. If soft energy technologies were implemented at a decentralized level, they would eliminate the need for nuclear power and would reduce capital’s control over a large segment of our lives.

The recomposition of the antinuclear movement associated with its links to the women’s movement began in 1974 as a result of the death of Karen Silkwood. Those ties have grown stronger in the last 15 years with the entrance of liberal and traditional women’s organizations as well as the radical and socialist women’s safe energy groups into the movement. However, it is the emergence of the eco-feminist movement that many believe has strengthened the antinuclear movement in a profound way by providing a unique perspective that combines feminist and ecological views—in effect broadening the concerns of the movement to include the elimination of racism, sexism, militarism, classism, and homophobia.

This new composition of the antinuclear movement has resulted in a significant loss of support for the industry, given that in the 1950s both women and men overwhelmingly supported the atom. Even before the accident at TMI more women than men opposed nuclear power. A 1981 Associated Press-NBC News Poll showed that two-thirds of the women, but only half of the men surveyed opposed the building of new nuclear plants.(13) The same pattern of sex differences has been found in Sweden, France, and Germany. Not only are women more concerned about nuclear power, but also they have been extremely active in the movement, outnumbering men at the grassroots level.(14) Their opposition is partly due to the higher total cancer risk and the reproductive hazards that women face. Moreover, in contemporary society women still remain the principal caretakers of the sick, of the old, and of those crippled by radioactivity induced birth defects and cancers, thus making them more sensitive to the nuclear issue.

The nuclear industry has sought to decompose that new composition by attempting to draw women back into the nuclear fold. In a 1975 memo to the industry, Cambridge Reports Inc. proposed that the industry target women as well as other groups whose support for nuclear power was the weakest (blacks, the young, and the poor), for an all-out public relation effort.(15) Also in 1975 the Atomic Industrial Forum (AIF) organized and funded Nuclear Energy Women (NEW), consisting primarily of women from the ranks of the nuclear industry. Few women work in the nuclear industry, usually holding educational, public relations or communication positions. Since women lacked nuclear enthusiasm, NEW’s (newer than NOW) task was to bring that important sector to nuclear realism. For example, in the Fall of 1979 NEW organized thousands of *energy coffees* across the country to challenge the legitimacy of the antinuclear movement.(16)

In an attempt to undercut women’s opposition to nuclear power, the industry has preyed on women’s fears of losing the recent gains in their status. For example, one advertisement proclaimed. “Frankly I’d rather face a meltdown than a morning of housework without my home appliances.” (17) The message is a warning to women, that if you oppose nuclear energy, you will jeopardize the gains women have made, and you will risk all—jobs, security, public safety, and freedom. The industry’s strategy is to relegate women to the status of consumer, thereby reinforcing the role of women as homemakers first and wage earners second, the latter role being dependent upon the use of electrical laborsaving devices in the home. The nuclear industry has pushed the case that high technology has been instrumental in liberating women from traditional roles. Nevertheless, the industry has used *patriarchy* to maintain its domination over the working class. While it is certainly true that women have used their power in the market to obtain

work-reducing tools, the reduction of their labor has been due to their struggles, not to the technology per se. Moreover, there is no reason to think that the only way electricity will be available to power those tools is through nuclear power.

Besides the public relations campaign, the nuclear industry and the State have used a variety of techniques to decompose the multiple recompositions. The State's continued repression of Native Americans is believed by some to be directly related to the theft of natural resources on Indian lands. According to Winona LaDuke, Leonard Peletier is a "prisoner of the national energy policy."⁽¹⁸⁾ While there is no proof that ties the State to multinationals, who in the decade of the 1970s consolidated their uranium claims, it is clear that the native American movement has been on the defensive, forced to defend AIM members against what many believe, inside and outside the movement, are largely fabricated criminal charges. The end result has been that the Native American movement has had little time to pursue treaty claims to the Black Hills and surrounding land. Similarly, Reagan's pronuclear policies coupled with the corporate takeover of soft energy weakened the movement for solar power. For example, government funds for the few existing solar programs were cut; Solar Lobby, a powerful voice for social change in its early years was co-opted, and many solar enterprises were bought out by larger companies. In short, the antinuclear movement remains active, while the soft energy movement has faded.⁽¹⁹⁾

Shortly after the accident at TMI industry trade organizations (Atomic Industrial Forum and the Edison Electric Institute) established the Committee for Energy Awareness (CEA) to turn a public relations disaster (Three Mile Island) into a triumph. CEA had an operating budget of \$1.6 million in the last half of 1979, rising to \$25 million in 1984.⁽²⁰⁾ As late as 1989 CEA's advertisements continued to appear in newspapers, magazines, and television. CEA's *raison d'être* has been, of course, to decompose the movement. Its most common argument has been to equate nuclear power with energy security, which has had a tremendous appeal in the post-Iranian revolution era, evoking fears of energy shortages such as the lack of winter heat and inflation—fears which strike at some potential supporters of the antinuclear movement (the poor) more than at others (the middle class).

5.2 Limits of the Struggles

Although the antinuclear movement has been the most successful social movement of the last 15 years, it has never achieved the status of a mass movement. Four factors have seriously limited the movement's ability to overcome capitalist divisions. (1) Gender conflicts continue to plague the movement. (2) Its failure to analyze solar energy technologies from a class perspective. (3) The organizational methods of the activist wing of the movement have excluded other sectors of the class that do not have the skills or the time to participate in the movement. (4) Finally and most seriously, its failure to mobilize support in minority communities and among blue-collar workers. Furthermore, if the movement is to successfully confront the current efforts of the nuclear power industry to make a comeback, it must overcome those limits.

5.2.1 Continuing Gender Conflicts

In a conscious effort to avoid the widespread sexism of the New Left movement, the antinuclear movement has embraced notions of egalitarianism and feminism, both in its ideology and group structure. Nonetheless, despite good intentions, sexism still remains a problem. In spite of the greater participation of women in the movement, men still dominate. Direct action groups were supposed to be nonsexist and nonhierarchical, however, in actual practice they have not been. Women have voiced fears of personal and sexual harassment, which are illustrated in the following quotations from two different regions of the country.

There is no getting around the fact that, even though women have been in the forefront of the antinuke movement, it still is dominated by men. One of the reasons I felt o.k. about getting involved with Clamshell was I thought the men were really

trying to confront their sexism while working against nuclear power. I still feel that is happening, but it isn't happening fast enough or deep enough for me.(21)

There have been incidents of sexism within the Texas Mobilization for Survival which have resulted in the alienation of many dedicated women.(22)

To counteract sexism within the movement, women's affinity groups were formed, giving women the option of planning their own actions or joining the larger antinuclear movement. The benefits of all-women's are large as is indicated in the following passage.

Many women feel that they can express themselves more freely working exclusively with other women. The lack of aggression, the camaraderie and the open willingness to learn from one another have enabled us to show our competence and to break away from the stereotypical views that imply women aren't capable.(23)

On the other hand, some men are threatened by the feminist presence, especially when lesbian groups are involved. On occasion they have refused to announce where the women's contingent group was forming, refused to post women's group leaflets, and have asked women to take down banners that refer to lesbians.(24) Some men have also argued that feminist issues muddy and complicate an already difficult struggle. They have failed to see the interconnectedness of the struggles being waged today. Even the Midnight Notes Collective, which perhaps presented one of the best critiques of the activist wing of the movement, failed to devote any attention to the issue of sexism.(25)

5.2.2 Absence of a Class Analysis of Alternative Technology

Although the antinuclear power movement adopted the soft energy perspective, it failed to analyze soft energy technologies from the point of view of the working class, thus exposing the innovations to capitalist integration. Solar technology like any technology can be used by capital to discipline workers. *Hard* solar can easily fit into capital's centralized high technology model. For instance, tax dollars have been used to develop large central stations to produce solar electricity such as the power tower (\$79 billion in fiscal 1977), which was the least cost effective of solar options at the time.(26) On the other hand, DOE spent only a small portion of its funds in the 1970s on community solar projects that were more cost-effective.

How can capital benefit from solar? Solar technologies can help capital weather the proliferation of crises that have beset it since the 1960s by providing a whole selection of products that can be produced by American industry. For instance, once the domain of political activists, solar energy has been taken over by corporations. Business has justified its takeover by arguing that it alone can quicken the pace of the diffusion of solar technologies.(27) Furthermore, capital has also come to see the solar vision as a means of imposing austerity measures on the working class and other groups to maintain existing living standards.

A critical issue in the class meaning of solar technology concerns its job creation potential which capital may use to impose more work on the working class. While many in the soft energy movement like Amory Lovins have emphasized the job creation aspect out of a sincere concern to reduce unemployment, from our perspective we seek the reduction of the valorization of capital (more imposed work) and the expansion of self-valorization. Daniel Luria and Lee Price have shown how arguments for job creation from solar development are flawed because of the confusion about *capital*. *Fixed capital*, i.e., machines, tools, and plants is simply *earlier* labor. Nuclear power embodies less of the *most recently* and *locally expended* labor than other industries. Therefore, it is a question of the time distribution of labor. If the choice of technology is determined by the time-distribution of labor (as opposed to the amount of during-production labor only), then it is the capital-intensive project that provides more jobs sooner. The work created many years later in the labor-intensive project must be discounted relative to the intensive work generated at an early stage in the capital-intensive project. Indeed, if the rate used to discount the work created much later in the labor intensive project is high enough, a labor-intensive project may not be preferable to a capital intensive one because of the squandering of labor. Thus, paradoxically capital-intensive projects may well be preferred if relief from an existing unemployment problem was a goal of

energy policy. That is why the building trades as well as other sectors of labor support nuclear power and the same is true in Mexico, which has a large labor surplus.(28)

The antinuclear movement refused to critique Lovins' thesis, perhaps as some have suggested, because it wanted to attract the largest number of people without alienating any group. Lovins himself appeared at antinuclear rallies, e.g., Seabrook. Nevertheless, the critique of Lovins has come from radicals, who since the early 1970s have been writing about and experimenting with appropriate technologies.(29) Wolfgang Rudig has written:

Severe doubt has to be voiced about whether the social system Lovins is proposing would be free of the problems of previous market economies; indeed, Lovins's view seems entirely ahistorical and neglects the basic social forces which had led to state intervention and Big Industry in the first place.(30)

Radicals, while largely sympathetic toward soft technologies, argue that massive social change must precede the implementation of soft technologies. Thus, a strategy for change based on alternative technology is insufficient, but must include a strategy for workers' interests in eliminating alienating technology in the workplace, gaining greater control over the conditions of work, and curbing the political and economic prerogatives of large-scale capital.(31) From an autonomist Marxist perspective, a shift in power relations will not be the result of electoral and bureaucratic politics or the market mechanisms upon which Lovins' thesis rests upon, but will be the result of the struggles of the so-called new social movements, such as the antinuclear, women's, peace, black, and other movements, which have called for broad-based changes in society.

Finally, Joe Shapiro and Garman and Alper have faulted solar enthusiasts for envisioning a solar utopia, and then sitting back to await the new solar future (much akin to other social utopias). Many solar activists believe that by developing small, decentralized technologies, new social relations will arise that will serve as a model for restructuring society. Joe Shapiro writes

[t]hough this position has many positive aspects, such as fostering self-reliance, it must be rejected as utopian. It is an example of technological determinism, i.e., it assumes that new technological developments determine how society evolves, rather than the technology and social forces mutually influencing each other. More explicitly, the development of decentralized renewable alternatives will not change the nature of monopoly capitalism—the banks will control loans, corporations will control patents, and the small-scale equipment will be mass-produced by large companies more cheaply than it can be made by the small entrepreneurs.(32)

In short, most of the technological forms in an advanced capitalist society are the result of management's need to control labor. Consequently, values of the socioeconomic system become built into the technological forms. While existing technology was created by and in the interests of capital, alternative technology (more human-scaled and consistent with ecological processes) will be created by and in the interests of the working class. Further, alternative technology, "must also be less alienating than the dominant technological forms in industrial capitalism, less disruptive of the social/psychological/cultural fabric and must also reinforce and be reinforced by decentralized organizational structures."(33)

5.2.3 Organization and Methods

As the movement recomposed itself, its methods and organizational structures also changed. Prior to 1976, the movement had relied on AEC/NRC hearings and the courts. Direct action methods such as occupations, sit-ins, pickets, marches, rallies, vigils were first used by the Clamshell Alliance, but more importantly it introduced nonhierarchical organizational forms, such as affinity groups, the consensus decision making process, which were later used by many other groups. The Clamshell Alliance wanted to avoid the centralized structure of the antiwar movement of the 1960s, and therefore opted for a decentralized, more democratic organizational form. Patterned after the Spanish Civil War *grupos de afinidad*, affinity groups are small tight-knit groups composed of ten to fifteen individuals. All basic decision making is done at the level of the affinity groups. Organized on the basis of such considerations as previous ties, membership in other organizations, or concerns such as feminism or anarchism, they linked with other like-minded affinity groups to form the Clamshell Alliance.

The consensus process resulted in open meetings and a structureless form of coordination that replaced structured elected hierarchies. While voting allows for quicker decision making, consensus slows it down. Although formally democratic, the consensus process has so far failed to yield democratic results, leaving itself open to the tyranny of a small minority which is prepared to exercise the most persistent voice and hold out for its objective over the greatest period of time.(34) Furthermore, because the consensus process is time consuming there is subtle pressure on people to come to an agreement. A class analysis of consensus reveals the exclusion of less qualified workers and of those who are exhausted by work. Therefore, consensus favors those individuals with psychological and sociological education. Although the consensus process has done away with a ruling elite, real power can still be accrued by those who have the money, the education, the technical instruments, and the social connections. Consensus only works if all members have the same class status, the same skills, and the same level of reproduction. Affinity groups, the consensus process, and nonviolent civil disobedience are class specific, requiring highly valuable labor power along with substantial amounts of free time. These methods exclude the less valuable labor power of Hispanics, blacks, and factory workers. Anna Gyorgy, antinuclear activist and the author of *No Nukes* has stated that whites did not deliberately omit any ethnic group from the movement, nevertheless, their class politics effectively excluded their participation.(35)

Moreover, the entrance of those groups would have undoubtedly changed the class composition of the antinuclear movement and its methods as well as occurred in other movements. For example, the black liberation movement began as a nonviolent movement composed of black intellectual workers and students organized around the churches. Birmingham, 1963, changed not only the class composition of the movement, but its tactics as well. As less valuable labor power joined the movement, altering the relationship between the movement and capital, struggles turned violent. The State's response was a greater degree of repression.

The consensus process was a contributing factor to the fracture of the Clamshell Alliance. So that by 1986, Clamshell organizers were obliged to drop the consensus process in favor of a campaign organizing group that would chart strategy and make decisions.(36) Having an explicit organizing group prevents the formation of ruling cliques that hide behind the democratic smoke screen of consensus. Those who wield power have to submit themselves to the control and the criticism of the movement.

5.2.4 Narrow Class Composition

Throughout its entire history the antinuclear movement has been composed primarily of white, middle class, in many cases of well educated women and men, working in the nonindustrial sector such as education, the arts, the professions, the home, and in the alternative sector. Two of its most important sectors—women and alternativists—were primarily white and middle class. The only notable exception has been the Native American movement that is nonwhite, poor and badly educated.

In particular the antinuclear movement has failed to attract minorities, the traditional working class, and the poor. Movement people such as Harvey Wasserman have been aware of this.(37) They have emphasized the need to broaden the movement to reflect the entire racial, sexual, and economic spectrum. Even the more egalitarian women's groups have failed to mobilize minority women.

Although the antinuclear movement had made some connections with Native Americans and Chicana(o)s in the Southwest by the late 1970s, it had failed to attract a significant segment of the minority population. Like other minority groups occupying positions in the lower part of the wage-income hierarchy, Hispanics have been more concerned about jobs than about nuclear power or the environment. However, at times and in small numbers Hispanics have participated in those movements. More specifically, through the United Farm Workers (UFW) Chicana(o)s have become involved in various campaigns to ban pesticides and fungicides which are harmful to the workers themselves, their spouses,

and children.(38) As we have seen in chapter 3, Chicana(o)s were involved in the antinuclear movement in the Southwest, particularly in New Mexico and Texas and in the appropriate technology movement, particularly in Crystal City. As their communities become more degraded because of runaway technologies, Hispanics may well develop a greater awareness of the issue. For instance, as the industry seeks to outflank its opposition, nuclear waste sites or new reactors may be sited in or around minority communities. A case in point is Panna Maria, Texas. There is speculation that when the nearby uranium mill is closed that Chevron will turn the site into a radioactive waste dump; already the mill tailings pond is leaking and polluting groundwater. Managers of the local facility have told Chevron headquarters that “those dumb Polacks down here will accept anything.”(39)

Similarly, blacks have been conspicuously absent from the movement as well. The antinuclear movement was taken aback when it learned that the National Association of Colored People (NAACP) and the National Urban League endorsed nuclear power after the Three Mile Island accident, citing the job market and the economy for its decision. Efforts at the grassroots level such as those by the Greenwich Village-Chelsea-NAACP which went against the national board’s pro-nuclear position and Gregory and Brenda Johnson, who formed Blacks Against Nukes (BAN) in August 1981 in Washington D.C. have increased the presence of blacks in the movement—but only slightly.(40) Moreover, the antinuclear movement has begun to link with other black movements such as the anti-apartheid movement, which is concerned about the use of South African and Namibian uranium to fuel some American nuclear power plants. In Vermont an anti-apartheid group filed a complaint with the state’s Public Service Board charging that the use of South African uranium at the Vermont Yankee plant makes customers de facto contributors to apartheid.(41) On the other hand, very few in the movement have followed the lead of Barry Commoner who has been concerned about the plight of urban blacks and Puerto Ricans, who are faced with a deteriorating environment and high electricity rates that exacerbate their living conditions.(42)

For the most part, the alternative energy movement has also bypassed the poor and minority communities. With the exception of a few notable community soft energy projects in the ghettos and barrios such as the New York City East 11th St. Movement and the West Side Community Development Corporation in San Bernadino, California (San Bernadino’s West Side is over 75 percent black and Hispanic), federal and state funded solar energy programs have benefited white affluent individuals.(43) Indeed as Alan Okagaki and Ron Okagaki discovered, a solar energy program directed at the poor would have been less expensive and would have produced considerably greater benefits than the generic solar commercialization program of the late 1970s aimed at middle and upper income consumers.(44) By 1978 minority groups had formed a national coalition — Minorities Organized for Renewable Energy (MORE), which was part of an emerging broad based coalition for soft energy, however, the drop in oil prices after 1981 coupled with the slashing of solar funding by the Reagan Administration derailed the movement.(45)

The pro-solar wing of the antinuclear power movement because of its middle class constituency has also failed to consider the impact of its policy recommendations on the poor. They were happy when oil prices rose because it made alternative technologies more competitive with other fossil fuels, thus ignoring the concerns of most people. This is precisely the argument that the Midnight Notes Collective has made. In particular, the movement has pushed the middle class to install solar devices in their homes without considering that the associated unplugging of those homes from utility companies might result in a rise in the price of electricity to those who remain plugged in, thus deepening the divisions within the class.(46) This is exactly what Bayard Rustin, a black leader, had predicted in 1976 when he argued that soft technology would be especially hard on the poor.(47)

On the other hand, the antinuclear movement has also been slow in directing its energy to the capture of state public utility commissions which would then serve the interests of *all* people by reducing electrical rates while adopting a soft energy path.(48)

5.3 Positive and Negative Lessons

What can the antinuclear struggles teach us? Perhaps a lesson that is applicable to all movements was the ability of the antinuclear movement to circulate the struggles to different sectors of the class—

white middle class workers, environmentalists, women, native Americans, white ranchers and farmers, Hispanics, blacks, appropriate technologists, peace activists, and to a lesser degree, some sectors of labor. Only because of its many linkages was the movement able to defeat an energy industrial policy that the State and the industry had assumed to be a moral imperative. A corollary to this argument is that as the movement underwent several recompositions, concerns broadened to include the domination and abuse of all things, animate and inanimate. A case in point, is the ecofeminist movement.

The dramatic decline of the nuclear power technology, unmatched in the history of capital, vividly illustrates that technology is *not* deterministic. We do not have to live with deadly technologies or technologies that reduce diversity rather than increase it. For the first time, a significant number of people began to examine alternative technologies that in the past capital had hidden or denigrated. Capital could no longer label opponents as neo-luddites because they were proposing alternative technologies that sustain or add diversity to life. The defeat of nuclear power strengthens other movements that are in opposition to technologies that dominate and abuse both nature and humans.

One of the important lessons that the antinuclear pro-solar movement revealed was that people want to take control over their energy needs. It also revealed that energy policy does not have to be a monopoly of the State or industry, but is best left to people at the local level. In the end, the insistence of the State and the industry that they alone had sole rights to the determination of energy policy undid the nuclear industry. On the other hand, non-experts learned that they could quickly educate themselves about energy matters, and that they were in a better position than the so-called experts to choose the kinds of technologies that were best suited to meet their local needs without threatening the environment and health of their communities—that is self-valorization.

The ability of the movement to create its own press and to link with other alternative presses was one of the keys to its success. The antinuclear books, films, alternative news programs, and numerous newsletters and articles were crucial in circulating movement struggles. The American antinuclear power movement has been the best documented of all the worldwide antinuclear movements, which may account for its greater success. Other social movements can build on that communications network.

How can we go beyond the limits of the movement? There are also lessons to be learned by examining the limitations of the movement. The failure of the movement to widen its class composition has limited its ability to completely abolish the nuclear power industry. More groups at the grassroots level such as BAN are needed to increase the presence of blacks in the movement. More linkages with other black movements such as anti-apartheid groups are vitally needed. The movement must also develop organizations and methods that would attract the poor, minorities, and traditional blue collar workers, recognizing the time constraints they are under and their skills deficiency when it comes to movement work. As to the problem of gender conflict, the movement needs to work harder to eradicate sexism. The adoption of an ecofeminist perspective is a step in the right direction. In the area of appropriate technology, the movement needs to attract minorities, factory workers, and the poor. To do this it has to address such issues as the high price of electricity.

ENDNOTES

1. This history is quite different from that of Europe. In Germany the Green Party also evolved directly from the antinuclear power movement, but was later able to tap enough support to elect several representatives to the Bundestag.

2. See E. H. S. Burhop, "The Peaceful Applications of Atomic Energy," *Marxist Quarterly* 1, no. 2 (Apr. 1954): 82-93, cited in Wolfgang Rudig, "Capitalism and Nuclear Power: A Reassessment," *Capital & Class* 20 (1983): 117-56.

3. See Hans-Magnus Enzensberger, "A Critique of Political Ecology," *New Left Review* 84 (Mar.-Apr. 1974): 3-32; Richard England and Barry Bluestone, "Ecology and Class Conflict," *Review of Radical Political Economy* 3, no. 4 (Fall-Winter 1971): 31-55; Barry Weisberg, "April 22: A One-Day Teach-in is Like an All Day Sucker," *Liberation* (Apr. 1970): 38-41.

4. "Europe After Chernobyl," *New York Times*, 27 Apr. 1987.
5. See also Sec. 5.1.2 Recomposition of the Antinuclear Power Movement.
6. Todd Gitlin, "News as Ideology and Contested Area: Toward a Theory of Hegemony, Crisis, and Opposition," *Socialist Review*, no. 48 (Nov.-Dec. 1979): 44-49. After the April-May 1977 Clamshell Alliance occupation, some members of the media were describing the Clams as well mannered and their actions well ordered.
7. Both were outgrowths of the antiwar movement of the 1960s.
8. *The Last Resort*, distributed by Green Mountain Post Films, P. O. Box 229, Turners Falls, MA 01376, 1978; *Lovejoy's Nuclear War*, distributed by Green Mountain Post Films, P. O. Box 229, Turners Falls, MA 01376, 1974.
9. *Alternative Views*, "On to Matagorda," Austin: Alternative Information Network, no. 36, first season, 1978-1979, videocassette; Douglas Kellner, "TV, Ideology, and Emancipatory Popular Culture," *Socialist Review*, no. 45 (May-June 1979): 43-47.
10. R. S. Lewis, *The Nuclear Power Rebellion: Citizens Vs. The Atomic Industrial Establishment* (New York: Viking Press, 1972); Sheldon Novick, *The Electric War: The Fight Over Nuclear Power* (San Francisco: Sierra Club Books, 1976); Sheldon Novick, *The Careless Atom*; John Berger, *Nuclear Power: The Unviable Option* (New York: Dell, 1977); McKinley Olson, *Unacceptable Risk* (New York: Bantam, 1976); John McPhee, *The Curve of Binding Energy* (New York: Farrar, Strauss, and Giroux, 1973).
11. Jay Rosen, "Music and the Movement," *The Progressive*, Jan. 1980, 22-23.
12. J. Donald Hughes, *American Indian Ecology* (El Paso: Texas Western Press and the Univ. of Texas, 1983), 137.
13. *Chicago Sun-Times*, 24 Nov. 1981. Issac Balbus,
14. Nelkin, "Nuclear Power as a Feminist Issue," 6.
15. See "Selling the Nuclear Faith," *The Progressive*, Sept. 1977, 22-23.
16. Lin Nelson, "Atom and Eve: The Nuclear Industry Seeks to Win the Hearts and Minds of Women," *The Progressive*, July 1983, 32, 34.
17. Advertisement found in Koen and Swaim, *Handbook for Women*, 22.
18. Koen and Swaim, *Handbook for Women*, 36. Also see "Targeted for Death: Native American Lives and Land Threatened by Uranium Mines," *Akwesasne Notes* vol. 16, no. 3 (Spring 1984): 10 and *The Nation*, 14 Apr. 1979, 394-95. Leonard Peltier has been accused in the killing of two FBI agents on the Pine Ridge Reservation on June 1975. William Kunstler, Peltier's attorney, has asked for a new trial given that important evidence was not allowed in Peltier's first trial.
19. Pollak, "Solar Power," 34-35.
20. Bert Useem and Mayer N. Zald, "From Pressure Group to Social Movement: Organizational Dilemmas of the Effort to Promote Nuclear Power," *Social Problems* 30, no. 2 (Dec. 1982): 150; Harvey Lipman, "CEA Wants You to Love the Dump," *Environmental Action*, June 1984, 14. In 1983 CEA broke away from AIF and is now the public relations arm of the nuclear-powered electric utility companies. CEA also changed its name to the U.S. Council for Energy Awareness (USCEA) which gives it the appearance of a government entity.
21. Koen and Swaim, *Handbook for Women*, 56.

22. *Hot Times*, "An Open Letter . . . Why a Women's Hot Times?," Aug.-Sept. 1979.
23. Ibid.
24. Nelkin, "Nuclear Power as a Feminist Issue," 38.
25. See Midnight Notes Collective, "Strange Victories."
26. See Allen L. Hammond and William D. Metz, "Solar Energy Research: Making Solar After the Nuclear Model," *Science*, 15 Jul. 1977, 241-44.
27. Pollak, "Solar Power."
28. Daniel D. Luria and Lee Price, "Solar Energy, Jobs, and Labor: Some Analytical Issues," *Review of Radical Political Economy* 15, no. 3 (Fall 1983): 131, 135.
29. See David Dickson, *The Politics of Appropriate Technology* (New York: Universe Books, 1975).
30. Wolfgang Rudig, "Capitalism and Nuclear Power," 137.
31. Chuck Garman and Ken Alper, "Alternative Technology: Not a Revolutionary Strategy," *Science for the People*, Sept.-Oct. 1976; Eric Entemann et al., "Alternative Technology: Possibilities and Limitations," *Science for the People*, Sept.-Oct. 1976.
32. Joe Shapiro, "Prospects and Problems: The Anti-Nuclear Movement," *Science for the People*, July-Aug. 1980, 19.
33. Phil Bereano, "Alternative Technology: Is Less More?," *Science for the People*, Sept.-Oct. 1976, 6.
34. See Midnight Notes Collective, "Strange Victories."
35. BAN: Blacks Against Nukes, Spring 1985.
36. James G. Ennis, "New England No-nuke Revival," *In These Times*, 20 Aug.-2 Sept. 1986, 3.
37. Harvey Wasserman, "The Clamshell Alliance: Getting It Together," *The Progressive*, Sept. 1977, 18; Jeff Pector, "The Nuclear Power Industry and the Anti-nuclear Movement," *Socialist Review* 48, no. 6 (Nov.-Dec. 1978): 27; Haines and Moyer, "'No Nukes' is not Enough," 41.
38. Regarding its current campaign see the UFW video, *The Wrath of Grapes*, 1986.
39. Panna Maria is the oldest Polish settlement in the United States. Are Slettan, "South Texas county could be suffering from contamination," *Daily Texan*, 15 Dec. 1988.
40. See *BAN: Blacks Against Nukes* newsletter, 3728 New Hampshire Avenue, NW #202; Wash., D.C. 20010.
41. The anti-apartheid movement recently broadened its base to include white students on college campuses. Datelines, "A Vermont Yankee in South Africa's Court," *The Progressive*, Apr. 1986, 17.
42. See Barry Commoner, "Energy and Economic Justice," *The Crisis* (NAACP) 87, no. 4 (Apr. 1980): 130-32.
43. Alan Okagaki and Ron Okagaki, "Solar Energy and the Poor," in Ken Bossong, *A Solar Critique: Solar Compendium*, vol. 2, Washington: Citizens Energy Project, 1980. Originally prepared for the Dept.

of Energy. DOE declined to publish and distribute the report, which more than likely was a response to the report's highly unfavorable findings and its critique of federal energy policy.

44. These solar projects utilize less sophisticated, lower-cost technologies, such as breadbox solar water heaters, trombe walls, and simple passive retrofits and have the added advantage of contributing to community economic development.

45. David Talbot and Richard E. Morgan, "From Seattle to the South Bronx," *The Progressive*, Oct. 1981, 35.

46. Midnight Notes Collective, "Strange Victories"; idem, "No Future Notes: The Work/Energy-Crisis and the Anti-Nuclear Movement," *Midnight Notes*, Aug. 1979, 33-38.

47. Bayard Rustin, "No Growth Has to Mean Less and Less," *New York Times Magazine*, 2 May 1976, 72, 76, 80.

48. Haines and Moyer, "'No Nukes' Is Not Enough," 41.