ENVIRONMENTALISM, MIDDLE-CLASS RADICALISM AND POLITICS

Stephen Cotgrove and Andrew Duff

There has been increasing interest in recent years in the possibility of fundamental changes in the political system, with the emergence of new social groups, new interests and new values which cut across traditional class-based alignments and cleavages. Moreover, in recent decades, there has been a marked increase in direct action, and the growth of outsider politics, a decline in partisan support for the traditional parties, and other indications of a loss of legitimacy.[1] Such indications of strain and stress take on a special significance with the possibility that industrial societies, which have relied so heavily on policies of sustained and rapid economic growth for maintaining a broad spectrum of consensus and support, may be facing special challenges with intransigent problems of unemployment and inflation, exacerbated by increasing shortages of materials and energy.[2]

The environmentalist movement provides an important case study and focus for exploring such issues. In the last decade the awareness of environmental problems has not only increased dramatically, but has taken on a new political significance. Environmentalist groups have been at the centre of protest, locally and nationally, against motorways, airports and dams, and have vigorously opposed the nuclear programme in a number of countries. And in the last few years, newly formed 'ecology parties' have captured a sizeable proportion of the votes at elections. The significance of the environment has shifted from a preoccupation with the preservation of the countryside, historic buildings and local amenities, to become the focus for radical protest. Above all, environmentalists have challenged the central values and ideology of industrial society. It is with this dimension of the environmentalist movement that this analysis is concerned. Is environmental protest indicative of a fundamental

change in social values, and if so, what strains and problems will this generate for the political system? What are the sources of support? Is there a potentially larger political constituency?

In order to clarify the analysis, it is necessary first to emphasise the heterogeneous character of those who come under the broad umbrella of environmentalists.[3] On the one hand there are those who are mainly interested in protecting wildlife, preserving the countryside, and our national heritage of buildings. They wish simply to give a higher priority to the protection of the environment. But at the other extreme there are those who argue that the problem requires more than simply a shift in priorities, and that fundamental changes are essential if we are to survive growing threats to the environment and the exhaustion of materials which result from a high-growth, energy-consuming and environmentally-damaging way of life. It is environmentalists in this 'strong' sense, and who have joined associations which promote such policies, who are the object of this analysis.

Environmental Awareness and Beliefs

The most plausible explanation for environmental activism is that those who join such associations are particularly aware of the problems. To test this we asked a series of questions about environmental issues. The questionnaire was distributed to three target groups: environmentalists (members of Friends of the Earth and the Conservation Society), leading industrialists (drawn from *Business Who's Who* and *Who's Who in British Engineering*), and a sample of the general public from Bath and Swindon.[4] The results were surprising. On items testing awareness of environmental damage such as 'Rivers and waterways are seriously threatened by pollution' and 'Some animals and plants are being threatened with extinction', both environmentalists and the public generally agreed that the environment was being damaged, although the strength of agreement was greater for environmentalists[5] (Table 1, scale 1). On a cluster of items testing awareness of shortages, such as 'There are likely to be serious and disruptive shortages of essential raw materials if things go on as they are', there was still substantial agreement about the threat of shortages (Table 1, scale 2). So it is clear that awareness of environmental dangers can only account in part for membership of the more activist environmental groups.

TABLE 1

*Beliefs and Values**

Scale	(a) Environmentalists			(b) Public			(c) Industrialists		
	Mean	S.D.	N	Mean	S.D.	N	Mean	S.D.	N
1 Environmental damage	80.58	11.26	425	72.21	13.73	268	58.68	15.71	217
2 Environmental shortages	81.11	10.76	429	69.42	14.59	266	62.83	15.28	218
3 Anti-industrial society	46.01	8.89	416	36.57	9.81	265	37.19	8.90	211
4 Anti-science	55.52	18.35	430	36.15	15.74	273	30.68	15.07	219
5 Post-materialism	60.20	12.05	425	44.74	11.07	274	38.56	12.23	215
6 Economic individualism	39.50	15.60	418	55.16	12.60	250	66.16	12.94	215

Scale scores were calculated as the sum of Likert scores (range 1-5), converted to percentages. For each scale negative items were recoded so that a high score corresponds to increasing agreement with the dimension being measured.

It is when we turn to an exploration of the significance and meaning of beliefs about the environment in the context of wider systems of belief and action that larger differences between environmentalists and others begin to emerge. Firstly, environmentalists see environmental dangers and problems to be much more serious: 93 per cent define them as extremely serious or very serious, compared with 56 per cent of the general public. Environmentalists differed too in their attitude toward science and technology. In answer to items such as 'Science and technology can solve our problems by finding new sources of energy, materials, and ways of increasing food production'. and 'We attach too much importance to reason and science to the neglect of our intuition', it was the environmentalists who showed their lack of confidence in, and even hostility to science and technology by contrast with the public (Table 1, scale 4). And on a scale of opposition to the institutions of industrial society environmentalists were significantly more opposed than members of the general public (Table 1, scale 3). Substantial differences in values and ideals between the two groups also emerged. Using a modified form of Inglehart's[6] scale for measuring 'material' and 'post-material' values, we found a marked polarization between environmentalists and the public, the former scoring higher on items indicating support for post-material values, and much lower on material items (Table 1 scale 5). Support for material values was indicated by high priority given to items such as 'Maintaining a high rate of economic growth' and 'Maintaining a stable economy'. By contrast, the environmentalists gave high priority to 'Progressing toward a less impersonal, more humane society', and 'Progressing toward a society where ideas are more important than money'.

The second source of empirical evidence is more complex. Our study of environmentalists' literature pointed to the probability that environmentalists held strongly negative views about many features of industrial society. In order to explore this, we devised a series of items to enable respondents to indicate their preferences for the kind of society they would like to see. Factor analysis of 21 such items was carried out, using principal factoring with iteration and varimax rotation.[7] Four factors were obtained. It is the first of these (covering 11 items out of 21), labelled economic individualism, which is of particular interest here (Figure 1). Again, the polarization on scale scores was marked (Table 1 scale 6).

FIGURE 1

Factor 1: Economic Individualism

(Private interests, differentials, rewards for achievement, law and order, authority)

Item No.		*Factor Loading*
3	A society in which there is a continually growing economy, or one in which there is no growth?	(0.363)
4	A society in which production is selective (e.g. towards products which use little energy), or one which aims to satisfy the market for consumer goods?	(-0.310)
9	A society with strong law and order, or one which attaches relatively less importance to law and order?	(0.740)
10	A society in which the individual has a considerable say in how things get decided at his work-place, or one in which decisions (after consultation) are left to management?	(-0.620)
11	A society which emphasizes work which is humanly satisfying, or one where work is controlled mainly by the needs of industry?	(-0.382)
12	A society which emphasizes rewards for talent and achievement, or one where the emphasis is on other criteria (such as need)?	(0.694)
13	A predominantly capitalist society, in which market forces and private interests predominate, or a predominantly socialist society, in which public interests and a controlled market predominate?	(0.747)
14	A society which emphasises the social and collective provision of welfare, or one where the individual is encouraged to look after himself?	(-0.579)
16	A society which emphasizes the participation of individuals in major government decisions, or one which leaves the final decisions to the judgement of the elected government?	(-0.428)
17	A society which strengthens the influence of experts in complex government decisions (such as nuclear energy), or one which facilitates the participation of the 'man in the street'?	(0.495)
21	A society which recognizes differentials related to skill, education and achievement, or one which emphasizes similar incomes and rewards for everybody?	(0.783)

At the top of the list for the general public was preference for a society with more emphasis on law and order, followed by satisfying work, economic growth, differentials, and rewards for achievement. By contrast, environmentalists want a society which above all attaches more importance to humanly satisfying work, in which production is selective rather than aiming to satisfy the demand for consumer goods, which sets limits to economic growth, and emphasizes participation, as against the influence of experts.

Environments at Risk

What differentiates the environmentalists then from the general public is not primarily their awareness of environmental dangers. Rather, it is the use to which they have put environmental beliefs which distinguishes them. They are opposed to the dominant values and institutions of industrial society, and want to change them. Now such a challenge faces enormous odds. But the environment has provided ammunition for their case. Beliefs about environmental dangers have been harnessed and put to work to support their challenge to the dominant values and ideology. What they are saying is that the society we have got is bad: that the way we behave is against Nature, our children will suffer, and time is running out. They are adopting a practice which is widespread in human societies. In the words of Mary Douglas, 'Time, money, God and Nature are the universal trump cards plunked down to win an argument'.[8] So, she says, the 'laws of nature are dragged in to sanction the moral code: this kind of disease is caught by adultery, that by incest; this meteorological disaster is the effect of political disloyalty, that the effect of impiety'.[9] In advanced industrial societies too, the environment has become a doom-point: a trump card thrown down by the environmentalists to win a moral argument. Nuclear power stations in particular have come to have a deep symbolic significance: centralized, technologically complex and hazardous, and reinforcing all those trends in society which environmentalists most fear and dislike —the increasing domination of experts, threatening the freedom of the individual, and reinforcing totalitarian tendencies. Opposition to nuclear power is seen for many as a key issue on which to take a stand against the further advance of an alliance between state power and commercial interests. For the objectors, the material advantages from nuclear power cannot justify the risks involved.[10]

As was stressed earlier, environmentalists are far from being a homogeneous group. This raises problems in testing ideas about the political significance of the environmentalists' movement. Some members of the environment associations do not share such radical views, nor wish to harness environmental beliefs to challenging the dominant values. Their main concern is rather with the protection of the countryside. Indeed, a significant minority of our sample support both material values and 'economic individualism'. The most im-

portant distinguishing factor was position on the political spectrum. Those on the left had less confidence in science, higher scores on the anti-industrial society scale, higher post-material scores, and were more opposed to economic individualism. And despite the fact that their perceptions of environmental damage and shortages did not differ from those on the right, it was this group who were most likely to rate environmental dangers as extremely or very serious. Such evidence lends even stronger support to the view that it is the use to which environmental beliefs are put which is the key to the political significance of the environmentalist movement.

Competing Paradigms

The environmentalist movement then has provided a vehicle for harnessing beliefs about environmental dangers to support an attack on the central values and beliefs of industrial capitalism—the hegemony of economic goals and values, and the rational and systematic orientation of action to these ends. In industrial societies economic criteria become the bench-mark by which a wide range of individual and social action is judged and evaluated. And belief in the market and market mechanisms is quite central.[11] Clustering round this core belief is the conviction that enterprise flourishes best in a system of risks and rewards, that differentials are necessary incentives to maximize effort and to call forth talent and achievement, and in the necessity for some form of division of labour, and a hierarchy of skills and expertise.[12] In particular, there is a belief in the competence of experts in general and of scientists in particular. More than this, scientific knowledge and the scientific method enjoy a special epistemological status as superior ways of knowing, so that statements of the form 'it is a scientific fact that   .' are treated with special deference. And as a corollary, there is an emphasis on quantification.[13] In short, it is possible to identify a dominant social paradigm —a set of beliefs about the nature of society which provides both a guide to action and a legitimation of policies.

The alternative environmental paradigm polarizes on almost every issue. The first and most obvious point of difference is the environmentalists' opposition to the dominant value attached to economic growth. This in turn rests on beliefs that the earth's resources are finite—a view encapsulated in Boulding's telling metaphor 'spaceship earth'. But their disagreement with the central values and be-

liefs of the dominant social paradigm runs deeper than this. Not only do they challenge the importance attached to material and economic goals, they by contrast give much higher priority to the realization of non-material values—to social relationships and community, to the exercise of human skills and capacities, and to increased participation in decisions that affect our daily lives. They disagree too with the beliefs of the dominant social paradigm about the way society works. They have little confidence in science and technology to come up with a technical fix to solve the problems of material and energy shortages. And this is in part rooted in a different view of nature which stresses the delicate balance of ecological systems and possibly irreversible damage which may result from the interventions of high technology.[14] They question whether the market is the best way to supply people with the things they want, and the importance of differentials as rewards for skill and achievement. They hold a completely different world view, with different beliefs about the way society works, and about what should be the values and goals guiding policy and the criteria of choice. It is, in short, a counter-paradigm.

What is being argued then is that what differentiates environmentalists is a complex of beliefs about the nature of industrial society, about both the effectiveness and desirability of many of its core institutions and values. Their world-view differs markedly from the dominant view. It constitutes an alternative paradigm, with different beliefs about nature and man's relations with his environment, about how the economy can best be organized, about politics and about the nature of society (Figure 2).

Middle-Class Radicalism

How then can we explain the existence of a group within industrial societies which rejects the dominant social paradigm? The most plausible explanation is to be found when we look at the occupations of environmentalists. What is particularly striking is the high proportion of environmentalists in our sample occupying roles in the nonproductive service sector: doctors, social workers, teachers, and the creative arts (Table 2).[15] In short, it will be argued, environmentalists are drawn predominantly from a specific fraction of the middle class whose interests and values diverge markedly from other groups in industrial societies. Firstly, environmentalism is an expression

FIGURE 2

Competing Social Paradigms

	Dominant Social Paradigm	*Alternative Environmental Paradigm*
CORE VALUES	Material (economic growth)	Non-material (self-actualization)
	Natural environment valued as resource	Natural environment intrinsically valued
	Domination over nature	Harmony with nature
ECONOMY	Market forces	Public interest
	Risk and reward	Safety
	Rewards for achievement	Incomes related to need
	Differentials	Egalitarian
	Individual self-help	Collective/social provision
POLITY	Authoritative structures (experts influential)	Participative structures (citizen/worker involvement)
	Hierarchical	
	Law and order	Non-hierarchical
SOCIETY		Liberation
	Centralized	Decentralized
	Large-scale	Small-scale
	Associational	Communal
	Ordered	Flexible
NATURE	Ample reserves	Earth's resources limited
	Nature hostile/neutral	Nature benign
	Environment controllable	Nature delicately balanced
KNOWLEDGE	Confidence in science and technology	Limits to science
	Rationality of means	Rationality of ends
	Separation of fact/value, thought/feeling	Integration of fact/value, thought/feeling

of the interests of those whose class position in the non-productive sector locates them at the periphery of the institutions and processes of industrial capitalist societies. Hence, their concern to win greater participation and influence and thus to strengthen the political role of their members. It is a protest against alienation from the processes of decision making, and the depoliticization of issues through the usurpation of policy decisions by experts, operating within the dominant economic values. It is the political dimension of their role which goes far to account for their particular form of dissent. Their sense of being political outsiders is reflected especially in the attitudes of environmentalists towards working through the existing political parties. As many as 17 per cent rejected the left-right dimension in political beliefs, compared with 4.7 per cent of the

341

industrial sample. And 64 per cent would support direct action to influence government decisions on environmental issues, compared with 60 per cent of the industrial sample who were opposed.

TABLE 2

Occupations of Environmentalists and Public

	Environ- mentalists %	Public %
Commerce and industry		
— professional and supervisory	14.3	13.6
— clerical	5.6	12.2
Self-employed	9.6	4.8
Service, welfare, creative	38.4	12.2
Manual	5.4	28.2
Retired	9.1	7.8
Housewife	8.0	18.0
Unemployed	1.6	1.7
Student	8.0	1.4
	100.0	99.9
	(N = 427)	(N = 294)

But this is only part of the answer. Their attack is not simply rooted in their subordinate position. It is also a challenge to the goals and values of the dominant class, and the structures and institutions through which these are realized. Environmentalists' rejection of beliefs in the efficacy of the market, risk-taking and rewards for achievement, and of the overriding goal of economic growth and of economic criteria is a challenge to the hegemonic ideology which legitimates the institutions and politics of industrial capitalism. Central to the operation of such societies is the role of the market. It is the relation between individuals and those subsystems of society which operate either within or largely outside the market which we will argue is the clue to the clash of value systems and social paradigms.

If this explanation is correct, then we would expect support for the dominant social paradigm to be strongest in precisely those occupations which are the polar opposite of the environmentalists— among those who occupy dominant positions in the market sector. As can be seen from Table 1, column C, support for the dominant social paradigm is markedly stronger amongst our industrial sample. It is here that we find overwhelming support for economic indivi-

dualism; for differentials, rewards for achievement, for a society in which market forces and private interests predominate and for managerial authority.

What we are arguing then is that the clue to understanding the quite different values and beliefs of environmentalists and 'industrialists' is to be found in part in their relations to the core economic institutions of society. It is class position and the interests and values which this generates to which we now turn.

The New Middle Class

Analyses of class in industrial societies, especially those in the Marxist tradition, have been overwhelmingly preoccupied with the way in which the capitalist relations of production generate antagonisms and conflicts of interest within societies in which the production of goods and services is the dominant activity. Such a model has faced considerable difficulty in relating a 'middle' class of managers, technicians, and service workers, to the two main antagonistic classes. What is notable is the almost complete omission of any extended discussion of the particular fraction of the middle class which has been identified in this analysis: those operating in those subsystems in industrial societies concerned with the pusuit of non-economic values, and functioning outside the market, and in this sense, non-capitalistic elements persisting within capitalist societies.[16]

The central question raised by this analysis is the extent of any relative autonomy of such subsystems within the framework of the dominant institutions of industrial capitalism. The Marxist tradition sees the institutions of health and welfare as functionally necessary for the reproduction of labour, thus serving the interests of a capitalist class. Now while this may possibly explain state support for 'non-productive' sectors, such an explanation does not offer a satisfactory account of either the interests or values of those who work in the personal service, intellectual, and artistic sectors. Our evidence demonstrates that many such hold values and beliefs which are sharply antagonistic to the dominant ideology.

The precise connection between occupation and values is problematic, though there are strong grounds for concluding that values are a major factor influencing occupational choice.[17] What our evidence does is to draw attention to the relationship between opposition to

the dominant ideology and occupational role. Non-productive sub-systems functioning outside the market, orientated to non-economic goals and values persist in all industrial societies. Those who work in them resist in varying degrees the intrusion of market values and processes (the commercialization of art, the vocationalizing of all education and learning). To the extent that schools, hospitals and welfare agencies operate outside the market-place, and those who work in them are dedicated to maximizing non-economic values, they constitute non-industrial enclaves within industrial societies and are the carriers[18] of alternative non-economic values. And they may well provide a more congenial environment for those for whom the values and ideology of industrial capitalism do not win un-qualified enthusiasm and unquestioning support. In short, those who reject the ideology and values of industrial capitalism are likely to choose careers outside the market-place.[19] Moreover, such occupations can offer a substantial degree of personal autonomy for those who have little taste for a subordinate role in the predominantly hierarchical structures of industrial society.

Discussion: Ideologies, Paradigms, and Political Legitimacy

It is not being suggested that the traditional antagonisms of capital and labour are no longer relevant. Conflicts of power and interest deriving from the ownership and control of production persist. But such conflicts tend to be focused primarily around economic values. What the new politics brings to the surface and feeds in to the political system are demands stemming from non-economic values. These have always constituted an element in left-wing politics, which has never lent support to unbridled economism, and whose dream of a new Jerusalem has gone beyond material goals, however important these have been for those suffering mat-erial deprivation and inequality.[20] Any attempt to assimilate the ideology of this particular fraction of the middle class to that of either the bourgeosie or the proletariat flies in the face of the evi-dence. Nor can their values and beliefs be explained away as 'false consciousness', being firmly rooted in their structural position. But although the new politics cuts across the trade union economism[21] which dominates Labour Party policies, the new dimension is much closer to the left[22] than it is to the right with its strong commitment to the dominant social paradigm. The radicalism located in this par-

ticular fraction of the middle class is then much more than an emotional satisfaction derived from the expression of personal values in action, as Parkin argued from his study of the C.N.D. movement,[23] and has much more radical potential than most theorists have recognized. Although position on the political spectrum accounted for much of the variance in scores on post-materialism and economic individualism, environmentalists had significantly higher post-material scores and were more strongly anti-economic individualism than the general public with the same political affiliations (Table 3).

Many theorists, certainly in the Marxist tradition, see the new middle class as playing an essentially subaltern role as servants of power. Poulantzas, for example, considers their ideology to be rooted in their lack of real power: any specifically bourgeois radicalism taking the form of anarcho-syndicalism. Touraine and Mallet similarly see some oppositional potential within what is variously described as a new class or petit bourgeoisie.[24] Others have emphasized the structural ambiguity of members of an intermediary class between capital and labour, who are volatile and politically unstable in their loyalties.[25] What our analysis does is to draw attention to and emphasize antagonistic values and beliefs within a fraction of the middle class who it is argued are outside the capitalist mode of production and cannot be assimilated to one or the other of the two main contending classes, and who constitute a potentially radical opposition to industrial capitalism.

Now it is not being suggested that environmentalists are about to man the barricades. Nevertheless, environmental issues have provided a focus for direct action—ranging from the disruption of inquiries on motorways, the massive protests against nuclear power sites in Germany and France, our own Windscale inquiry, to the violent opposition to the opening of Tokyo airport and even the strong reaction against the culling of grey seals. But more important, the dominant social paradigm provides not only a set of beliefs about how society works, and taken-for-granted assumptions about goals and criteria: it functions also as an ideology, legitimating and justifying the dominant political institutions and processes. And it is at the level of legitimacy that the environmentalist movement may provide its greatest challenge to the political system. Because of its taken-for-granted character, the dominant social paradigm can

TABLE 3

Economic Individualism and Political Affiliation*

	Environmentalists				Public				Industrialists			
	Mean	S.D.	N	Sig	Mean	S.D.	N	Sig	Mean	S.D.	N	Sig
Left	21.79	9.46	63	***	39.52	13.04	12	***	–	N<5		
Mildly left	35.22	11.69	119	***	49.46	12.02	34	***	N.S.	44.29	10.88	15
Centre	47.64	10.52	81	***	56.30	11.31	50	***	**	64.89	11.79	35
Mildly right	54.40	10.69	53	***	62.77	12.54	47	***	***	69.00	8.67	96
Right	60.20	9.33	15	N.S.	61.33	14.58	21	N.S.	***	73.59	9.98	42
No position	37.25	14.35	65	***	51.22	8.15	56	***	***	62.63	13.37	12

* Economic individualism scale score calculated as sum of scores on the eleven individual items (range 1-7) converted to a percentage. A high score corresponds to support for economic individualism.

N.S. = not significant
 * = p<0.05
 ** = p<0.01
 *** = p<0.001

systematically repress the articulation of alternative viewpoints. Given support for economic values and growth, confidence in experts, and in the power of science and technology to come up with answers, then the conclusions of Mr. Justice Parker at Windscale can be seen to be not only reasonable but right. Given the acceptance of the dominant goals and values of society, problems are seen to be essentially questions of means, soluble by harnessing knowledge and expertise to the political process. Rationality is defined in narrowly technical or instrumental terms. What are properly political questions involving conflicts of values and interest are de-politicized and treated as technical questions.[26] This, it is argued, is precisely what happened at Windscale. It is under such conditions that political institutions distort communications and there is no genuine dialogue. There is little doubt that alternative social paradigms generate major problems of communication and understanding. Hence the charges and counter-charges of unreason and irrationality between environmentalists and supporters of the status quo.[27] From the environmentalist perspective, it is modern industrial societies dominated by the value of 'technology—organization—efficiency—growth—progress whose sanity is called into question: ' only such single-valued mindlessness would cut down the last redwoods, pollute the most beautiful beaches, invent machines to injure and destroy plant and human life. To have only one value, is, in human terms, to be mad. It is to be a machine'.[28] And from the industrialists' perspective, environmentalist policies look silly, utopian, or plain mad.[29]

Those who seek to promote alternative goals and values look with exasperation at the failure of the main parties to grasp the essential issues, and to formulate appropriate policies. The traditional left-right polarization is seen to be no longer relevant.[30] The normal channels for feeding interests and demands into the system are clogged by incomprehension: the hegemony of the dominant taken-for-granted values and beliefs of liberal capitalism blocks off meaningful dialogue and communication. The charges and counter-charges of unreason are rooted in the failure to grasp that what is at stake is competing world-views and ideologies. The debate about environmental issues becomes a dialogue of the blind talking to the deaf. It is such experiences which, it can be argued, contribute to the decline in political legitimacy,[31] a falling-off in support for traditional political parties and processes, and an increase in direct action.

This analysis suggests that many prescriptions for increasing the rationality of the environmentalist debate fail to penetrate to the heart of the problem. Its 'irrational' character is generally diagnosed as being due to a failure to settle crucial scientific and technical issues. Opposition to nuclear energy is seen to be irrational, because the scientific evidence demonstrates it to be safer than windmills.[32] A more sophisticated version recognises that the evidence of those who have an interest in an issue may be partial or distorted. So, it is argued, the way to ensure a rational debate for the inquiry on fast-breeder reactors is to set up more broad-based machinery which would not be dependent on those institutionally committed to official options, but would be able to initiate, conduct or commission independent research.[33] In short, the problem of achieving rationality is seen to be fundamentally one of getting the facts right, and of discovering the right technical and organizational solutions. Such an approach fails to recognise the problems of communication and understanding rooted in alternative paradigms. What is not appreciated is the existence of what may be described as an anthropological problem of competing cultures and meaning systems.[34] If this is correct, then the 'new' politics will present a serious challenge to the parties of the left to come to grips with conflicts of values and beliefs which run deeper than simply a reordering of prorities. Such conflicts have always been evident in the left. But any decisive generational shift away from the overriding materialism and economism of industrial societies, reinforced by intransigent economic problems of 'stagflation' and material and energy shortages, could place new strains on any tenuous consensus.

[1] Kai Hildebrandt & Russel J. Dalton: 'The New Politics: Political Change or Sunshine Politics?', in M. Kaase and K. Von Beyme (eds.): *Elections and Parties*, Sage Publications, German Political Studies Vol. 3, London, 1978, pp. 70-96. A. Marsh: *Protest and Political Consciousness*, Sage Publications, London, 1977. A. Marsh: 'The New Matrix of Political Action', *Futures*, Vol. 11, No. 2, 1979, pp. 91-103. R. Inglehart: *The Silent Revolution: Changing Values and Political Styles Among Western Publics*, Princeton University Press, 1977. I. Crewe *et al.*: 'Partisan Dealignment in Britain, 1964-1974', *British Journal of Political Science*, Vol. 7, No. 1, 1977, pp. 129-190. J. Habermas: *Legitimation Crisis*, Heinemann, London, 1976.

[2] L. N. Lindberg (ed.): *Politics and the Future of Industrial Society*, David McKay, New York, 1976.

[3] For an attempt at a typology of environmentalists, see S. Cotgrove: 'Environmentalism and Utopia', *Sociological Review*, Vol. 24, 1976, pp. 23-42. The group analysed here can be categorized as 'utopian' environmentalists. The term is being used in a descriptive sense to refer to those who have a vision of a better society.

[4] The research is supported by a grant from the Social Science Research Council. The sample sizes and response rates were: environmentalists 441 (79 per cent), general public 316 (62 per cent), industrialists 220 (63 per cent).

[5] Researches in Berlin and America have come to similar conclusions— that the general level of awareness of environmental problems among the general public is high. R. C. Mitchell: 'The Public Speaks Again: A New Environmental Survey', *Resources*, No. 60, 1978. Lester W. Milbrath: *Environmental Beliefs: A Tale of Two Counties*, Mimeographed Report, State University of New York at Buffalo, 1975. H. J. Fietkau: *Environmental Consciousness in Berlin*, unpublished draft, Wissenschaftszentrum Berlin, Internationales Institut für Umwelt und Gesellschaft, 1977.

[6] R. Inglehart, op. cit.

[7] N. H. Nie *et al.*: *SPSS: Statistical Package for the Social Sciences*, second edition, McGraw-Hill, New York, 1975. A form of semantic differential was used to differentiate between opposed images of an ideal society.

[8] M. Douglas: 'Environments at Risk' in J. Benthall (ed.): *Ecology, The Shaping Enquiry*, Longman, London, 1972, pp. 129-145.

[9] M. Douglas: *Purity and Danger*, Penguin, Harmondsworth, 1970, p. 13.

[10] H. J. Otway: 'Risk Assessment and the Social Response to Nuclear Power', *Journal of the British Nuclear Energy Society*, Vol. 16, No. 4, 1977, pp. 327-333; H. J. Otway *et al.*: 'Nuclear Power: the Question of Public Acceptance', *Futures*, vol. 10, No. 2, 1978, pp. 109-118.

[11] Indeed, the market comes to be seen as a natural and self-evident fact having some kind of independent existence outside political and social arrangements. Ernest Gellner: 'A Social Contract in Search of an Idiom: the Demise of the Danegeld State?', *Political Quarterly*, Vol. 46, No. 2, 1975, pp. 127-152.

[12] For an influential statement of this conception of the nature of industrial societies, see Clark Kerr *et al.*: *Industrialism and Industrial Man*, Heinemann, London, 1962.

[13] For an exploration of partisan support for and opposition to science see S. Cotgrove: 'Styles of Thought: Science, Romanticism and Modernisation', *British Journal of Sociology*, Vol. 29, No. 3, 1978, pp. 358-371.

[14] R. E. Dunlap & K. D. Van Liere: 'The "New Environmental Paradigm"', *Journal of Environmental Education*, vol. 9, 1978, pp. 10-19.

[15] Now this is exactly what we had been led to expect from Parkin's earlier studies of the C.N.D. movement. And our evidence broadly supports his conclusions as to the most likely explanation: that 'The occupational location of radicals results from their desire to avoid direct implication in the capitalist economic system'. F. Parkin: *Middle Class Radicalism*, Manchester University Press, 1968, p. 187.

[16] See, for example, R. Crompton & J. Gubbay: *Economy and Class Structure*, Macmillan, London, 1977, pp. 81-85.

[17] For a more detailed discussion, see S. Cotgrove & A. Duff: 'Environmentalism, Values, and Social Change' (unpublished working paper).

[18] The concept of carrier groups derives from K. Mannheim: *Essays on Sociology and Social Psychology*, Routledge & Kegan Paul, London, 1953. See also S. Cotgrove, op. cit., 1978.

[19] M. Rosenberg *et al.*: *Occupations and Values*, Free Press, Glencoe, Ill., 1957.

[20] The recent rise of the Lucas shop stewards' movement pressing for a shift to socially useful products is an indication of such concerns among trade unionists. See D. Elliott & R. Elliott: *The Control of Technology*, Wykeham, London, 1976.

[21] The value system of the trade union movement is perhaps best described as subordinate rather than radical. F. Parkin: *Class Inequality and Political Order*, MacGibbon & Kee, London, 1971. 'Collective bargaining does not call into question the values underlying the existing reward structure, nor does it pose any threat to the institutions which support this structure.' p. 91.

[22] For a more extended discussion of the relationship between the new politics and the left, see Hildebrandt & Dalton, op. cit.

[23] F. Parkin, op. cit., 1968. Parkin came to the conclusion that the 'bomb' had provided the focus for the expression of a specifically middle-class form of radicalism. He drew a distinction between expressive and instrumental politics, and argued that working class radicalism has been primarily instrumental in character, geared to securing a more favourable share of wealth, power and civic rights. By contrast, middle class radicals were typically more concerned with issues of a moral or humanitarian nature—what can be labelled as 'Home Office issues' such as the liberalization of the law and racial discrimination. The main payoff, argued Parkin, was 'the emotional satisfaction derived from expressing personal values in action' rather than any direct benefit to the class interests of supporters.

[24] For a more extended summary and analysis of theories on the new middle class, see George Ross: 'Marxism and the New Middle Classes: French Critiques', *Theory and Society*, Vol. 5, No. 2, 1978, pp. 163-190.

[25] R. Crompton & J. Gubbay, op. cit., pp. 171, 174-175, 196-203.

[26] J. Habermas refers to this process as the scientization of politics; see *Toward a Rational Society*, Heinemann, London, 1971.

[27] An analysis of the Windscale report by *The Ecologist* (Spring 1978) concluded in a tone of desperation that 'reason and truth no longer prevail at Public Inquiries', and that the only course open is a programme of non-violent civil disobedience. Environmentalists on the other hand are accused of being emotional and irrational, and are dismissed in pejorative terms as 'eco-maniacs' and 'eco-nuts'.

[28] C. Reich: *Greening of America*, Penguin, Harmondsworth, 1970.

[29] This interpretation is strengthened by the evidence of the often angry and emotional reaction of industrialists to the environmentalists. For example, 'The risk-free mentality is supported by the new-found power of the pressure group—quite small numbers of people with a passionate but narrow interest. They have learned how to manipulate our democratic systems and disrupt development at its most vulnerable point.   we see a huge agricultural dam

halted by environmentalists when it was nearly finished, and then scrapped to protect some obscure fish . . . It has been well said, "The creation of wealth in a world of want is a moral duty". I suggest that morality is just as valid as the morality of the environmentalists'. C. C. Pocock: *A Fast-Changing World—The Political Challenge* (Seventh World Planning Congress, London, 27th September 1978).

[30] For further evidence on the decline of partisan support see I. Crewe *et al.*, op. cit.

[31] J. Habermas, op. cit., 1976.

[32] The Richard Dimbleby Lecture by Lord Rothschild on 'Risk' (*The Listener*, 30th November 1978), and a report by Dr. Herbert Inhaber of the Canadian Atomic Energy Control Board' 'Risk of Energy Production', n.d.

[33] R. J. S. Baker: 'Nuclear Power: The Widening Debate', *Political Quarterly*, Vol. 50, No. 1, 1979, pp. 71-85.

[34] It is true that there is a sense in which values are considered as well as facts. Eric Ashby, for example, draws attention to what he calls 'subjective components' which include values and public opinion, and which form an essential element in arriving at a political judgement on environmental issues (*Reconciling Man with the Environment*, Oxford University Press, 1978). But this misses the point. The value priorities are debated *within* the dominant social paradigm. What the policy makers cannot do is to see the issues from the completely different perspective of an alternative paradigm, using the concept in the strong Kuhnian sense. What is not appreciated is the 'anthropological' problem of conflicting cultures and meaning systems.