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**THE SOCIAL STRUCTURING OF
POSTINDUSTRIAL CONFLICT:
CITIZEN POSITIONS ON ENVIRONMENTAL DIMENSIONS**

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The new social movements characteristic of postindustrial societies have raised a number of novel issues, in particular environmental ones. The positions which groups in these societies take on these issues, however, is far from clear. The paper examines three perspectives on the problem: traditional class, new middle class, and transitional disequilibrium. Data from a western New York community are used to examine citizen positioning on three eco-factors—environmental protectionism, deep ecology, and limits-to-technology. The two class perspectives perform poorly but the disequilibrium perspective proves useful. Cluster analysis yields a five-group indicator which is significantly related to all the environmental factors. Two associated property vectors, democratic-party affiliation and education, help account for intersectoral distances on the eco-factors. The implications for research and practice are discussed.

Postindustrial politics seems in disarray. Traditional issues (e.g., unionization, enfranchisement) have receded in salience while new issues (environmentalism, feminism) have grown in significance. Traditional parties, slow to respond to the new concerns, have lost adherents while the number of independents has grown and "new social movements" (NSMs) and new parties have recorded gains. For some scholars, however, traditional class remains salient for postindustrial issues. According to others, a new middle class has formed which better accounts for positions on the new issues. Still others would contend that only a completely new formulation of social location can account for postindustrial attitudes.

Considerable debate, therefore, surrounds the question of the social-locational basis of postindustrial conflict. What social grounding, if any, can be found for citizen positions on the new issues? This paper investigates the social basis of opinion on perhaps the central postindustrial issue, environmentalism, through an analysis of survey data from a western New York community.

**THEORIES OF SOCIAL POSITIONING ON
POSTINDUSTRIAL ISSUES**

Three perspectives can be adduced to account for citizen positions on postindustrial issues: traditional class, new middle class, and transitional disequilibrium.

Traditional class. Conflict in industrial societies pitted agrarians, ethnics, and proletarians against the owners and managers of capital. Some citizens from the middle class were active in the conflicts, but because of the small size of this group they played a peripheral role, providing marginal support for one side or the other. By and large in such conflicts, opinion took a bi-modal shape and was firmly grounded in citizens' location in the class structure.

But in postindustrial societies the situation seems less simple, sparking a renewed debate on the relevance of the traditional class concept (see Wright, 1989). Affluence has presumably reduced the importance of class-based, material issues and rendered other concerns (workplace autonomy, world peace) more salient. Workers are likely to consider themselves "middle class"; the power of unions has declined dramatically (Kelley and Evans, 1995; Western, 1995). According to a recent comprehensive survey of U.S. public opinion, class-related differences are confined almost exclusively to industrial-age questions such as unemployment and welfare (Page and Shapiro, 1992). The class variable, then, seems of little use for predicting positions on specifically postindustrial issues.

Some evidence, however, suggests that the requiem for the traditional class perspective is premature, especially with respect to environmentalism (see Pakulski and Waters, 1995). Less affluent citizens, for example, have assailed the dumping of toxic substances by elites on their "ugly duckling" communities (Greenberg and Anderson, 1984). Nonwhite communities have frequently criticized "environmental racism" (Mohai, 1990). Traditional class is still a relevant concept, especially for social movements (Berberoglu, 1994; Maheu, 1995). Class may be down, but not yet out. On environmental and other postindustrial issues, according to this perspective, the traditional class variable helps account for citizen positions.

New middle class. Other scholars agree that social cleavages, especially class, are still important in postindustrial politics, but in a way far different from the pattern of industrial politics. For some of these analysts, the strongest support for new postindustrial values is found in the middle class, while opposition is strongest in the upper and working classes (Gottlieb, 1993).

Most scholars of this school, however, prefer a more refined conceptualization (Kitschelt and Hellemans, 1990; Melucci, 1989). Class is too crude a concept; one must isolate those specific social sectors whose location renders them most amenable to supporting the new demands (Clement and Myles, 1994).¹ Only a fraction of the middle class--those sectors most involved in producing immaterial goods for the service, especially nonmarket, economy--form the vanguard of NSMs. They alone have the expertise to decipher the complex issues of postindustrialism. Located at the cutting edge of the transition from industrialism to postindustrialism, they are the most receptive to new ideas (Rohrschneider, 1990). Their economic importance, however, is unmatched by political power. They attempt to mobilize nonelites against the old industrial elites for their own purposes, namely the reversal of their marginal political position (Offe, 1987). They form a "new middle class" standing at the

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forefront of NSMs and opposed by those sectors still engaged in producing material goods for the market economy (McCrea and Markle, 1989). On environmental and other postindustrial issues, according to this perspective, a new middle class variable helps account for citizen positions. Hence, scholars should focus on specific sectors in order to articulate the social basis of NSMs (Kriesi, 1989).

Four sectors are usually regarded as constituting the new middle class. Citizens providing health and other *human services* unambiguously support NSMs, especially environmentalism. Their activity lies outside the material-goods economy. Because of education and occupational location, they are more informed than other sectors about postindustrial threats (Betz, 1990). The *education* sector is the driving force behind the new information economies and the major proponent of postmaterial values. The primary production site of the "new capital" of postindustrial economies--knowledge--is the university. A major concern of educators is the inculcation of non-material values. Students are free of the constraints of production bureaucracies. The social location of both educators and students is outside the market-goods economy. They resent governmental and corporate control over information, and possess the cognitive resources to challenge that domination (Luke, 1989; McCrea and Markle, 1989). Closely related sectors, namely *professionals* and *clerical workers*, tend to support NSMs. Their job security is minimally dependent on growth-dependent material-goods industries (Kriesi, 1989).

Other sectors, however, take ambivalent positions on postindustrial issues. *Farmers* are normally regarded as attached to market-goods production and distinctly non-environmentalist. Rural residents are less exposed than urbanites to pollution. Many farmers must despoil their land with artificial fertilizers and biocides to survive economically; their approach to nature is utilitarian. Many rural areas are economically depressed, susceptible to materialistic appeals. Environmentalism threatens the control of farmers over their land. On the other hand, pollution disrupts traditional ways of life; rural areas are often the dumping grounds for hazardous wastes. Nature-protective beliefs survive in rural areas; farmers must conserve their land for the sake of future income. Populist distrust of the modern economic complex lingers on (Kowalewski, 1994). *Skilled workers* are firmly located in the market-goods economy, but are more educated and unionized than unskilled workers, which enhances their support for NSMs. They have become increasingly militant in fighting against pollution in the workplace. They tend to have deep roots in communities threatened by environmental hazards (Brown and Mikkelsen, 1990; Nelkin and Pollak, 1981). *Small businesses* depend on the market-goods economy for their livelihood; boosterism still dominates their politics. Yet they also resent the power of governments and corporations over their lives. Environmental hazards jeopardize their income. Small businesses can be radicalized to support NSMs (Offe, 1985). *Homemakers* are largely dependent on income from the market-goods economy. However, they are located outside the labor market and their life choices are restricted by governments and corporations. They are especially concerned about

the impact of environmental hazards on their children and have flexible time for acting on postindustrial issues (Offe, 1985). *Technicians* usually adopt technocratic stances, enjoying their knowledge monopolies and resenting popular demands for informational democracy. Their instrumental reasoning conflicts with the moral reasoning of the new middle class. Their lucrative jobs and contracts with governments and corporations are threatened by NSMs. Yet technicians also resent elite control over information and demand more occupational autonomy. They are often denied power concomitant with their skill (Luke, 1989).

Still other sectors are clearly anti-NSM. *Private managers and owners* in finance and industry, for example, have the greatest stake in market-goods production and the most to lose from NSM demands. The idea of limits-to-growth threatens profits. Industrialists have been found to score low on environmentalism (Cotgrove, 1982; Inglehart, 1990). *Government employees* believe that state control is necessary to manage postindustrial affairs, which have become increasingly complex and crisis-ridden. They resent the participatory-democratic demands of NSMs. The bureaucrat has begun to replace the industrialist as the immediate target of NSM attacks. NSMs threaten public order with disruption. Government officials see environmental problems as less salient than does the mass public. Government and corporation often ally against environmentalists (Boggs, 1986; McAdam et al., 1988). *Unskilled workers* are located in the market-goods economy and outside the new information economy. Their demands are for material goods, which they expect to be provided by the institutions of the "old left." They still believe in the virtues of economic growth, and wage-consciousness is their ethos. They resent the elitism of NSMs, who fail to take their economic anxieties into account. Environmentalism is seen as a threat to jobs (Kriesi, 1989; Touraine et al., 1987). In sum, the NSMs of postindustrialism are simply new forms of "middle-class radicalism" (Brand, 1990:25).

Transitional Disequilibrium. Another perspective criticizes both of these approaches as simplistic. The traditional class perspective ignores the profound disruption of class relations brought about by economic restructuring. Postindustrialism has complexified the old class system beyond repair.

The new middle class perspective oversimplifies the multiple pressures of postindustrialism on all occupations. More sectors are ambivalent than the survey above would indicate. On the allegedly pro-NSM side, many human-service and clerical workers are thoroughly embedded in the market-goods economy as office employees, industrial psychologists, and the like. Many educators have little concern for postmaterial values. Professionals often group together into corporate entities (law and accounting firms, medical clinics), whose major concern is material aggrandisement. On the allegedly anti-NSM side, some private managers and owners have become enlightened and empathize with NSM demands. Governmental jobs are rarely threatened by NSMs. Local officials often conflict with national ones on environmental issues. National governments visit environmental hazards on local governments,

preempting their control over land use. Citizen pressures for postmaterial values force local officials to sympathize with NSMs. Unskilled workers find their jobs threatened by postindustrial technification; they are rapidly becoming expendable on the labor market. Communities of unskilled workers are often the dumping grounds for industrial wastes. In short, the tripartite classification is simplistic (Andrews, 1988; Mohai, 1990).

These problems suggest the need for a tentative new perspective which here we will label "transitional disequilibrium." Postindustrial society is one undergoing significant economic restructuring; hence it is in a transition state of instability. As such, it contains features of both old and new societies which only new conceptual formulations and methodological techniques can ferret out.

The approach draws its inspiration from recent research on dynamical systems (Briggs and Peat, 1989; Dendrinos and Sonis, 1990; Peitgen and Sanpe, 1988). In systems at equilibrium, the trajectories of components are stable and predictions about present and near-future states are easily formulated and tested with simple conventional methods. Such systems are insensitive to initial conditions; even big changes have only little effects. But when systems move toward disequilibrium, however, trajectories become unstable, even chaotic, making predictions impossible. Hence, unconventional methods (fractal geometry and the like) may be needed to determine the possible states of the system. Such systems are highly sensitive to initial conditions; even little changes can have big effects. When entire systems change from one order to another, relationships become highly fluid. When dealing with systems in transition, humility is the better part of science.

This perspective proposes that postindustrial opinion is still structured by social location, but the configuration is likely to be far different from conventional formulations. The term "postindustrial" is especially apt, for it reflects the reality that industrialism is "post" but the shape of the "new" society is still unclear and appropriately unnamed. Economic restructuring causes great uncertainty; how social sectors are affected by the change is far from clear—even to themselves. Citizens are "on unfamiliar ground; their past political cues seem inappropriate or irrelevant" (Pierce et al., 1989:5). Groups divide and new ones form. In the unstable political situation, many citizens take a wait-and-see approach to new issues. New political identities are slow to form. New occupations gain power and old ones decline. Old social-locational coalitions fragment, yet new coalitions are slow to congeal. Old political institutions, locked into conventional patterns and unable to discern any stable configuration of sectors, fail to form majority coalitions on the new issue-constellation. As these issues go unaddressed, citizens defect from their parties. New parties, however, also have trouble discerning the social basis of opinion and find it difficult to mobilize support.

These dislocations are familiar to historical and comparative scholars. As the United States moved from agrarianism to industrialism, for example, voters defected from traditional parties and third parties arose, eventually giving rise to "critical" elections (Sundquist, 1983). As the Third World has done the same,

party fragmentation has been common, as well as military coups, general strikes, and revolutionary movements. In transitional periods, politics needs time to shake itself out. Thus, new social movements are likely to have a variegated base.

Positions on the new issues, therefore, have a complex social-locational grounding. In postindustrial societies, economic differentiation broadens the spectrum of occupations and expands the number of possible coalitions and cleavages. Postindustrial issues, highly technical and complex, are usually multidimensional. Sectoral cleavages and coalitions depend on the dimension of the issue being considered. Environmentalism, for example, shows some social structuring but the configuration depends on the particular dimension under consideration. Different dimensions attract distinct sets of social sectors. The large size of the environmental net renders simple predictions hazardous (de Haven-Smith, 1988). Research on the demographic correlates of specific eco-dimensions, therefore, must be conducted before attempting to generalize about social structuring. Scholars have correctly advocated an issue-by-issue approach before generalizations are made (Dryzek and Lester, 1989). Unique sectoral cleavages and coalitions may appear on each dimension. Hence, since a completely new social order is unfolding, precise "point predictions" are inappropriate. However, since the old order has yet to disappear, a looser "field prediction" of some social structuring is apt. In a "social transition zone," all specific bets are off; nonetheless, out of the disorder some order should appear (like strange attractors in chaotic systems).

To ascertain these unique sectoral configurations, therefore, an exploratory approach and new methodological techniques are needed. Conventional correlation analysis is too crude for examining the social-locational basis of positions on the new complex issues. More sophisticated multidimensional techniques are necessary. Postindustrial issues must be broken down by dimension; unique sectoral configurations may appear on each subdimension.

Further, the transitional disequilibrium perspective leaves open the possibility that oft-used social-locational and other variables may be related to the *multidimensional set* of issues, accounting for sectors' positions vis-a-vis each other. In the social "transition zone" of postindustrialism, the old industrial society lingers on but in a new way. Traditional class, for example, may help predict a sector's position in relation to those of other sectors in multidimensional issue-space. At the same time, social-locational and other variables of key importance to the emerging new society may also help to structure the set of opinions. Education, attitude toward change, and the like may be useful for explaining intersectoral distances on the array of new issues.

In short, according to this perspective, by using exploratory multidimensional methods one can find unique sectoral configurations on any set of environmental or other postindustrial issues. These configurations, in turn, might be explained by oft-used variables of special import to both the old declining and the new emerging societies.

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The null hypotheses for the above three perspectives suggest the lack of any social structuring of environmental positions. Indeed much of the recent literature on NSMs plays down the role of social location and emphasizes, instead, citizen consciousness as the key structuring factor. With postindustrialism, the basis of wealth-creation shifts from capital goods to knowledge. Entrepreneurial capitalists no longer constitute the central power, and laborers no longer the central movement. Technocratic institutions predominate, monopolizing knowledge and withholding information to preserve their power, which in turn contributes to the rise of NSMs. Alienation, deriving from inadequate information with which to participate meaningfully, rather than exploitation, is the major grievance. Postindustrial hazards threaten citizens regardless of their social location. Indicators of consciousness such as postmaterial values, culture, and identity are often regarded as the best predictors of positions on NSM issues (Coutin, 1993; Franklin and Rudig, 1995; Inglehart, 1995; Johnston et al., 1994). While this paper does not aim at resolving these competing claims, support for the null hypotheses of all three perspectives will at least suggest that social location is a scholarly deadend in the postindustrial age. Indicators of "pure consciousness," on the other hand, may offer the more fruitful approach.

THE STUDY

The present study examines opinion data on environmentalism gathered from a phone and mail survey of 626 randomly selected household heads of Allegany County in western New York. The response rate, 54 percent, was equivalent to those obtained in other environmental surveys (Hunter, 1989). The county's population is largely white, primarily of German, English, and Irish ancestry. While the economy is largely agricultural and industrial, it has several postindustrial characteristics. Its two universities are the largest employers; services constitute a growing proportion of the economy; and several high-tech plants have been built in a "ceramics corridor" linking the county with the city of Corning. Many urban professionals have moved into the county as permanent or summertime residents. A large proportion of residents has attended college (44 percent according to the 1990 census). Hence the venue provides a useful postindustrial "transition zone," allowing for adequate sampling of usually underrepresented traditional sectors (farmers) but also more modern ones (technicians).

The following variables for social location were constructed from respondent self-descriptions of occupation used in conjunction with the classification of occupations from the General Social Surveys' *Cumulative Yearbook* of the National Opinion Research Center:

- (1) a traditional 6-point ordinal measure of class (unskilled worker, skilled worker, white collar clerical and service, self-employed small business, professional/technical, and manager/owner of larger-than-family business and high-ranking government official);

(2) a 12-point nominal scale for all the sectors described in the discussion above on new middle class, which was then collapsed into a 3-point ordinal measure for new middle class (coded "1" for anti-NSM sectors, namely unskilled workers, government employees, private managers and owners; "2" for ambivalent ones, namely farmers, skilled workers, small businesses, homemakers, technicians; and "3" for new middle class ones, namely human services, educators, professionals, clerical workers).

From the literature on environmentalism, a listing of specific concerns was compiled and questionnaire items formulated using Likert scales for responses. They include environmental priority (Protecting the environment is more important than economic growth and material wealth--agree); conservation (Our natural resources should be conserved to benefit future generations--agree); pollution (Pollution is rising to dangerous levels--agree); natural balance (The balance of nature is easily upset--agree); limits-to-growth (There are limits to growth and we shouldn't expand beyond them--agree); distrust of industry (Industry is good because it provides well-being for most people--disagree); skepticism toward science (Science and technology give us the best hope for the future--disagree); domination of nature (Humans were created to rule over nature--disagree); and utilitarianism toward nature (Plants and animals exist to be used by humans--disagree).

The items were factor-analyzed (varimax rotation) to obtain the underlying dimensions. Table 1 shows that a three-factor solution best fits the data. The strongest factor is labeled *Environmental Protectionism*, with high loadings for natural balance, pollution, environmental priority, and conservation. It indicates a mainstream, conventional type of environmentalism; respondents scoring high on this factor desired a balance between production and conservation. The second, a *Deep Ecology* factor, contained items for non-domination of nature, non-utilitarianism toward nature, and distrust of industry. It captures a nature-rights philosophy; respondents scoring high rejected anthropocentrism and accorded rights to other species, especially vis-a-vis industrialists. The third, a *Limits-to-Technology* dimension, had high loadings for limits-to-growth and skepticism toward science. It taps an anti-developmental approach to the environment; respondents scoring high subordinated technocratic values to natural ones. Since summative scales are less vulnerable to error than factor scores, the items of each factor were added to form variables for the three eco-dimensions.

TABLE 1
FACTOR PATTERN MATRIX OF ENVIRONMENTAL ITEMS

Item	Environmental Protectionism	Deep Ecology	Limits-to-Technology
Upsetting nature's balance	.732		
Pollution danger	.690		
Priority of the environment	.666		
Conserving resources	.571		
Non-domination over nature	.781		
Non-utilitarianism toward nature		.752	
Distrust of industry	.607		
Distrust of technology	.690		
Limits to growth	.634		
Eigenvalue	2.02	1.62	1.22
Percent of variance	.22	.18	.14
Total factorial determination =	.54		
N = 542			

The study first employs conventional correlation and analysis-of-variance techniques to see if any structuring by the traditional class and new middle class (as well as overall sector) variables is observable on the three eco-factors. It then uses multidimensional techniques (proximity scaling, cluster analysis, and associated property vectors) to search for unique coalitions and cleavages among sectors suggested by transitional disequilibrium.

FINDINGS

The traditional class variable has little utility for predicting opinion on environmentalism. All the correlations between class and the three eco-factors are near-zero (-.01 for Environmental Protectionism, -.01 for Deep Ecology, and -.03 for Limits-to-Technology).

The variable for new middle class also fails to structure opinion. The correlations provide little support for the perspective (-.02, -.05, and -.05). (Indeed, no social-sectoral structuring was found using the elongated 12-point variable of all the sectors used in new middle class theorizing. A conventional analysis-of-variance was conducted to see if the variable could structure opinion on the three individual eco-factors. However, it has little structuring power; none of the significance levels rise above .10 [see Table 2].)

TABLE 2
SECTORAL SCORES ON ECO-FACTORS

Sector*	Environmental Protectionism	Deep Ecology	Limits-to-Technology
Farmers	18.3	5.5	5.6
Unskilled workers	18.2	6.9	4.6
Skilled workers	18.5	6.7	5.1
Homemakers	18.1	6.2	4.7
Small businesses	18.3	6.3	4.6
Clericals	18.7	6.8	4.7
Human services	18.6	7.0	5.2
Educators	18.3	7.3	4.6
Technicians	17.8	7.0	4.4
Professionals	17.2	7.0	5.5
Private managers	18.3	6.9	4.3
Government employees	18.2	5.9	4.6
F =	0.99	1.10	1.48
p =	.412	.361	.134
N =	514	505	507

*The respondents provided the following self-descriptions of their occupations for the 12 sectors. *Farmers*: self-evident; *unskilled workers*: custodian, housecleaner, maintenance worker, dishwasher, groundskeeper, waiter and waitress, cook, cashier, salesclerk; *skilled workers*: factory worker, machinist, machine/equipment operator, mechanic, welder, carpenter, roofer, road or building construction, electrician, electronics assembly and repair, bus or truck driver, butcher, beautician, housepainter; *homemaker*: self-evident; *small businesses*: self-employed, real estate agent, insurance broker, contractor; *clericals*: secretary, typist, clerk, bookkeeper, paralegal; *human services*: welfare worker, therapist, teacher of disabled, nurse or nurse's aide, hygienist, speech pathologist; *educators*: university professor, teacher or teacher's aide, counselor, librarian; *technicians*: engineer, technician, draftsperson, computer programmer or operator, research and development officer or employee; *professionals*: economist, lawyer, commercial artist, minister, doctor, dentist, pharmacist; *private managers*: plant/office manager, banker, corporate owner or administrator or executive, production supervisor; *government employee*: office supervisor, law enforcer, corrections officer, tax collector, mayor, councilperson, executive assistant, court clerk, military officer or non-com, surveyor, highway superintendent.

Hence, as the transitional disequilibrium perspective suggests, more sophisticated exploratory and multidimensional techniques may be necessary to

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find any social-locational basis of opinion. First, proximity scaling was employed. This method allows us to search for social patterning by examining the distances among sectors along the three eco-factors jointly considered. The previous dimension-by-dimension analysis may have obscured an actual social structuring along a single environmentalism construct of all three dimensions. Proximity scaling can provide a mapping of sectoral opinion-positions on the three factors combined. Proximity scores, by emphasizing distances in a global spatial configuration, can determine the social spaces between sectors with respect to the environmentalism construct.

The mean score for each sector on each of the factor-based scales was computed. The resulting three variables, containing the sectors' scores on each of the three eco-factors, were then standardized and converted to social distances in a Euclidean coefficient matrix. The matrix contains the distances between each sector and every other sector on the three factors combined.

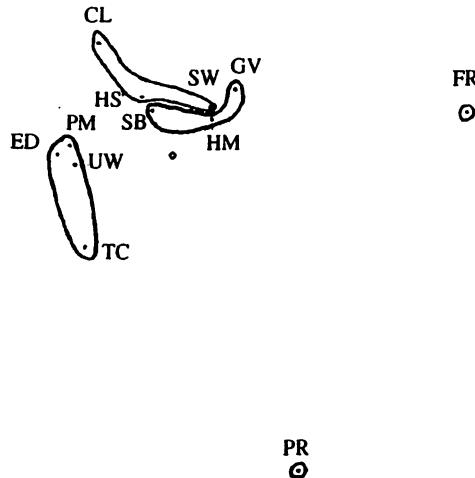
As a preliminary cut at the data, the five largest and five smallest scores of distances between sectors were examined to explore for hints of cleavages and coalitions. The largest distances suggest that farmers are a unique sector. The four largest scores show that farmers are most distant from industrialists, technicians, professionals, and educators. Hence, some hint of a cleavage between an urban technocratic coalition and a rural anti-technocratic sector is observable. The fifth largest score shows clerical employees located far from professionals. This cleavage within white-collar ranks directly contradicts, of course, both the traditional class and the new middle class perspectives.

The five smallest scores, however, reveal no obvious multi-sectoral coalitioning. However, they suggest some bilateral alliances: homemakers with government employees and educators; educators with unskilled workers; human services with skilled workers; and government employees with small businesses. In sum, while some sectoral patterning can be observed, no distinct sets of sectors emerge. A more comprehensive picture of sectors' locations is needed.

Second, therefore, a visual picture of all the sectors' locations on the environmental construct was generated by scaling the distance data. Alternating least squares was employed, with untied ordinal-data criteria, to produce such a mapping. A two-dimensional configuration emerged as the most statistically acceptable, parsimonious, interpretable, and graphically useful solution. The scree diagram showed a distinct elbow over the second dimension; the stress value (.15) and the R² (93 percent) for the two-dimensional solution were acceptable.²

Figure 1 displays the configuration of the 12 sectors. Closest to the centroid, or the modal point in the space, lie homemakers, small businesses, and human services. Farthest from the centroid are farmers and professionals. These two outlying sectors, as noted above, are more distant from each other than any other two sectors; here we also see that they lie farthest from the mode of the configuration. Hence some cleavage is evident, between these two sectors, and between them and the rest of the community. The other sectors, in contrast, gravitate toward the centroid, but no distinct coalitions are apparent.

FIGURE 1
SECTORAL DISTANCES ON ENVIRONMENTAL ATTITUDES^a



^aSmallest circle at the upper left represents the centroid of the configuration. CL = clericals; HS = human services; SW = skilled workers; SB = small businesses; HM = homemakers; GV = government; FR = farmers; ED = education; PM = private managers and owners; UW = unskilled workers; TC = technicians; PR = professionals.

Third, cluster analysis was used to search for coalition patterns. Cluster or "network" techniques can detect "neighborhoods" of sectors; they can determine the number of groupings and the degree to which their members form tight coalitions.³ Figure 2 shows that a five-cluster solution best fits the data. The first noticeable jump in fusion coefficients occurs between five (3.21) and four (5.06) clusters, indicating a joining of dissimilar cases at the four-cluster solution.

FIGURE 2
SECTORAL CLUSTERS ON ECO-FACTORS

The clusters are drawn in Figure 1. *Professionals* and *Farmers*, as hinted above, form extreme unisectoral "clusters." Closest to the centroid lies what can be called a *Main Street* coalition of small businesses, homemakers, and government employees, with homemakers as its prototypical core. This grouping best represents the "community norm" concerning environmentalism. Not far removed, however, lies a *Skilled Workforce* cluster containing human services, clericals, and skilled industrial workers, with human services as its prototypical core. The final cluster is a *Technocracy* grouping of technicians, private managers, educators and unskilled workers. Hence, sectoral location seems relevant, but contrary to the traditional class and new middle class perspectives, it is relevant in a complex and not immediately intuitive way.

Fourth, the ability of the clusters to structure positions on each of the three environmental dimensions was tested. Whereas the simple social-locational variables used above were unable to structure opinion on the eco-factors, the sectoral *clusters* may prove more useful. A five-point sectoral-cluster variable was constructed and related to the three eco-factors using analysis-of-variance. Table 3 provides the cluster scores on the three factors. The findings indicate that the cluster variable is useful for structuring positions. All three tests are significant at the .05 level.

On the Environmental Protectionism factor, all the clusters coalesced around the mean value except for the Professionals, who had a comparatively low score. This finding sharply contradicts the new middle class notion that professionals are an NSM vanguard. Overall, protection of the environment has a wide

community base. It is supported by a massive "super-coalition" which excludes only the Professionals. The finding accords with recent surveys which document mass support for traditional environmental measures such as conservation and pollution-abatement (Davis and Smith, 1988).

TABLE 3
CLUSTER SCORES ON ECO-FACTORS

Cluster	Environmental Protectionism	Deep Ecology	Limits-to-Technology
Farmers	18.3	5.5	5.6
Main Street	18.2	6.1	4.6
Skilled Workforce	18.5	6.8	5.0
Professionals	17.2	7.0	5.5
Technocracy	18.2	7.1	4.5
F =	2.58	3.09	3.55
p =	.037	.016	.007
N =	560	553	555

On the Deep Ecology factor we also see some unexpected results. Farmers were distinctly "shallow" environmentalists; they expressed a utilitarian and human-dominationist philosophy toward nature, scoring lowest of all the clusters. Surprisingly the Technocracy cluster (technicians, educators, private managers, unskilled workers) scored highest, and the Professionals second-highest, on Deep Ecology. However, while all four sectors in the Technocracy cluster had high scores on Deep Ecology, educators and technicians were more supportive than private managers and unskilled workers (see Table 2). Still, in general the Technocracy and Professionals were most likely to disagree with a utilitarian and human-dominationist approach to nature.

On the Limits-to-Technology factor, however, Professionals scored second-highest while the Technocracy scored lowest. Apparently, in contrast to the Professionals, the Technocracy felt its economic interests threatened by limits-to-growth and skepticism toward science and technology. It was joined in this view by the Main Street cluster, the traditional "boosters" of economic development. In sharp contrast to these clusters, the Farmers scored highest on the Limits-to-Technology factor, indicating an anti-development animus. Thus, while the agrarian sector proved anti-environmentalist in terms of its utilitarian/dominationist approach to the land, it proved pro-environmentalist in terms of its skepticism toward unlimited growth and technology which have threatened and damaged that land.

Finally, the ability of associated property vectors to structure sectoral positions on the environmental construct was tested. As noted above, the

disequilibrium perspective leaves open the possibility that traditional class and other conventional variables may be related to the complex of coalitions and cleavages among sectors. Such variables may tap both old and new societies in ways especially relevant to "transition zone" issues. These variables may provide a clue to the deep structure undergirding the sectoral locations in multidimensional space. Testing for associated property vectors can uncover such a hidden structure underlying the distances among the sectors. By regressing dummy variables measuring the social characteristics of the sectors over variables indicating the two point-coordinates of their locations in the distance configuration (Figure 1), one can obtain a more complete understanding of the opinion structure.

Eight social-locational and other variables commonly cited in the literature as explanations for environmental positions were constructed: traditional class; new middle class; education; enjoyment of living in the community; rural residence; democratic-party affiliation; employment; and conservatism. From the (sometimes conflicting) literature, it was hypothesized that pro-environmental positions in the configuration would characterize sectors which were upper class; new middle class; educated; enjoying residence in the community; urban; affiliated with the democratic party; employed; and liberal. High R²'s for relationships indicate the vector-variables which best account for the distances among the sectors.

The results prove only suggestive. The R²'s turned out insufficiently large for unambiguous selection as vectors (4 to 41 percent). Democratic-party affiliation and education, however, were moderately related to sectoral positions (31 and 41 percents). Further, these two vectors were completely orthogonal; the Pearson's r for the relationship between mean scores for the sectors on the two variables was zero, indicating independent contributions to the structuring. Thus a two-dimensional cleavage structure, albeit weak, appears to underlie the inter-sectoral distances on the environmental construct. More specifically, sectors located near the democratic end of the party vector, especially the Skilled Workforce cluster (skilled workers, human services, clericals), were somewhat more favorable to Deep Ecology and Limits-to-Technology than were the republican sectors, especially the Technocracy. And sectors located near the high end of the education vector were somewhat less favorable toward Environmental Protectionism but more favorable toward Deep Ecology than were the less educated.

If we regard party affiliation and education as indicators of class interest and consciousness, then their emergence as vectors accounting for the "transition zone" issue of environmentalism may be understandable. Indeed, the findings harmonize well with the disequilibrium perspective. Class interest in the form of party affiliation is somewhat related to environmental positions; a hint of the continuing importance of industrial political institutions, as evident in the term "postindustrial," is observable. At the same time, education is the most important vector underlying sectoral distances. It contributes to the

environmentalist consciousness of postindustrialism. Thus modern society, perhaps, is caught between the class politics of industrialism and the consciousness politics of the new age, whatever that turns out to be.

In sum, the findings support the cautionary tales of transitional disequilibrium. Relationships using the variables for traditional class and new middle class (and even disaggregated sector) all failed to reach significance. Proximity, cluster, and vector analyses were necessary before clear sectoral divisions and alignments and their underlying bases could be detected. The cleavages were unexpected, and the coalitions included some strange postindustrial bedfellows indeed.

IMPLICATIONS

The findings have implications for the research and practice of postindustrial politics. Traditional variables and techniques should be reassessed. Researchers may need to innovate methodologically to construct more complex societal variables, and combinations thereof, to ascertain coalitions and cleavages. Multidimensional techniques seem essential in this methodological repertoire, to detect and map the social-locational configurations of postindustrial societies. Conventional techniques may hide more than they reveal. Social basing is still relevant, yet traditional techniques have difficulty isolating the novel alignments and divisions, especially on the various dimensions of complex issues.

If the task confronting researchers is daunting, that facing politicians is frustrating. Politicians, for good reason, have difficulty discerning sectoral positions on new multidimensional issues like environmentalism. In this study, much of the conventional wisdom about sectors (professionals for example) proved incorrect. If the coalitions and cleavages of postindustrial politics seem confusing, that perception may be accurate. Sectoral coalitioning is likely to be complex and even counterintuitive. Postindustrial issues are best analyzed multidimensionally. A main street cluster backing the moderate environmental dimension of protectionism may be clearly observable, yet the number of supportive sectors is likely to be small. Politicians will be hesitant to write off key sectoral clusters like the technocracy, professionals, farmers, and skilled workforce who are less committed to the position. On the more radical dimensions like deep ecology and limits-to-technology, sectoral positions are likely to be more fragmented. Yet if the demands put forward by NSMs cannot be aggregated, coopted, and institutionalized by politicians, the potential for disruption grows.

The implications of the findings for the realignment of political parties are unclear. We saw that traditional party affiliation helped to structure sectoral distances, but its influence was weak. The question then arises: Can new parties be built out of the unusual social configurations on postindustrial issues? Green parties have arisen, but their growth has been erratic, and perhaps understandably so. What exactly does "green" mean? It clearly means different things to different sectoral clusters. Can a green coalition be built when no such coalition exists,

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except perhaps on the almost consensual dimension of protectionism? New parties may be as unable to build a national consensus around complex issues as the old. Indeed, parties may be a time-dependent phenomenon, having emerged out of a unique, industrial mass-society, stage of political history. Today the postmodernist "no-party" option may be an understandable response to the transition stage between industrialism and the new age--and a prophetic call to consciousness?

ENDNOTES

1. By sectors are meant those sets of individual occupations in modern, complex economies which, according to the social-scientific literature on the new middle class and environmentalism, presumably exhibit a unique set of attitudes on the total array of postindustrial issues. As one referee usefully pointed out, these sectors constitute a mix of dimensions, e.g., traditional class (workers vs. managers), classical economic sector (public or governmental vs. private employment), etc. Further, within sectors may be found a variety of statuses, e.g., poor vs. affluent housewives. Thus the existing literature tends to support a major theme of this paper, namely the need for new classificatory formulations of occupation in postindustrial societies.
2. The scree plot indicated a complete convergence. Kruskal's Stress Formula 1 was used for stress values. The low value for the two-dimensional solution suggested a global rather than local minimum. The R^2 , representing the proportion of variance in the scaled disparities data accounted for by their corresponding proximity distances, indicated a near-perfect fit. The R^2 's for three or more dimensions showed only minor improvements. Also, the moderate number of datapoints requires caution in accepting a higher-dimension solution. Plots of linear fit, nonlinear fit, and transformation revealed steep slopes and no nonmonotonic, nonlinear shapes. No large or patterned residual outliers, which would indicate the need for additional dimensions, were evident.
3. An agglomerative hierarchical routine using Ward's method with Euclidean distances was utilized as most appropriate for coalitional analysis.

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BOOK REVIEWS

For Richer, for Poorer: Early Colonial Marriages.. Russell Penny (ed.). Australia: Melbourne University Press, 1994. 146 pp.

This interesting analysis of nineteenth century marriage among six English couples involved in the colonization of Australia draws on rich sources of historical data, including personal letters and prose, to depict how these couples merged what Russell calls two "inseparably linked and totally incompatible" concepts: marriage and colonization. The major contradiction was in the portrayal of colonization as an almost exclusively public arena, male-centered enterprise involving adventure, conquest, and society-building; yet, marriage and the making of families were also intricately tied to the concept of civilization. Indeed, social reform and economic progress were thought to require the creation "decent families," defined as breadwinner/homemaker units. The promotion of this family model led to a second contradiction -- the conflict between female subordination and the essential economic roles women usually assumed. How, then, did couples reconcile the labor demands of colonization with the ideologies of traditional marriage and gender inequality?

Interestingly, the heavy reliance of colonial society on both the productive and reproductive labor of women did not challenge gender ideologies which assigned women domestic roles. While colonization provided men with a variety of masculinity styles from which to choose, femininity was still defined as being "restrained, ladylike, affectionate, devoted, dutiful, and by implication domestic (20)." Moreover, the attribution of these characteristics to particular women influenced their status and treatment in colonial society. For example, femininity was seen as being beyond the reach of most colonial women because they were of convict origin; thus, they endured deplorable living conditions, forced prostitution, and economic exploitation. Most of the wives of the British colonists were at least assumed to be in conformity with the ideals femininity and its code of morality, although neither their social background nor their husband's status made them exempt from the restrictions imposed by gender norms.

Indeed, violations of sexual and gender norms received wide public censorship, as vividly illustrated in two of the marriages presented in this book. In one case a leading citizen of Sydney, William Wentworth, married his mistress, Sarah. While he went on to become a prosperous and well-respected politician, any effort by Sarah to present herself to "polite society" resulted in a public outcry. The writer notes that although her "humble and convict parentage could be overlooked; her sexual immorality could not. She was, forever, the damned whore (120)." Lady Jane Franklin also experienced the penalties imposed on women who were defined as violating the boundaries between the public and private arenas. When her husband was assigned Lieutenant Governor of Van Diemen's Land, she was enthralled with the possibility of helping in the creation of a free society. Her highly visible public role as her husband's key political adviser and consultant, however, led to accusations of interference with governmental affairs and neglect of her domestic duties. Critics charged that the