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Denmark: Environmental Conflict and the 'Greening' of the Labour Movement

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This article addresses two problems: firstly, how can we account for the social pattern of environmental consciousness and the participation in environmental activities in Denmark; and secondly, what are the consequences of the environmental mobilization for the party system?

The first question is concerned with the nature of the new would-be cleavage introduced by environmental politics. Is it associated with interests or values of a new class, is it the expression of a postmaterialist value change, or does it express a structural change in industrial society?

The second question focuses on the process of political articulation. Obviously, the 'objective' cleavage structure of the environmental issue is not readily transmitted into a new political cleavage structure; its effects upon the party system depend on the political practices of parties and other actors (Lipset & Rokkan 1967; Laclau & Mouffe 1985). On the other hand, such actors are not free to act as they wish. As pointed out by Inglehart (1987), the Communist Parties were unable to maintain the support of post-materialist students of the 1970s even though the student protest movement originally understood itself in Marxist terms. In short, there are certain limits, and only national studies can determine where these limits occur. Denmark is an interesting case as it is one of the most environmentally conscious nations in the world; and yet it has no influential Green Party.

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The first section briefly describes the environmental mobilization and the

response of the party system in Denmark in the 1970s and 1980s. The next section gives an overview of the various time-series measuring the environmental consciousness among voters. Then follows an analysis of participation in environmental activities and the social profile of environmental consciousness. The next section describes the political cleavage structure of environmentalist attitudes, and the penultimate section gives a brief portrait of the Danish Greens. The final section discusses some general implications of our findings.

Environmental Mobilization and the Response of the Party System

As in other countries, the environment did not become a political issue in Denmark until the late 1960s. The only significant environmental organization was the Danish Society for the Preservation of National Amenities (Danmarks Naturfredningsforening, abbreviated as DN), founded in 1911. Recruiting its members mainly from the urban social elite and having close affiliations with public authorities, it was quite influential, also in a comparative perspective (Svold 1989, 14). But its activities were concentrated on nature preservation, and until the 1970s it generated little hostility, except among farmers.

At the end of the 1960s, pollution control gained political attention. At the same time, the radical ecological movement was born. The most important organization, NOAH, was founded by university students in 1969 but soon spread all over the country; 10 years later it counted some 80 local committees (Gundelach 1988, 235). Local environmental groups mushroomed in the 1970s, frequently on an *ad hoc* basis. In 1971, a Department of the Environment was established, and by 1973, a quite far-reaching Law of the Environment was passed by the Danish Parliament.

In Denmark, this law was considered 'The best environmental law of the world', and apparently, most people took confidence in the belief that the environment was safe. The political saliency of environmental problems among voters, which was substantial in the elections of 1971 and 1973 (Siune 1982, 177), virtually disappeared.

Other problems took over, in particular the nuclear power problem. From the 1950s, Denmark had been preparing for nuclear power. A Nuclear Energy Commission was appointed by 1955, and in 1956–58 a large nuclear research centre, Risø, was built. For various reasons, however, no initiative was taken until the energy crisis of 1973–74, when ELSAM, the largest association of electric power plants, asked for permission to build a nuclear power plant.

Almost immediately, by January 1974, an Organization for Information

on Nuclear Power (OOA) was founded, demanding a public debate on nuclear power before a decision was taken. The Danish Parliament agreed to postpone the decision and to initiate an information campaign (Sidenius 1986, 383), and only a minor part of the necessary law complex was passed. From 1975, the OOA took up a clear position against nuclear power and demanded a referendum on the issue.

The OOA became one of the most successful grass-root movements of the 1970s and was able to exert substantial pressure on the Parliament. Originally, only a single party took a clear position against nuclear power: the Left Socialists, formed in 1967 as a splinter party from the Socialist People's Party (SF). However, SF was soon to join, following a rebellion against the party leadership in the mid-1970s.

In Denmark, the left-wing mobilization of the post-war generations was extremely strong in the 1970s (Svensson & Togeby 1986), in particular among students. In all seven elections from 1971 to 1984, 50–60 percent of the students voted for parties to the left of the Social Democrats (Glans 1989, 61). The effect was clearly generational (Goul Andersen 1989, 193–200), and support for left-wing parties accumulated: 10 percent in the 1977 election, 12 percent in 1979, 15 percent in 1981 and 1984, and 20 percent in 1987.

The Social Democrats, still suffering from the EC referendum of 1972, felt the pressure and, again and again, found excuses to postpone the decision over nuclear power (Sidenius 1986), even though the idea was not formally buried until 1984–85. Thus, the Social Democrats never became responsible for the introduction of nuclear power. On the contrary, the Social Democratic governments in the 1970s supported energy savings and the development of alternative energy sources.

When the battle over nuclear power was settled around 1980, attention again shifted to genuine environmental problems such as air pollution, toxic dumping grounds and nitrate pollution of the ground water.

Meanwhile, membership of the Nature Preservation Organization (DN) grew. In the 1970s, the organization had some 50,000 members. From 1978, the organization intensified the recruitment of new members via telephone calls to all Danish households. At the same time, it shifted attention from nature preservation to environmental problems in general. This strategy proved extremely successful. By 1980, membership had doubled, and by 1983, the threshold of 200,000 members was passed (Svold 1989, 27–31). By 1988, the organization had 280,000 members. This not only made DN the largest nature-preservation organization in Europe; it also meant that it had more members than all Danish political parties put together.

By 1982, a bourgeois government took over. But the Radical Liberals, who supported the government on economic issues, voted with the opposition on environmental and several other 'new politics' issues. This gave

the Social Democrats a further incentive to exploit the so-called 'alternative majority' in the Danish *Folketing*. Not least, the prominent MP Ritt Bjerregaard took a firm position and criticized the older generation of Social Democrats as well as the trade unions for assigning too little priority to the environment. By the mid-1980s, the Social Democratic profile was clear: there could be no compromises, as far as the environment was concerned, even if it meant loss of jobs.

The bourgeois government also sought to improve its environmental image. But whereas the Social Democrats were able to take an offensive position, the pattern of the bourgeois government remained basically reactive.

At the same time, the end-of-pipe solutions of the 1970s proved insufficient as serious pollution problems were recorded even on the open sea. By 1986, this mix of unsolved problems, popular consciousness, party strategies and unstable parliamentary relations gave rise to a spectacular event. Following a television report on dead lobsters fished in open waters, the director of the nature-preservation organization (DN) launched a quickly prepared plan for fighting the pollution of the Danish waters, and within a few turbulent weeks the Government had committed itself to a plan estimated to cost more than 10 billion kr.

The government has not modified its environmental policies in recent years, but undoubtedly, the 'garbage-can decision' (Cohen, et al. 1972) in 1986 frustrated many bourgeois voters, even though most experts today seem to agree that the plan is largely a success.

Finally, it is important to note that a green party was not founded in Denmark until 1983 and did not take part in national elections until 1987. Most environmental movements have consistently resisted the formation of a green party (Gundelach 1988, 237). Undoubtedly, the early adaptation of the 'new left' parties (Left Socialists and the Socialist People's Party) to environmental concerns has played an important role. At best, a green party was considered unnecessary; at worst, it could weaken the parliamentary strength of parties committed to the environment. As the Danish Greens have not been able to pass the 2 percent threshold of representation, recruiting around 1.5 percent of the vote in the 1987 and 1988 elections, this fear of 'wasting' votes proved quite relevant.

The Development of Environmental Attitudes

The environmental concern of and the changing environmental attitudes among Danish voters were referred to in several passages above. A more systematic account can be derived from the Eurobarometer surveys (Hofrichter & Reif, this issue), as well as from Danish voter surveys. The

Table 1. The Development of Environmental Attitudes and the Saliency of the Environment: Proportions and Net Majorities (nm) (percentages (percentage points)).

	1971	1973	1974	1975	1976	1977	1979	1980	1981	1982	1984	1985	1986	1987	1988	1989
A. **NUCLEAR POWER** (nm)	–	–	−23	−19	6	9	31	–	41	–	43	–	–	–	–	–
pct. don't know	–	–	31	39	38	35	21	–	19	–	15	–	–	–	–	–
B. **ENVIRONMENTAL CONCERN**																
(1) Serious problem (pct)	–	–	–	–	–	–	–	21	–	25	44	–	57	68	–	–
Rank (among ten problems)	–	–	–	–	–	–	–	5	–	5	3	–	1	1	–	–
(2) Spontaneously mentioned (pct)	8	4	–	1	–	3	6	–	2	–	2	–	–	15	9	–
C. **ENVIRONMENTAL ATTITUDES**																
(1) Increase expenditure (nm)	–	–	–	–	–	–	37	–	–	–	–	57	–	60	–	–
(2) More impt. than econ. growth (nm)	–	–	–	–	–	–	–	–	4	–	32	39	–	37/44	30	39

Nuclear Power: Net majority against nuclear power, i.e. proportion which would vote against nuclear power minus percentage which would vote in favour of nuclear power is a referendum were held tomorrow. *Source:* 1974–77: Observa surveys (Observa 1977); 1979–84: Danish election surveys. Slightly modified wording 1975ff. and 1979ff. (Goul Andersen 1988, 395)

Serious problem: Percentage mentioning 'pollution of the environment' as one of the most important problems for the country. The respondent was asked to pick three items from a list of ten items. *Source:* AIM surveys (AIM-nyt 5.1.1988)

Spontaneously mentioned: Percentage spontaneously mentioning environmental or energy questions as the most important political problems. Figures indicate percentage of all *answers*. On average, people gave around two answers. (In 1977 and 1979, the figures largely indicate energy problems; otherwise, energy was hardly mentioned.) (Wording: 'In your opinion, what are the most important problems that the politicians should handle?) *Source:* Danish election surveys.

Increase expenditure: Net majorities, i.e. percentage favouring increased public spending for the environment, minus percentage favouring budget cuts. *Source:* 1979: Mass Survey; 1985: Class Survey; 1987: IFO survey.

More important than economic growth: Net majority assigning larger priority to protection of the environment than economic growth. (Wording: 'Economic growth should be secured by expansion of industry, even if it should affect the environment.') *Source:* Danish election surveys; 1985: Class Survey; 1989: IFO survey. In 1987, two separate surveys were conducted. The first figure is comparable with 1981–85, the second with 1988–89.

most important time-series from the Danish surveys are presented in Table 1. The first row shows the attitudes towards nuclear power from 1974 to 1984. The figures indicate net majorities against nuclear power, i.e. the percentage who would vote against nuclear power in a referendum minus the percentage who would vote for. The mobilization of the anti-nuclear movement (OOA) soon had its impact: from 1976, a relative majority was against nuclear power. By 1979, the Harrisburg incident decided the issue for the uncertain, and the second energy crisis of 1980–81 was not able to change the trend: opposition against nuclear power continued to grow.

Concern for the environment is a typical 'valence issue' (Butler & Stokes 1969). Everybody wants a clean environment; but people may differ in their perception of the seriousness of the problem (salience), or in the price they are willing to pay.

The salience of the environment is indicated by two questions. The first row indicates the proportion of the voters mentioning 'pollution of the environment' as one of the three most serious problems facing the country, choosing from a fixed list of ten problems. By 1980 and 1982 people did not regard the environmental problems as very serious; its rank among the ten issues was only 5.

Between 1982 and 1986, however, the situation changed, and from 1986 onwards, pollution of the environment was regarded as the most serious problem, even more important than unemployment and the balance of payment deficit.

This measure, however, may overestimate the importance of the issue. From the mid-1980s, few people deny that environmental problems are, basically, very serious problems; but this does not necessarily mean that the environmental issue is politically operational. The new row indicates how frequently environmental problems are *spontaneously* mentioned as problems that the politicians should handle. Because of differences in the number of answers given from survey to survey, the figures indicate the proportion of *answers* concerning the environment. As a rule of thumb, the proportion of *persons* is almost twice as high.

On this open-ended question, environmental problems have more limited salience, and only in specific situations: in 1971 (when pollution came on to the political agenda); in 1979 (mainly concerning nuclear power); and in 1987–88, following the plan for fighting pollution of the Danish waters. In 1987, however, environmental protection was considered as important as unemployment (though less important than the balance of payment problems), and in 1988 it was still among the five most important issues.

The two remaining rows in Table 1 describe the willingness to pay. The preference for increased public spending for environmental purposes increased markedly between 1979 and 1985. The same trend is found on the question concerning preferences between economic growth and

Table 2. Environmental Consciousness in Denmark, Norway, Sweden and Finland. Percentage Assigning Larger Priority to Protection of the Environment than to Economic Growth (Excluding Neutral/Don't-Know Answers).

	1977	1981	1984	1985	1987	1988	1989
Denmark	–	53	71	75	73	66	71
Sweden	–	–	–	63	–	–	–
Finland	–	–	–	50	–	–	–
Norway	33	20	–	33	43	–	–

The Danish and Norwegian wordings are identical. Sweden and Finland are slightly different: 'To maintain our industry and standard of living, we have to accept a certain detriment to the environment.'

Source: Denmark: See Table 1; Other countries: Bjørklund & Hellevik (1988, 421, 428). Equivalent data from the Norwegian election surveys are presented in Aardal & Valen 1989, 55.

environmental protection. By 1981, only a net majority of 4 percentage points favoured environmental protection at the expense of economic growth. By 1984, the figure was 32 percentage points, and even though Denmark experienced a negative economic growth rate in 1987 and 1988, this high level was maintained throughout the 1980s.[1]

The latter question can be compared across four Scandinavian countries. To achieve comparability, Table 2 excludes don't know answers and presents the proportion assigning priority to the environment. The difference between the Scandinavian countries is quite impressive. Danes assign highest priority to the environment, followed by the Swedes. The Finns are equally concerned with economic growth, and in Norway, economic growth is given by far the highest priority. Thus, even by comparative measures, the Danes are willing to pay a high price for an improved environment. If necessary, they accept lower rates of economic growth[2] and higher public expenditure, i.e. increasing taxes. This is confirmed by an IFO survey from 1987 where people were asked if they agreed that 'The state should do much more to improve the environment, even if it means higher taxes'. Some 67 percent agreed while only 23 percent disagreed. However, there *is* a limit: in the same survey, 53 percent agreed that 'Efforts to improve the environment should not go so far that they damage the competitiveness of Danish industry'. Only 31 percent disagreed (Goul Andersen 1988, 397).

The Environmental Movements: Profile of Members and Activists

The most complete Danish data on environmental participation stems from a mass survey conducted in 1979. From this survey, it is possible to

operationalize with a reasonable validity the distinction between three phases in the environmental movement: (a) traditional organizations (b) environmental groups, and (c) radical ecological movements (Rüdig 1988).

In this section, we compare the social composition of participants in these activities with the 'post-materialist' value model of environmental behaviour. From this model, we can derive two implications: firstly, that participation should be disproportionately high among the postwar generations; and secondly, that participation should be associated with the fulfilment of basic material needs, i.e. with affluence.

When the 1979 data were collected, the Danish Nature Preservation Association was still dealing almost exclusively with nature preservation, thus matching the ideal type of a traditional environmental organization. And the membership profile of this and a number of minor organizations corresponded quite well with this picture of an elite organisation (see Table 3). Only 2 percent of the unskilled workers held membership in the associations, as compared to 18 percent among higher-level non-manual wage earners and 11 percent among the self-employed. Membership rates among higher-level non-manuals far exceeded the figures for lower-level non-manuals, both in the public and in the private sector.

This confirms Inglehart's model of the association between post-materialism and affluence. However, it disconfirms Inglehart's model in another respect: there is no overrepresentation of the postwar generation. And nature preservation is not 'new politics': such 'idealist' movements were analysed as early as in the Communist Manifesto of 1848. In other words, Post-materialism *is* an effect of affluence; but it is hardly a new phenomenon.

The absence of a generational effect also characterizes participation in local environmental groups. Now, this category includes a large number of minor groups dealing with local traffic problems and the safety of children. This explains why a life-cycle perspective seems more relevant here: participation is strongest among the 25–49 years old, i.e. among the age groups having children at home. Participation in local environmental groups also exhibits the weakest association with education and social class. The effect of class and education should probably be interpreted more in terms of political resources than in terms of interests or values associated with education and class.

Among radical ecological movements, we have distinguished between the anti-nuclear power movement and other movements. Both groups fit the notion of 'new politics'. In both groups, the generational effect is very significant, corresponding with the assumption of new values in the postwar generation. However, the profile of activists disconfirms the notion of affluence: there is no difference in participation rates at all between skilled workers, lower-level non-manuals and higher-level non-manuals. Among

Table 3. Participation in Environmental Organizations and Groups.

	Trad. org.	Grass-root organizations			
		Local env. groups	Radical Ecol. Mov.		Grass-root total
			nuclear power	others	
	1979	1979	1979	1979	1987[1]
Total	6	13	13	6	9
Postwar generation[2]	6	14	22	10	13
Prewar generation[2]	6	13	8	5	6
Left-wing parties	13	22	60	22	20
Social Democrats	4	13	7	4	6
Non-socialist parties	8	15	5	5	8
Lowest education	4	10	8	4	4
					11
Medium	10	18	17	9	12
Highest	16	27	43	19	18
Unskilled Worker	2	8	8	3	5
Skilled Worker	4	14	17	7	8
Non-manual, lower	8	18	17	9	na
Non-manual, higher	18	18	17	9	na
Self-employed	11	12	10	7	9
Farmer	4	10	2	2	na
Lower non-manual, private	6	14	11	7	9
Higher non-manual	15	18	7	6	8
Lower non-manual, public	10	22	22	10	11
Higher non-manual[3]	23	22	23	11	19
Men	8	15	15	8	10
Women	5	12	12	5	8

[1] Excluding nuclear power movement and probably also some of the local groups as it referred to environmental problems in a more narrow sense.

[2] 'Postwar generations': 1979: 18–34 years old; 1987: 20–39 years old. 'Prewar generations': 1979: 35 years old or more; 1987: 40+ years old.

[3] In 1987: Respondents with 'gymnasium' or higher education.

Source: 1979 survey (Goul Andersen 1988, 399); 1987: Togeby 1989, 114.

the privately employed, the association with social position is even negative when we compare these three groups.

In short, the post-materialist, 'aesthetic' values associated with nature preservation can be conceived of as 'post-materialist' values associated with affluence, but hardly as a new phenomenon. And the new values of the postwar generation, on the other hand, have little to do with affluence.

These observations are more compatible with a structural model of environmental interests and values. What is even more significant, however, is the political mobilization aspect: not less than 60 percent of all voters to the left of the Social Democratic party had participated in activities against nuclear power in the 1970s, as compared to only 5–7 percent among other voters. The political bias among participants in other ecological groups is almost equally strong. The importance of environmental issues in the political mobilization of a Danish left-wing culture in the 1970s is obvious from these data (Svensson & Togeby 1986).

Now, the data presented are more than ten years old, and undoubtedly, the composition of the members of the Danish Nature Preservation Association has changed since 1979. Likewise, the profile of grass-root participants has been modified, but not substantially. Recent data on participation in grass-root activities (Togeby 1989) reveal a similar pattern (see the last column in Table 3). The most striking change is the decline in participation rates since the 1970s.

However, participation may tell us little about attitudes. At the aggregate level, the participation rates are affected by, for example, the political opportunity structure. And at the individual level, participation is affected by political resources. A recent Swedish survey demonstrated that some of the smallest (and probably socially and politically most biased) grass-root movements enjoyed the most widespread public support (Petersson et al. 1989, 113–127). Thus, political attitudes tell us more about the nature of environmental conflict.

Social Variations in Environmental Attitudes

In this section, we examine the social variations in environmental attitudes, mainly on the basis of three questions in a survey conducted in 1985. Two of the questions were presented in Table 1: the priority between environmental protection and economic growth, and the attitude towards public spending for environmental protection. The third question measures sympathy for the environmental movement on a scale from 0 to 10. Finally, the analysis includes the nuclear power issue from the 1984 survey.

For the present purpose, all three variables in the 1985 survey were trichotomized. Intercorrelations were moderately high (Pearson r's around 0.4, gammas above 0.5). A factor analysis indicated unidimensionality: together with a fourth question concerning sympathy for the peace movement they formed a separate factor.[3] The three environmental questions were subsequently combined into a simple additive index ('Index of environmentalism' which could vary between 0 and 6.[4]

Table 4 shows the effects of age, gender and education. Not surprisingly,

Table 4. Environmental Attitudes in Denmark, 1984 and 1985. Net Majority Against Nuclear Power (1984) and 'Index of Environmentalism' (1985).

	1984	1985		
	Net majority against nuclear power	Index of environmentalism	Adjusted ('causal') effect	(N)
20–29 years	65	4.98	0.32	(388)
30–39 years	53	4.83	0.29	(439)
40–49 years	28	4.48	0.10	(306)
50–59 years	39	4.09	−0.10	(256)
60–69 years	33	4.06	−0.17	(278)
70+ years	39	3.49	−0.74	(285)
Men	25	4.34	−0.07	(980)
Women	58	4.49	0.06	(1098)
Basic education				
7 years		3.88	−0.31	(N=799)
8–9 years	45	4.49	−0.03	(N=343)
10 years	36	4.73	0.16	(N=604)
12–13 years	51	5.11	0.49	(N=334)
	1985:	eta	beta	p
	age	0.32	0.23	<0.001
	gender	0.05	0.04	0.067
	education	0.30	0.19	<0.001
		$R^2 = 0.13$		

N's refer to the 1985 survey. The figures for 1984 are around one-half of the 1985 figures. 1985: MCA analysis. No significant interaction effects.

the postwar generations (20–39 years old) are the most 'environmentalist', scoring average index values around 4.9. The generation born between 1935 and 1945 is in an intermediate position. However, the remaining generations divide into an interwar generation, born between 1915 and 1935 (index values around 4.1), and a pre-First World War generation, born before 1915 (index value of 3.5). A similar age structure is uncovered in the 1987a election survey (Tonsgaard 1989a, 287). This picture deviates somewhat from the generational structure in attitudes towards nuclear power. Here, there is a clear dividing line between the postwar generations on the one hand and the remaining generations on the other (this was even more outspoken by 1979; see Goul Andersen 1988; 402).

The difference in environmental attitudes between men and women is stable but almost negligible. Surveys from 1984, 1987, 1988 and 1989

confirm the picture of the 1985 survey (see Hoel & Knutsen 1989 for similar findings in the other Scandinavian countries). On the nuclear power issue, on the other hand, we find a very significant 'gender gap', appearing also in other studies, both in Denmark and Sweden (Goul Andersen 1984, 262–65; Holmberg & Asp 1984; Holmberg 1988, 16–17). Apparently, more than concern for the environment is involved in gender differences in nuclear power attitudes.

Next, we note from Table 4 a linear association between education and environmentalism. On the nuclear power issue, however, the effect of education is curvilinear.

Table 4 also compares the effects of age, gender and education in a multiple classification analysis (MCA). As gender is nearly unrelated to age and education, the gender effect remains almost unaffected. A large share of the generational effect, on the other hand, is mediated through education, as reflected in the eta and beta values of 0.32 and 0.23, respectively. An even larger share of the effect of education is a spurious effect of the generational differences (eta and beta values of 0.30 and 0.19, respectively). Still, both generation and education have strong independent effects (see also Tonsgaard 1989a).[5]

Table 5 describes class and sector differences. Social variations in nuclear power attitudes are different from, for example, the Swedish experience where workers have been rather favourable towards nuclear power and farmers very hostile (Holmberg & Asp 1984, 346–364). In Denmark, farmers are the most favourable whereas workers are the most hostile (for equivalent 1979 results see Goul Andersen 1985). First and foremost, however, the nuclear power issue in Denmark divides between wage earners on the one hand, and the self-employed on the other. On the 'index of environmentalism', workers score a little lower than non-manuals, but still higher than self-employed and significantly higher than farmers.

The remaining part of Table 5 presents a test of various interpretations of environmental behaviour, on the basis of category effects of sector and class, controlling for education and age. Whereas the generational and educational variations are compatible with most interpretations of environmentalism, the sector and class effects are not.

The first interpretation is the 'new class' model. It is concerned with the 'new middle class' and may appear in at least three versions. The first version stresses the interests or values of the new middle class as a whole. This version is not confirmed: when we control for education and age, the attitudinal difference between manual workers and 'the new middle class' disappears.

Another version predicts a conflict between private and public employees. This is also disconfirmed, as public employees outside the

Table 5. Index of Environmentalism 1985, by Occupation and Sector, controlled for Education and Age: Category Effects.[1]

	Occupation				
	Worker	Non-manual	Self-employed	Farmer	Total
1984: Anti-Nuclear Power[2], nm	54	40	0	−10	
1985: Unadjusted index values	4.54	4.82	4.23	2.67	4.61
1985: Category effects	0.03	0.11	−0.28	−1.37	–
1985: Category effects, by sector[3]					
(1) Primary & secondary	−0.02	−0.33	−0.31	−1.37	−0.28
(2) Private services	−0.10	0.11	−0.26	–	0.00
(3) Public: Infrastructure	0.36	0.10	–	–	0.15
(4) Public: Reproductive	0.03	0.31	–	–	0.25
(*n*)					
Private: Primary + secondary	169	88	27	42	326
Private: Services	73	198	40	–	311
Public: Adm./Infrastructure	35	139	–	–	174
Public: Reproductive	46	209	–	–	255
	eta	beta	*p*		
age	0.26	0.16	0.001		
education	0.26	0.15	<0.001		
class + sector, combined var.	0.31	0.22	<0.001		$R^2 = 0.15$
(class	(0.28)	(0.17)	<0.001)		
(sector	(0.20)	(0.10)	0.040)		

[1] Series of MCA analyses, combining class and sector into a single variable. Last two lines indicate effects of class and sector, treated as separate variables in the analysis. Respondents classified by own occupation. Only economically active, employed population.

[2] Net majorities against nuclear power, uncontrolled.

[3] 'Public infrastructure' includes: Public administration, defence, the police, public transportation, publicly owned supply plants. 'Public: reproductive' includes: Education, Culture, Health & Care.

reproductive sector are not more environmentalist than private-sector workers.

The third version of the 'new class' model restricts the term 'new class' to non-manual employees of the public *reproductive* sector, i.e. education, culture, health and care etc. This version is compatible with the data as we note a clear polarity among non-manual employees, from the 'productive' (primary and secondary) sector at the one pole to the reproductive sector at the other. On the other hand, the difference between non-manual reproductive workers and other service workers is relatively small.

The second general model is the 'post-materialist value' model. The critical point is not whether environmentalism is associated with a broader set of values but whether these values can be interpreted as an effect of affluence. If this were the case, we should expect a difference between non-manual employees and the self-employed on the one hand, and workers on the other. This implication is not confirmed: the dividing line is between wage earners and the self-employed, not between the middle class and the working class.[6]

In the 1985 survey, we are furthermore able to test the assumption that the experience of social conditions during the 'formative years' should be decisive for post-materialist orientations. From this assumption, we should expect that individuals of working-class origins were more 'materialist' and thus less favourable towards environmental protection than individuals from middle-class backgrounds. Again the test is negative. Controlling for education, age and own occupation in an MCA analysis, we found that people growing up in unskilled worker families were slightly more environmentalist than people from middle-class origins (Goul Andersen 1988, 405).[7]

Finally, the structural perspectives on environmentalism, stressing the contradictions and conflicts of capitalism or industrialism, find some support in the class difference between wage earners and the self-employed, and in the sector differences between non-manual wage earners.

The final rows in Table 5 summarize our findings in terms of beta coefficients. Age and education are equally important (beta = 0.16 and 0.15, respectively), but the combined class and sector effects are more important (beta = 0.22). If we try to single out the effects of class and sector despite the interaction between the two, and despite the empty cells, social class stands out as the most important.

This confirms the structural models. The effect is relatively weak, as expected from the industrialist interpretation: environmental regulation is in the long-term interest of all, but certainly the issue is not without conflict.

Environmental consciousness is also related to generation (probably reflecting political exposure in formative years) and education (exposure and knowledge). Finally, it is not surprising that reproductive values of

women and of employees in the public reproductive sector also have a minor impact on environmental attitudes. It is not the notion of values that is problematical; it is the labelling and interpretation of these values as 'post-materialist' values, emerging out of affluence that is wrong (for a similar conclusion see Knutsen 1989, 526).

Such theoretical differences in the perspective on environmentalism are not only important for the interpretation of social variations in attitudes and behaviour. They also imply different perspectives on the political consequences of environmentalism, to which we now turn.

Environmentalism and the Party System

According to the post-materialism/new-politics thesis, the 'new politics' dimension represents a new cleavage which will lead to major changes in the party system, or at least in the structure of cleavages underlying the party system (Inglehart & Rabier 1986). By implication, this should certainly hold also for the environmental 'sub-dimension' as it has been the core issue of the new Green Parties.

More precisely, four implications may be derived. The emergence of Green Parties is the first implication. Next, existing parties should change relative position on the environmental dimension, as compared to the left–right dimension. More specifically, materialist 'old left' parties such as the Communists and the Social Democrats should share position with bourgeois parties. By the same token the third implication is that liberal centre parties may share position with 'New Left' and Green Parties on the environmental dimension. Finally, we should expect that such tendencies would strengthen in 'critical conjunctures', i.e. in periods where the environmental issue had high saliency and public media attention (as in Denmark since the mid-1980s).

Certainly the question is not whether this *may* happen. The question is whether it is a *necessary* consequence, or whether parties can adapt to the situation.

In Sweden and Norway, all implications would seem to be confirmed, excepting the absence of a green party in Norway. In both countries, social democratic voters more or less share position with bourgeois voters on the environmental dimension, and centre parties (i.e. the Norwegian liberal party. 'Venstre', and the Swedish farmer party, 'Centre Party) share position with the left wing on most environmental issues (Petersson & Valen 1979; Holmberg & Gilljam 1987, 267–272; Aardal & Valen 1989, 67–69, 75).

In Denmark, however, the story is different. The first implication finds little confirmation as the Green Party has run for two general elections

Table 6. Index of Environmentalism 1985, by Party Choice: Deviation from General Mean.

	Index	(N)
(1) Left Socialists	1.41	46
(2) Communists	0.98	10
(3) Socialist People's Party	0.85	214
(4) Radical Liberals	0.35	82
(5) Social Democrats	0.10	507
(6) Christian People's Party	−0.26	39
(7) Centre Democrats	−0.32	73
(8) Conservative People's Party	−0.32	329
(9) Single-Tax Party	−0.37	19
(10) Progress Party	−0.47	42
(11) Liberals	−0.81	211
eta = 0.35; eta^2 = 0.12		

without success; it has only gained some 1.5 percent of the votes and no seats in the Danish *Folketing*. To test the second and third implications, the parties are arranged according to their score on the index of environmentalism in Table 6.

With one minor exception, the ranking of the parties corresponds almost perfectly with their ranking on a left–right dimension (according to party ideology – or to the rankings obtained from left–right self-placement or from a left–right index construction). The three left-wing parties (Left Socialists, Communists and Socialist People's Parties) have by far the most environmentalist voters. Next we find the Radical Liberals and Social Democrats who are both in the environmentalist half of the continuum. The exception, as compared with the left–right dimension, is that the Radical Liberals are located a little nearer the environmentalist pole than the Social Democrats. But even on the left–right continuum, the Radical Liberals are clearly the most 'leftist' non-socialist party.

Among the centre parties, the Centre Democrats and the Christian People's Party are almost identically located at the environmental dimension – a finding which is confirmed by other surveys. This is interesting for two reasons. In the first place, the Centre Democrats was founded in 1973 as a super-materialist life-style party, protecting the interests of car-owners and home-owners against the threatening 'new values', and protesting against the alleged 'new left' ideology in the media, in the educational system and so on. In dimensional analyses, it has frequently been located as the 'materialist' extreme point (see, for example, Knutsen 1989, 508). Yet it occupies a 'centrist' position on environmental issues.

The record of the Christian People's Party is the very opposite. In the new bourgeois government from 1982 it was given only one ministry: The

Table 7. Party Choice and Net Majority Assigning Priority to the Environment over Economic Growth, 1981–89 (percentage points).

	1981	1984	1985	1987	1988	1989	(N)
Left-wing parties	52	70	70	72	78	82	148
Social Democrats	15	29	38	46	48	61	264
Radical Liberals	34	49	57	50	50	62	49
Centre parties	−5	30	28	31	20	15	83
Right-wing parties	−22	17	25	9	−6	−17	310
SD minus right wing	37	12	13	37	54	78	

(N)'s refer to 1984. In 1985, N's are around twice as high, in 1989 around one-half.
Left-wing parties: Socialist People's Party, Left Socialists, Communists, Marxists-Leninists, Common Course and (from 1988) the Greens
Centre Parties: Centre Democrats, Christian People's Party, Justice Party
Right-wing parties: Conservatives, Liberal Party (*'Venstre'*), Progress Party.

Ministry of the Environment. The party leader, Christian Christensen, became very engaged to this end, and within a short time, the party sought to give itself a profile as a 'green' party; but without success.

Apparently, some voters are difficult to move, even if their party gives them clear signals. On the other hand, other voters *may* be moved, as will be demonstrated below in the case of Social Democratic voters.

Firstly, however, it should be noted that the relative position of social groups is not the same on all questions concerning the environment. Workers were the most unfavourable group towards nuclear power. On the item concerning preferences between economic growth and environmental protection, however, unskilled workers (regardless of sector) were less 'environmentalist' than other wage-earning groups. In 1985, the net majority among unskilled workers was +28 (percentage points) as compared with figures around +55 or more in the other wage-earning groups.[8] This was also reflected in the overall index above. Clearly, the problem of economic growth (and, consequently, employment) is a critical problem in relation to working-class support for environmentalism, at least among unskilled workers (but it probably reflects a concern for *employment* rather than for increasing consumption possibilities). This means that *political articulation* may be a decisive factor in the transformation between structural preconditions and political behaviour.

In particular, the high environmental consciousness of the Danish working class may be an effect of the political practice of the Social Democratic Party. Furthermore, the trade unions have generally supported the environmental concern, and the radical environmental movements have rarely advocated zero growth. The interests of workers and the protection of the

environment are not necessarily incompatible interest. Whether they are reconciled may depend strongly on the capabilities of political elites.

As judged from Table 7, the political articulation of the environmental issue by the Danish Social Democrats has been successful. As our basis of comparison over time we have even chosen the most 'critical' item concerning the priority between concern for the environment and economic growth.

The main observation from the table is that the environmental consciousness of Social Democrats has been increasing constantly during the 1980s. The same holds for left-wing voters, but here environmental consciousness has always been high. A small increase in environmental consciousness has also taken place among Radical Liberals, but since 1987, they are no longer more 'environmentalist' than the Social Democrats. Among bourgeois voters, on the other hand, environmental consciousness increased until 1985 but then fell off, and by 1989, the figures are almost the same as in 1981. Furthermore, we note an increasing differentiation between the centre parties (Centre Democrats and Christians) on the one hand and genuinely right-wing parties (Liberals, Conservatives and the otherwise not-so-genuinely-right-wing Progress Party) on the other.

A reasonable measure of the degree of polarization is the difference in net majorities between Social Democrats and right-wing voters. This difference has increased from 12 percentage points in 1984 to 78 percentage points in 1989.

Now this could be a 'Pyrrhic victory' for the Social Democrats if it meant that the party had simply lost the materialist working-class voters formerly supporting the party. In a number of fields, the populist Progress Party has argued that the Social Democratic Party is not the party it once was but has been taken over by intellectuals and public employees directing the party to concerns not in the interests of the working people. In other fields (such as immigration) the Social Democrats has found little resonance for its 'liberal' position even among its core voters, and it may have lost voters to the Progress Party on this account.

In the environmental field, however, there are no signs of such problems. The social composition of Social Democratic voters has not changed more than should be expected from the overall changes in the class structure during the 1980s (Goul Andersen & Bjørklund, forthcoming), and the working-class voters are not more politically polarized on the environmental dimension than middle-class voters. Thus, it seems that the increasing environmental consciousness among social democrats is due to a genuine change in attitudes and not to a renewal of supporters.

However this may be, there appears a considerable, and increasing, coincidence between the green dimension and the left–right dimension.[9] To the extent that 'environmentalism' affects party choice, it does not cut

Table 8. Party Choice by Left–Right Position and Environmental Attitudes: Stepwise Regression, 1985.

	Bivariate correlation r	beta	Multiple correlation R	Explained variance R^2	R^2 change
Left–right self-placement	0.69	0.67	0.69	0.481	0.481
Index of environmentalism	−0.29	−0.09	0.70	0.488	0.007
Left–right attitude index	0.52	0.48	0.52	0.273	0.273
Index of environmentalism	−0.29	−0.14	0.54	0.290	0.017

across the traditional left–right polarization between the parties; on the contrary, it *reinforces* it.

The next question is whether this effect is considerable or only of minor importance, as compared to the effect of traditional left–right issues. This is examined in Table 8. Unfortunately we have to rely on the 1985 figures as we have no index in later surveys.

From the results above it is hardly surprising that environmental attitudes have little independent effect upon party choice. The correlation between the index of environmentalism and party choice (trichotimized in bourgeois, social democratic, and left wing) is $r = -0.293$. Controlling for left–right self-placement on a scale from 0 to 10, the beta value is only −0.086. In a stepwise regression the explained variance is only improved from $R^2 = -0.481$ to $R^2 = 0.488$ when the index of environmentalism is added to the left–right self-placement as an explanatory variable.[10]

Now this may reflect that the political articulation of environmentalism with traditional left–right ideologies is so strong that people incorporate their environmental attitudes when they place themselves on a left–right scale. To examine this possibility, we have also performed a stepwise regression with an index of left–right attitudes as the independent variable.[11]

This assumption is compatible with the data but the results are inconclusive. The explained variance is now improved by two percentage points when the environmental index is included. Furthermore, it may be argued that it is a somewhat 'unequal struggle' in the sense that the reliability of the index of environmentalism is probably lower than the reliability of the index of left–right attitudes.[12] But differences in reliability may also explain why the effect of left–right self-placement is larger, absolutely and relatively, than the effect of the index of left–right attitudes.

Nevertheless, it is plausible to suggest that environmentalism is perhaps about to become just another aspect of the left–right dimension – not because it is structurally determined to become a left–right issue, but

because of the political articulation of the political parties, and because the structural determination of the environmental issue does not rule out such a possibility.

In a historical perspective, it would hardly be surprising if the content of the left–right dimension should change. It would be more surprising if it did not. For instance, nationalism, in Marx's time seen as an immanent part of bourgeois ideology, has probably more frequently been articulated with leftist or populist ideologies in the second half of the twentieth century, in particular in Third World countries (Laclau 1977). In short, the *meaning* of nationalism is defined by the context. Within certain structural limits, the same may hold for environmentalism.

A Note on the Greens

Considering the close association between the left–right dimension and the environmental dimension, the unsuccessfulness of the Danish Green Party is understandable. It is not entirely without growth potentials but basically, it was founded 10 or 15 years too late. The Swedish experience shows that the previous existence of a 'left-libertarian party' (Kitschelt 1988) does not necessarily preclude a breakthrough of a green party; it may be a question of delay (Lowe & Rüdig 1986, 535). However, when 'left' and 'green' become almost indistinguishable in public consciousness, the prospects for a green party are worse.

Because of the supply of several 'green' alternatives on the left wing, the Danish Greens have adopted a moderate position, refusing to identify itself with 'left' or 'right'. In local politics, the Greens have been open to co-operate with both socialist and non-socialist parties; nevertheless, among voters it is probably typically considered as a party of the left.

The social profile of the Greens can be described from the 1987b election survey. Some 28,000 accumulated AIM interviews from 1986 including 600 supporters of the Greens (Tonsgaard 1989a) serve as a supplement (these interviews measured voting intentions rather than party choice).

In general, the social profile of the Greens is similar to that of the New Left parties such as SF – the Socialist People's Party (see Table 9). Some 90 percent (AIM: 78 percent) of the Green voters were less than 40 years old. 'New Left' supporters are young – the Greens are even younger. The same ranking holds for the educational attainments. The gender composition of the party is almost 50:50.

With respect to class composition, informations diverge: according to the 1987 election survey, only 23 percent of the party's economically active supporters were workers. In the AIM material, however, the figure was 40 percent – more than in the 'New Left' parties, and much more than in the

Table 9. Social Profile of Green Voters, 1987 (percentages)

	Greens	SPP[1]	Soc. Dem.	Rad. Lib.	Bourg.[2]	Total
18–29 years	51	32	16	20	17	20
30–39 years	39	37	20	20	16	21
40 years or more	10	31	64	60	67	59
Basic Education						
7–9 years	12	33	70	39	53	53
10 years	44	39	25	37	33	32
12–13 years	44	28	5	24	14	15
Men	51	46	47	58	51	50
Women	49	54	53	42	49	50
Manual Worker	23	33	50	17	24	33
Lower non-manual employee	50	52	38	39	38	41
Higher non-manual empl.	20	12	8	30	16	14
Self-employed, farmers	7	3	4	14	22	12
Public sector	40	50	42	41	27	36
Private sector	60	50	58	59	73	64
Total	100	100	100	100	100	100
(N)	43	463	932	198	1393	3176

Source: 1987b election survey.
1. Socialist People's Party (SF).
2. Other non-socialist parties.

non-socialist parties. Probably the AIM figure is the more correct but the difference may also reflect a discrepancy between voting intention and actual party choice. As far as sector composition is concerned, the election survey indicates that the sector composition is around the same as among Radical Liberals. The accumulated AIM surveys indicate that 8 percent of the Green supporters were unemployed. This is more than among the non-socialist parties and among Social Democrats. However, this is seemingly a simple effect of the age composition and not a sign of marginalization (Bürklin, 1985): young people have higher rates of unemployment, and similar rates of unemployment are found among other parties with a similar age composition.

Finally, different surveys from 1985–87 can be combined to obtain an impression of which parties the Green supporters came from (Goul Andersen 1988, 410). According to this estimate, two-thirds came from the left-wing parties or the Radical Liberals: 19 percent from the Left Socialists, 25 percent from the Socialist People's Party, 17 percent from the Radical

Liberals. The Social Democrats contributed with only 17 percent, and the remaining non-socialist parties with 19 percent.

Conclusions

The conclusions from this article are threefold. The first point is a methodological one, stressing the dialectic between structural determination and political articulation. This is, of course a rather trivial point but in several current approaches to the study of political behaviour, it tends to be ignored. Some approaches focus exclusively on structural determination at the expense of political articulation. In their respective ways, structural Marxism and public choice approaches seem guilty of this error. The opposite tendency is to dispense entirely with the possibility of structural determination (or at least limitation), as is the case with post-Marxist theories of discourse (e.g. Laclau & Mouffe 1985).

Perhaps the most serious problem in electoral research is to ignore *both* structural determination and political articulation, as tends to be the case in the numerous dimensional analyses seeking to derive on an exclusively empirical basis the dimensionality of the party space and the position of parties, followed by more or less intuitive 'labelling' of the dimensions. In one type of such analysis, the so-called materialism–post-materialism dimension is identified as the most important cleavage dimension in Denmark (Knutsen 1988, 1989); in analyses of 'party spaces' derived from party sympathy questions, such a dimension does not appear at all (Nannestad 1989).

If the environmental dimension is becoming more or less amalgamated with the left–right dimension, both interpretations may perhaps be correct. But if this is the case, they both seem to obfuscate a central question for political science: namely, why and how these dimensions were 'fused' in Denmark, apparently in contrast to the other Scandinavian countries.

All human behaviour, including political behaviour, is guided by *meaning*, and meaning is always a *constructed* phenomenon (Berger & Luckmann 1966), although not necessarily consciously constructed. Thus, instead of focusing exclusively on the statistical identification of dimensionality, it would seem more promising to focus also on discursive processes, i.e. on the political *construction* of dimensionality, not least in comparative research.

This holds also for the environmental conflict. This may be conceived of as a value conflict between 'materialists' and 'post-materialists', or between adherents and opponents of economic growth. If this becomes the frame of reference in public consciousness, it will probably have quite different implications for, for example, the party system than if the conflict is

constructed as a conflict between narrow interests of capitalist producers or industrialists on the one hand and on the other hand the general interest of the population at large.

Still, this construction of meaning does not take place in a vacuum. We do not have to dispense with the assumption of objective structures, only with the assumption that there is any direct relation to political behaviour. In this sense, the notion of post-materialism is problematical for theoretical reasons in the sense that it ignores the problems giving rise to environmental mobilization. It is not the stress on values that is problematical; it is the explanation of the emergence of such values. Furthermore, there is no empirical evidence indicating that environmentalism is related to increased wealth. Thus, we must give up the notion of affluence.

As far as Marxist models are concerned, we have found evidence that environmental consciousness is related to the interests of capitalist producers, but it would be illegitimate reductionism to claim that this is the only explanation. In particular, the Marxist model cannot account for the entire 'gestalt' of green politics. Thus, a model of industrialism and post-industrial values seems more satisfying.

Finally, if we accept the proposition that post-industrial values, including environmentalism, are becoming ever more important, we might have to change the conventional stereotypes concerning the Scandinavian Social Democratic Parties. Usually the question goes: Why is the Danish Party so weak, both in terms of voter support and in terms of steering capabilities, as compared to the neighbouring countries: Norway, and in particular Sweden (Elvander 1980, 324–333; Esping-Andersen 1985)? Usually the answer refers to Denmark's imperfect industrialization. But if we accept this proposition, then it might be suggested that perhaps this very weakness of the Danish Party may have decreased its commitment to the structures of industrial society and increased its adaptability to change. At least the figures concerning the environmental consciousness of Social Democratic voters in the Scandinavian countries give a new dimension to the discussion. They indicate that the Danish Party might in some respects be the better equipped to meet the challenges of *post*-industrial society.

NOTES

1. Two figures are presented for 1987. The first, comparable to earlier years, is from the 1987b survey. The second refers to the 1987a survey where interviews were obtained by telephone. In general, the latter method, also applied in 1988 and 1989, seems to provide a lower rate of 'don't know' answers.
2. Frequently, it is assumed that environmental regulation, or more generally, 'new politics', entail lower economic growth rates (e.g. Inglehart 1988). However, empirical research indicates that it is questionable whether improved protection of the environment *necessarily* entails lower rates of economic growth (Munk Christiansen 1989).

3. The environmental attitudes also correlate strongly with a number of other 'new-politics' questions. As the survey included a large number of questions concerning grass-root movements, however, these questions formed a separate factor.
4. Respondents answering 'don't know' on all three items are treated as missing.
5. The strong interaction effects between age and education, known from party choice (Goul Andersen 1989, 193–200) is not found on environmental attitudes: the effects of age and education are additive.
6. Again, the variations are stable across surveys. See for equivalent 1979 results Goul Andersen (1985) and for 1987 results Tonsgaard (1989a). In the 1979 mass survey, workers were even more 'environmentalist' than the non-manual wage earners, at least within the private sector. Probably this is simply an effect of the items included: the 1979 survey did not contain questions concerning economic growth.
7. In this case, however, we find an interaction with age: In the postwar generation, persons born in 'new middle class' families were slightly more environmentalist than persons born in other families (adjusted effects of 0.1–0.2). In the generations born before 1945, on the other hand, persons from unskilled-labour families were significantly more environmentalist than persons from 'old' and 'new' middle-class backgrounds (adjusted effects of around 0.5).
8. A similar difference is found in the IFO survey referred to above where the respondents were asked to assign priority to the environment or Denmark's international competitiveness. Here the balance of opinion was −47 among privately employed workers, as compared to −22 among the population at large.
9. As mentioned above, a factor analysis indicated that they were still separate dimensions, but interestingly, two traditional left–right issues concerning economic equality and social reforms had high factor loadings (around 0.30) on the environmental dimension. Doing experiments with the scalability of the attitude questions in the 1987a election survey. Tonsgaard (1989b, 167–172) found that the most consistent scale was obtained by including one of two environmental questions in a left–right scale. In their 1979 survey of young voters, Svensson & Togeby (1986, 234–235), from purely-statistical criteria, constructed a cumulative 'left–right scale' based on four 'old left' issues and four 'new politics' issues.
10. Various experiments were done with alternative techniques and alternative groupings of the dependent variable (party choice). This had no substantial effect upon the conclusions.
11. The index includes four questions concerning state control with private companies; nationalization of big business; economic equality; and social expenditure.
12. In particular, all the environmental items had a skewed distribution in favour of the 'environmental' pole.

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Appendix: The Data

(a) *Election surveys*: Post-election surveys 1971, 1973, 1975, 1977, 1979, 1981, 1984, 1987a (panel), 1987b, 1988 (panel).
(b) *1979 Mass Survey*: Survey of political participation.
(c) *1985 Class Survey*: Survey of Danish class structure and new cleavages.
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(d) *Commercial Surveys*: Observa, AIM, IFO.
