

American Studies: Environment

**Allan Schnaiberg
Department of Sociology
Northwestern University
Evanston, IL 60208, USA**

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AMERICAN ENVIRONMENTAL STUDIES

ABSTRACT

American environmental studies, such as "human ecology", somewhat predate the rise of modern concern about "environmental problems". However, most of the pre-1960s work emphasized the influence of the natural environment upon human communities. In contrast, the more recent work has stressed the impact of societies upon their natural habitats, and has followed policy construction of different kinds of environmental problems..

Two streams of work are outlined. The first refers largely to social surveys of individual Americans' concerns about environmental hazards, and their preference for various policies of environmental protection. A basic distinction is drawn between perceptions of natural resources, on the one hand, and environmental systems, on the other. These include analyses of environmental risk tolerance, risk aversion, anxiety, and protection support through additional tax and market surcharges.

A second stream of work focuses on social institutions and their orientations towards ecological systems and environmental protection. Especially important are the technological and economic mechanisms of major economic organizations in their use of natural resources. Related are the studies of the social and political influences by regional, national and transnational economic organizations influence both the political protection of the environment, and the consciousness of major publics about this protection.

In general, modern American environmental studies have been strongly influenced by policy conflicts in American society. The agenda for research has successively incorporated the analysis of (1) the causes of air and water pollution, (2) the social uses of energy, and (3) control over sources of global warming and ozone depletion. To a lesser extent, the agenda for research has also emerged from other social concerns, such as the impact of economic globalization of the economy.

THE NATURE OF AMERICAN ENVIRONMENTAL STUDIES

Environmental studies focus on interaction between ecological (ecosystems) and human societies. Ecosystems are those organized forms of natural system that integrate biotic organisms and their resource base, including air, water, and minerals. Modern scholarship notes: (1) human societies are now seen as dependent upon more features of ecosystems, (2) ecosystems sustain human societies in ways apart from their traditional role as "natural resources". Natural resource views of ecosystems led to increasing pollution and depletion from societal production, exposing citizens and social institutions to new vulnerabilities from ecological scarcities. Prior to 1965, social analyses primarily traced how features of natural systems shaped the structure, location, and activities of communities, in work such as spatial ecology (Theodorsen 1961) and human ecology (Hawley 1950). Then, ecosystems were seen as autonomous from human actions.

Central problems in modern environmental studies include the complexity of relationships between social and ecological organization. It is often difficult to offer precise statements about the ecological impact of human activities, on the one hand, and the social impact of environmental disorganization, on the other. Moreover, boundaries between social scientists' and natural scientists' roles are unclear. Evaluating patterns of social impact on ecosystems and/or ecological impact on social systems does not permit the rigor of laboratory control of variables, and thus a variety of differing assessments of such impacts emerge (e.g. Dietz & Rycroft 1987, Kraus et al. 1992).

In the United States, the social science approach incorporated mainstream natural science perspectives on environmental destruction. One approach engaged in surveying American individuals, to trace how much recognition of environmental problems had emerged, and how individuals had altered their values and behaviors in the light of this recognition (Dunlap & Van Liere 1978). Another set of analyses traced the changes in the 20th century American institutions, assessing both how they had produced negative environmental impacts (Burch 1971), and how they responded to attempts to engage in policies of managed scarcity (Schnaiberg & Gould 2000) to meliorate this impacts.

INDIVIDUAL AMERICAN RESPONSES TO ENVIRONMENTAL CHALLENGES

In the late 1960s and early 1970s, social surveys traced how much the public had consciousness of pollution hazards, and their attitudes towards proposed government regulation of pollution. Higher education levels predicted more concern, but later studies showed more diffused anxieties. By the late 1970s, though, individuals showed more skepticism about the implementation of new environmental protection laws through

environmental agencies. More respondents were cautious about expanding government action to protect ecosystems, especially those whose livelihoods devolved around natural resource usage (Dunlap and Van Liere 1978). Better-educated Americans still expressed stronger concerns about the social impacts of pollution. More pragmatic lines of research included people's willingness to pay for hunting and fishing licenses to support conservation agencies (Heberlein 1989) and other environmental controls.

With the rise of the energy crisis in the mid and late 1970s, a variety of studies explored citizen reactions. Many citizens favored government support for broader domestic oil exploration, despite new environmental risks from drilling and transporting offshore and onshore oil. The "problem" denoted by these segments of American society was the scarcity of petroleum products. Conversely, though, other respondents felt this was an occasion for citizens to alter their behaviors, and to engage in more energy-conserving (and resource-conserving) actions. They favored smaller cars, more public transportation, more energy-efficient appliances, and new programs of recycling social wastes (Murray et al. 1974). Middle-income respondents favored this. In contrast, low-income groups lacked the means to change their use of energy, and high-income groups resisted this decrease in their standards of living.

Towards the latter part of the 1970s, public attention was increasingly drawn to toxic waste problems, highlighted by the problems of Love Canal in New York State, and a series of other chemical threats to human health (Levine 1982). Many social scientists began to study the emerging grass-roots social movement organizations associated with these incidents of public health (Brown & Mikkelsen 1997 [1992]). Other studies concentrated on individuals' concerns with risk (Slovic 1987), and found that individuals perceived environmental health hazards as more severe than did experts (cf. Dietz & Rycroft 1987, Kraus et al 1992).

In the early 1980s, attention in the scientific and media circles shifted from national pollution and energy problems to new issues of global environmental change, especially ozone depletion and greenhouse gas increases which would lead to global warming. Studies of individual attitudes incorporated this new concern, adding fears about global warming and willingness to forego some use of energy to reduce this risk. Increasingly, though, such social surveys of individuals became more problematic, as matters of environmental policy and industrial use of natural resource became more removed from individual decisions and attitudes (Buttel & Taylor 1992).

Perhaps the most recent arena in which citizen attitudes seemed to play a role was in voluntary participation in recycling their household wastes. Ironically, much less

research has been addressed to this, although for some social scientists, individual recycling became a general criterion for environmentally responsible behavior (Derksen & Gartrell 1993).

AMERICAN INSTITUTIONAL RESPONSES TO ENVIRONMENTAL ISSUES

Perhaps the closest institutional analogue to the individual surveys are the studies of diverse American environmental movement organizations. Early in the modern period of environmental concern, Albrecht and Mauss (1975) reviewed the history of conservation, recreation and environmental voluntary organizations. These citizen-based organizations sometimes predated and at other times monitored government agencies. These agencies regulated parklands, forests, and natural resources, either for purely conservationist or utilitarian purposes (Hays 1969). Most of the studies of the 1960s and 1970s focused on older and emergent national organizations, such as the Sierra Club and Environmental Defense Fund. Yet only Mitchell (1980) actually studied their members. He discovered that the bulk of these had little experience with current and previous social movements (civil rights, anti-poverty, anti-war, and feminist). Most other analysts simply traced how national organizations had brought environmental issues to the national political agenda, and to public consciousness through the use of mass media (Mazur 1981).

In contrast, later case studies of local or grass-roots environmental organizations offered considerable insight into the motives and means of ordinary citizen-activists in these organizations (Levine 1982, Brown & Mikkelsen 1992, Szasz 1994, Gould et al 1996). Some of these case studies treated emergent "environmental" protest as examples of collective behavior theories, while others used the resource mobilization perspectives developed during civil rights and other modern social movements (Turner 1981). More recent studies often focus on environmental justice movements of peoples of color, and other lower social groups. Unlike middle-class mobilization around "protecting the environment", these recent grass-roots organization often dealt with members' exposure to direct health risks from local toxic waste sources, both at home (Bullard 1994) and at work (Pellow 1998).

With the political appeal of inequality-oriented movements in the U.S. (Szasz & Meuser 1997), and the rise of concern about global inequalities (Goldman 1998), social scientists began to study the emerging web of non-governmental organizations. In the United States, clearing-houses of local movements emerged (Brown & Mikkelsen 1997). Responding to global inequalities, multinational linkages appeared in groups protesting

in Seattle and Washington DC in the late 1990s, the World Trade Organization and the World Bank, respectively.

Beyond these studies of protest organizations, social scientists have explored the capacity of social institutions to respond to environmental problems and environmental protection. Researchers in business/management schools have stressed the motivation and capacity of economic entities to carry out environmental management (Hoffman 1997). This approach is also consonant with a western European approach, ecological modernization (Mol & Sonnenfeld 2000). This research details how leading industrial firms have incorporated ecological criteria into their operational decision-making.

Another set of researchers has examined the prospects and limits of American and European regulatory agencies to moderate the expansionary impulses of dominant national and multinational firms (Hawkins 1984, Landy et al 1990). These expansionary pressures have been detailed by the theory of the treadmill of production (Schnaiberg 1980, Schnaiberg & Gould 2000). Investors seeking to maximize their share values pressured managers to expand, thereby creating rising demand for natural resources, while offering fewer benefits to workers themselves from the resulting environmental exploitation.

Over the period from the mid-1960s, normative schemes have been suggested by social scientists, working with and observing social activists. These efforts focused on creating an alternative form of production and consumption. The work of E.F. Schumacher (1973) was the first approach outlining a goal of alternative or intermediate technology. Evaluating the outcomes of these programs, Schnaiberg and Gould (2000) noted how the concept had become eviscerated of its mission in most applications. Successes of these projects were only temporary, and occurred in settings which were not of interest to major investors or firms in the treadmill of production.

A second proposal was for industrial ecology (Socolow et al. 1990), in which the waste products of one firm would serve as the feedstock for another, reducing the depletion of materials, polluting wastes, and water and energy needs. Noting that examples of such projects existed in Denmark, American analysts proposed to apply these principles in the U.S. However, few clear examples of such systems have emerged, usually because of the limitation of capital available for the linked technologies involved, as opposed to investments in existing single-firm technologies (Weinberg et al 2000).

More recently, much of the logic of these earlier approaches has been reconstructed in the new ideal type of sustainable development (Baker et al. 1997, PCSD 1999). Many utopian goals have been put forward by social science and activist citizen

groups, despite substantial resistance from existing institutions (Daly 1996b). Paradoxically, this concept was initially proposed by natural scientists, with an aim of sustainable biodiversity. The sociopolitical reality is that most institutions seek to achieve maximal ecological protection with minimal social change (Daly 1996a). This was confirmed by recent evaluations of urban recycling as an exemplar of sustainable development policies (Weinberg et al 2000). A related example is eco-tourism, where sustainable development is highly contingent on limiting competition for local resources (Gould 1998).

Still other researchers have explored strategies of voluntary simplicity, eco-communities, and other forms of community-based production and consumption. Proponents have noted the growth of such collectivities and numbers of participants (Shuman 1998), but they do not challenge the dominance of existing industrial systems.

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