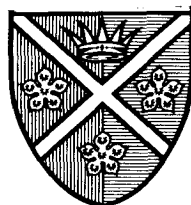


PAPERS ON
GOVERNMENT
AND POLITICS



THE GREENING OF EUROPE:

*Ecological Voting in the
1989 European Elections*

by

Mark N Franklin and Wolfgang Rüdig

No. 82

1991

**STRATHCLYDE PAPERS ON GOVERNMENT
AND POLITICS**

(Series Editor, David Judge)

No. 82

**THE GREENING OF EUROPE:
ECOLOGICAL VOTING IN THE 1989 EUROPEAN ELECTIONS***

by

**Mark N. Franklin
Department of Political Science
University of Houston**

and

**Wolfgang Rüdig
Department of Government
University of Strathclyde**

**ISSN 0264-1496
© 1991 Franklin & Rüdig**

**Department of Government
University of Strathclyde
GLASGOW G1 1XQ
Scotland U.K.**

***We are grateful to Lynn Bennie, John Curtice, Michael Marsh, and Tom Mackie for their helpful comments on previous versions of the paper. Naturally, all remaining faults are our responsibility alone.**

1. Introduction

The European Elections of 1989 provided a major boost for the green movement. Virtually all over Europe green parties made gains, even in some countries which had previously not been noted for their enthusiasm for such parties. The most surprising result was recorded in Britain where the previously hardly known Green Party polled a staggering 14.9% of the vote, the highest ever share that a green party has achieved in nation-wide elections anywhere in the world. The French Greens who previously had also looked like a rather weak party with poor electoral prospects provided the second surprise, polling 10.6%. While the British Greens were prevented by their majority voting electoral system from sending any member to the European parliament, the French achieved a major breakthrough and got 9 MEPs elected. Green parties generally did well in other European countries, too (see Curtice 1989; Niedermayer 1989; Mackie 1990).

At the same time, it is noteworthy that the German Greens failed to improve significantly on their previous results. Die Grünen merely confirmed the results of the previous General Election. Similarly, the Dutch "Rainbow" list, which claimed the green mantle in the Netherlands, failed to make any significant breakthrough.

The results of the 1989 European elections raise a number of important questions about the character and future of green politics in Europe. First, to what extent was green voting a "protest vote"? European elections are regarded as "second order elections" (Reif 1984) in which voters are more inclined to vote for small parties because the result in their view does not really matter. However, in the past, green parties have quite successfully used European elections as a spring-board to national respectability: interpretations of early successes of Belgian and German green parties in European elections in terms of protest votes were confounded by the subsequent firm establishment of these parties in their respective national party systems (cf. Curtice 1989, p. 218). The question is thus whether green parties in Britain and France (and also in some other

countries) can repeat this pattern. Who are all the new green voters, and what are the chances of them voting green again at the next national elections? Conversely, does the disappointing result for the German Greens augur badly for their long-term future?

The second key question we would like to explore concerns the nature of green politics generally. There are many shades of green, and the various European green parties are not necessarily of the same green tint. The German Greens and the Dutch Rainbow parties have long been regarded as "New Left" groupings which do not exclusively or even primarily define their identity in ecological terms, pursuing instead a broader agenda of issues including economic deprivation, racism, and a host of other protest radical causes (Rüdig 1985). The French and British green parties, on the other hand, are generally seen as more 'conservative', more narrowly 'ecological' parties. The European election result suggests that the left-wing green parties were not doing very well, in contrast to their more 'conservative' counterparts in Britain and France.

On the other hand, while there is evidence on the existence of these differences in terms of the genesis of parties and their programmes, do these differences actually filter through to the voters? In other words, do 'ecological' and 'left' green parties really have different political constituencies? And, if so, what implications does this have for the stability of green voting preferences?

There is an important theoretical background to these questions. Green parties have been seen by some writers as the representatives of a new cleavage which, potentially, gives them the chance to establish themselves firmly in the party system. On the other hand, green parties could be seen as a more ephemeral phenomenon. With an increasing dealignment of the electorate from big parties and party politics in general, the old certainties and stabilities are gone. Party choice has become volatile, and any party, even the Greens, can suddenly benefit from this volatility (Franklin, Mackie, Valen *et al.* 1992). However, any such electoral gains could disappear as quickly as they appeared (Franklin 1985). The key question is whether the break-up of old party systems has indeed led to a volatile situation where party choice is essentially unpredictable and (almost) anything is possible, or

whether the old certainties are in the process of being replaced by new ones, including the formation of a new green constituency which identifies with green parties and votes for them on a regular basis.

These questions will be explored in this paper with the help of the results of the 1989 European Elections Study.¹ Green voting behaviour has been studied before, but there has never been a truly comparative analysis involving any large number of European countries. The data from the 1989 European Elections Study now give us the first proper chance to compare green voters in different countries systematically.

First, we will look at some of the theories which have underpinned research on green voting behaviour so far. We will then present and analyse our own data, leading to a discussion of the likely future course of green politics in Europe.

¹ The European Elections Study 1989 (EES'89) is a joint effort of Western European social scientists to take advantage of the elections for the European Parliament (EP) held simultaneously in all European Community (EC) countries in June 1989, in order to engage in cross-nationally comparative electoral research. The study was designed and organized by a core group of researchers consisting of Roland Cayrol (University of Paris), Cees van der Eijk (University of Amsterdam), Mark Franklin (formerly at the University of Strathclyde, now at the University of Houston), Manfred Kuechler (Hunter College, City University of New York), Renato Mannheimer (University of Genova) and Hermann Schmitt (University of Mannheim) who co-ordinated the efforts of this group. The study consisted of three independent cross-sectional surveys that were conducted in each member country of the EC before and immediately after the EP elections. The questionnaires, which were administered in the language of each country, constituted one part of the European Omnibus Surveys which also contained the regular Eurobarometer (EB) surveys of the Commission of the EC. With the kind permission of the director of EB surveys, we have been able to derive from the EB data a number of variables such as demographic and background characteristics to employ in conjunction with our own questions. The relevant EB surveyes were number 30 (Fall 1988), 31 (Spring 1989) and 31A (summer 1989, immediately after the European elections). Each of these waves involved interviews with some 12,500 respondents divided into independent national samples of about 1000 respondents each. This number was lower for Luxembourg (about 300 cases) and higher for the United Kingdom where an additional sample of 300 cases was drawn from the Northern Irish population. In the present paper we focus upon data collected by means of the third (post-election) wave of interviews. Funding to support the first two waves was obtained from a consortium made up of European mass media and other institutions; funding for the third wave, which is the major data source employed in the present paper, was provided largely by a grant from the British Economic and Social Research Council. The data will be deposited at the ESRC Data Archive at the University of Essex, the ICPSR at the University of Michigan, and other data archives, and released into the public domain in January 1992.

2. Theories of Green Politics

The rise of green parties in the 1980s has recently led to a burgeoning literature on green politics, espousing a variety of theoretical approaches to its explanation (cf. Lowe and Rüdig 1986; Kitschelt 1988a, 1989; Kitschelt and Hellemans 1990; Müller-Rommel 1989a,b; Rüdig 1990). The strengths and drawbacks of the various theories are linked to the particular focus of their explanatory endeavours.

A number of these theories were developed out of the specifically German situation. For example, Bürklin (1984,1987) and Alber (1985, 1989) have argued that green politics is essentially a function of the blocked mobility of a new class of unemployed academics: green supporters are young and highly educated, but they are not part of mainstream economic activity. Rather they are marginalised, and excluded. This has several important implications: support for green parties is likely to melt away once the specific historical conditions which have brought green politics about (an educational revolution combined with a baby boom and a stagnation of the tertiary sector) disappear and/or are addressed by the established parties.

If we follow this approach, what would we expect the green voter in Europe to look like? He/she should be predominantly young, highly educated, and without regular employment - students and unemployed could be expected to support the Greens particularly strongly. Even before we can test this relatively simple hypothesis, it looks unlikely that the rather sudden rise of the Greens in Britain and France could be explained by Bürklin's and Alber's theories: there was no rise in graduate unemployment at that time in these countries, and other factors must have been at work to cause this sudden electoral upsurge of the Greens.

What other theories could fill this gap? Apart from the possibility (already mentioned) of treating green votes in 1989 as protest votes, we should note that one of Bürklin's sharpest critics has been Herbert Kitschelt (1988b) who has put forward a comprehensive theory of the emergence of what he terms "left-libertarian" parties. Kitschelt (1988a, 1989) argues that these "left-libertarian" parties are the outcome of certain structural

developments: they form a response to growth-oriented, bureaucratic and anti-democratic political structures. They are "left libertarian" because they combine a commitment to individual autonomy and public participation with a programme of social justice and economic redistribution. They open up a new cleavage and are not ephemeral protest parties likely to disappear quickly. Kitschelt applies this model to explain the international differences in the strength of green parties: countries with a low per capita income, low growth rate, underdeveloped welfare state provisions, a low degree of labour corporatism, a high strike rate and without major socialist/communist party participation in government are unlikely to develop significant left-libertarian parties, and vice versa.

The model seemed to work reasonably well before 1989, but the 1989 results have shown the emergence of major green parties in countries which do not show the right combination of macrosociological factors, particularly France and the UK. There are two possibilities: either the model of left-libertarian parties is faulty, or the parties which have emerged in France and the United Kingdom are different from green parties elsewhere. Indeed, given Kitschelt's definition of "left-libertarianism" as containing a major commitment to redistribution, the programme of the British and French Greens as "ecological" rather than "red-green" parties may well warrant their exclusion from the category of "left-libertarianism". We would expect the factors propelling the success of green parties in France and the UK to be rather different from most other green parties in Europe, particularly in West Germany and Belgium. And this would shed serious doubt on the applicability of Kitschelt's theory of "left-libertarianism" to the phenomenon of green parties generally.

Kitschelt's analytical focus is very much on the macro-level, on the different development of national parties. At the level of individual green voters, the theory which also suggests that green parties are the result of a more fundamental structural change is the well-known theory of postmaterialism. The basic tenets of that theory have been spelt out often enough and need not be repeated here. The theory of post-materialist value change has been the dominant source of reference for many studies of green voting behaviour. Preference for post-materialist values has been shown in a

number of studies to be linked to voting for green parties (cf. Lowe and Rüdig 1986; Poguntke 1989; Müller-Rommel 1989b). Again, we can test this theory with our data.

What has been less clear in previous work is the relative importance of post-materialism in comparison with other variables. Post-materialism is associated with high levels of education and has a negative relation to age, due to differences in generational experiences; but how much of the variance in (in our case) green voting could be explained by age and education alone, and how much is left to be explained by post-materialism once other (often causally prior) effects have been taken into account?

Furthermore, one of the main criticisms of post-materialism has been that it does not really measure value change but simply changes in attitudes on particular issues. Given that all green parties have a dominant concern for "the environment", irrespective of their different view on the traditional social questions of redistribution of wealth and social justice (cf. Rüdig 1990), will an attitude-related index with more specific concern for issues which are of key importance to green ideology (the environment, nuclear energy, arms limitations, etc.) not be equally or more successful as a predictor of green voting? Alternatively, if green parties are predominantly "left-libertarian" in their outlook, will the voter's placement on a traditional left-right scale not be an equally good predictor of green voting as their espousal or otherwise of postmaterial values?

We now have a number of hypotheses on the likely shape of the "green voter" and we can proceed to test these hypotheses with data from the 1989 European election study.

3. Data

The survey from which our data derive was carried out over a four-week period, starting on 20 June 1989, in all EC countries. Because the share of green votes for Spain, Greece, and Luxemburg is too small to be interpreted, we will concentrate in this paper on the data for Britain

(excluding Northern Ireland), West Germany, France, Belgium, Italy, Netherlands, and Ireland.

Turning to individual countries, green votes in Belgium include both votes for *AGALEV* and *ECOLO*. For France, the corresponding figures include only votes for *Les Verts*. Votes for some smaller groups, for example one list concerned with animal rights, were not included. Equally in West Germany, the figures only refer to *Die Grünen*, and votes for smaller ecological parties such as the *ÖDP* were not included. No similar problem arose for Ireland and Britain since there is only one Green Party in each of these country. However, the Irish Greens only had candidates in two out of four constituencies. For our analysis of actual green voting, we have excluded inhabitants of these regions who were unable to vote for a green candidate.² In Italy, two major green formations, *Verdi Europa* (Greens Europe) and *Verdi Arcobaleno* (Rainbow Greens) took part in the elections. There were only 15 voters for the more left-wing rainbow group in the sample, and this did not provide a basis upon which to compare them with the more 'ecological' greens. Therefore it was decided to put these voters together into one category. An even more complicated situation arose in the Netherlands. There, the 'ecological' green party did not take part in the elections, but a group called *Regenboog* (Rainbow), formed by parties of the so-called Small Left (Radical Party, Pacifist-Socialist Party, Evangelical People's Party, and the Communist Party) did participate. After the European elections, these parties decided also to join forces for the national elections and formed a new party called Green-Left. The rival 'ecological' green party polled very few votes in these elections, but Green-Left managed to establish themselves and are now increasingly recognized by other European green parties as a 'green party'. Any reference to the Dutch Greens thus refers only to the Rainbow group that took part in the European elections.

Table 1 provides a list of votes cast for green parties (as defined above) in the seven countries with which we are concerned, and compares

² Unfortunately, the data on the regional distribution of respondents does not match the definition of constituencies exactly. While we have tried to match them as best as we can, it is inevitable that we may have excluded some respondents who did have the opportunity to vote for a green candidate and included some who did not.

these official statistics with the proportion voting green as recalled by respondents to our surveys. In the final column of the table we also present a figure for "potential" green voting, which deserves somewhat more explication.

--- Table 1 about here ---

In addition to asking respondents to recall how they voted in the recent European Parliamentary election, voters were also asked, for each party contesting the election, to state how likely they thought it was that they would vote for that party in European elections at any future time. The rationale for these questions has been discussed at length elsewhere (see in particular van der Eijk and Oppenhuis 1990)

Respondents were presented with a scale of 1-10 which labeled 1 as "not at all probable" and 10 as "very probable". In our analysis we rescaled this variable into a probability ranging from 0 (no chance of a green vote) to 1 (every likelihood of a green vote at some time), or sometimes from 0 to 100 in order to facilitate comparisons with percentage green voters. Respondents not giving any probability rating for green parties were excluded. All references to potential green voters also exclude the Netherlands where this particular question did not refer to the voting potential for a green party but only to the three "Small Left" parties which eventually formed a green party. As there may be a major difference between the potential "Small Left" vote and the potential green vote, we feel that we cannot deduce anything about the potential votes for the new 'Green-Left' party from the aggregation of potential votes for its 'Small Left' predecessors.

The share of green voters in our sample was generally slightly higher than the share of votes in the European elections. This discrepancy is not necessarily due to sampling bias. The recall of previous voting choices is influenced by a range of factors which have a distorting effect. In particular, many respondents may not want to admit that they did not vote in the European elections. As shown in Table 1, the share of respondents

claiming to have voted in the 1989 European election is substantially higher than the actual turnout, with the exception of Belgium where a compulsory voting system leads to unusually high turnouts. In manufacturing a response to the voting question that follows, they are likely to mention the more popular parties rather than the less popular ones. Green parties had certainly attracted unprecedented attention in June 1989, and their good showing in the election may be reflected in these responses given shortly after the election.

4. Results

The various theories which have hitherto been employed to explain green politics suggest a number of bivariate relationships between green voting and various socio-demographic and other variables. We will first explore whether or not our data confirm the various expectations before we conduct a multivariate analysis to explore the relative predictive qualities of these variables more closely. As the comparative analysis of green voting is still in its early development, we also thought it would be valuable simply to document the relationships at a bivariate level for the information of an academic and non-academic readership. We start with a number of socio-demographic variables and then turn to political attitudes and related variables.

Sex

Surveys of attitudes on nuclear energy and nuclear weapons regularly find women to be more concerned about these issues than men (cf. Young 1990). We could thus expect that women are more inclined to vote green than men. Our data provide some support for this assertion. Women are slightly more likely to vote green than men, but the relationship is very weak, both for actual green voting ($r=.037$, $p\leq 0.01$) and for potential green voting ($r=.050$, $p\leq 0.001$). The only country where there is a more sizeable relationship between potential green voting and sex is Germany ($r=.096$, $p\leq 0.001$) but this is still a rather weak, even if statistically significant, relationship.

Age

Theories of green politics uniformly predict that it is young people who are attracted to green parties. There are some subtle differences, however, between these theories in terms of the exact age group which is thought to be likely to vote green. An approach focussing on political generations may predict that it is those socialized in the 1960s who will provide the backbone of green politics, supplemented by the followers of the "new" social movements of the late 1970s and 1980s. Other theories would predict that those socialized during the period of post-war affluence as a whole and benefitting from the 'educational revolution' would be the most likely to vote green since (a) a major proportion of the group in question still stands outside the pressures of industrial society, being still in full-time education or without regular employment, and/or (b) this group has not (yet) had the opportunity to be socialized into the habit of voting for any particular party.

--- Table 2 about here ----

The results shown in Tables 2 and 3 indicate that younger voters are indeed more likely to vote green than older voters, though there are some potentially interesting differences between countries. In all countries, it is the 18-24 age group which has most green voters.³ Green voters are most evenly distributed among the age groups in Britain. Considering that 1960s student movement activists must be in their 40s now, it is noticeable that the share of green voting of that age group is reasonably high in France, Belgium and also Britain. But in the rest of the countries, including Germany, Italy and the Netherlands which all had very strong student and other protest movements in the 1960s, green voting falls back quite sharply in the 34-44 age groups in comparison with the younger generations. The preponderance of the 18-34 group generally sheds doubt on the thesis that green voters are heavily influenced by their socialization in social

³ In the analysis of actual green voting, respondents who were less than 18 years old and thus were not able to vote in the 1989 European elections were excluded from the analysis. For potential green voting, also 15 to 17 year old respondents were included.

movements. This may be so for Green Party activists (see Kitschelt 1989; Kitschelt and Hellemans 1990; Rüdig *et al.* 1991a) but this does not appear to play a major role in voting behaviour. The fact that it is mainly the very young voters which are attracted to the Greens provides support for the party socialization thesis. For green parties this does, however, introduce a level of uncertainty: their electoral fortune appears closely tied to their ability to appeal to new, young voters. The data on the age distribution does suggest that green parties find it more difficult to keep the support of these voters once they become older.

Looking at potential green voting, the 15-24 age group displays the highest potential except in France and Belgium. The potentials recede with advancing age, particularly so in Germany and Italy.

--- Table 3 about here ---

In summary, there is a fairly strong relationship between green voting and age. The data suggest important differences, though, in the reliance of green parties on new voters. The data on potential green voting gives us a strong indication that it is particularly in Germany that the appeal of the Greens is restricted to the younger age groups while this is rather less the case in France and also in Britain.

Education

All theories of green politics predict that a high level of education is related to green voting. In Table 4, the correlation coefficients between education and actual and potential voting are presented. Education levels were measured in terms of the age when the respondent left education, with four categories: less than 15, between 16 and 17, between 18 and 20, and 21 or older. For actual and potential green voting, there is a statistically significant relationship in all countries. The figures do suggest interesting differences. In some countries, in particular Germany and Italy, actual and potential green voting are more or less equally strongly related to education. In Belgium and Ireland, the relationship is far stronger for potential voting.

The reverse is true for France and Britain, suggesting that in these countries, the Greens are appealing to a somewhat broader spectrum of the electorate, at least as far as their education levels are concerned.

--- Table 4 about here ---

Looking at the green vote in Great Britain and France, we thus find some evidence which would suggest that the green vote in these countries is not as tightly defined by age and education as, for example, in Germany.

Occupation

According to one theory of green voting, green voters should come from a particular section of the population whose educational achievements have not been rewarded with a matching position and influence in society. The Greens could thus be expected to be the party of "frustrated academic plebeians" (Alber 1989, p. 205). An alternative explanation which has already found widespread empirical support in studies of social movement activists, at least in Britain (cf. Rüdig *et al.* 1991b), predicts that the Greens should have a particularly fruitful recruiting ground in a particular sector of the middle classes: non-commercial and human services (education, health, alternative economy etc.) as well as from other groups standing outside mainstream economic activity, such as those still in full-time education.

Our data are not ideally suited for testing the theory that greens come from a particular section of the middle class because we cannot identify those in "caring" professions. The closest we could get to this group is to look at public sector employees. The data allow us to make a more comprehensive assessment of the role of more broadly defined occupational profiles, such as students and unemployed.

Table 5 shows a number of broad occupational categories and their inclination to vote green. Overall, manual workers are slightly less likely to vote green, professional and other middle class occupations are somewhat more likely to vote green. But the difference is not large and in some countries, respondents with a "working class" occupation show a greater likelihood to vote green than those with "middle class" occupations. The

group which is consistently rather hostile to the Greens are retired people, perhaps not surprisingly if we consider our previous findings on the influence of age. Students on the other hand figure very strongly all over Europe, but particularly in Germany and Italy. There are some interesting differences as far as the unemployed are concerned: they figure strongly among actual green voters in West Germany and the Netherlands but otherwise they do not play any significant role. This ties in well with the more left-wing orientation of the Dutch and West German Greens, emphasizing social justice and welfare issues in their programmes. Overall, the eta values demonstrate that occupation as defined in these terms does have a sizeable effect particularly in Germany.

--- Table 5 about here ----

Is the high proportion of green votes from German unemployed and students a confirmation of the Bürklin/Alber thesis of green politics as the outcome of the frustrations of the academically unemployed? We need to analyse the effect of being in full-time education or unemployment in a multivariate context before we can say anything with any confidence, but a look at percentage differences already demonstrates clearly that such an interpretation would mainly apply to the German and Dutch cases.

A look at the influence of public sector employment on actual and potential green voting did not elicit any strong relationships, not surprisingly as this group would also include groups with an anticipated low probability of voting green, such as members of the security forces or employees of nationalised energy industries. For all countries together, we found small positive correlations between public sector employment and actual ($r=.076$, $p\leq 0.001$) and potential green voting ($r=.070$, $p\leq 0.001$). The only country where public sector employment had a more noticeable positive effect was Belgium with coefficients of $r=.151$ and $r=.160$ ($p\leq 0.001$) for actual and potential green voters, respectively.

Social Integration

An individual's occupation is certainly one of the most important indicators of a person's standing in society. But there are many others which could also be of importance for a theory which sees green support predominantly coming from temporarily marginalised sectors of society. In his analysis of the German green voter published in 1987, Bürklin constructs a cumulative "social integration index" which is intended to capture this section of the population. This index is based on five variables: marital status, source of income, number of children, church affiliation and housing status. A person who is not in full-time occupation and lives off unearned income, is unmarried, has no children, does not own a house, and does not go to church, is considered most marginal and is allocated a "0" in the index, a person in exactly the opposite position is considered highly integrated and is allocated a "5", with the rest of the cases being allocated values between 1 and 4. Bürklin finds that this social integration index is a fairly good predictor of green voting. Together with a second index based on personal attitudes to wealth creation and career values, Bürklin is able to explain about 20% of the variance on green voting (Bürklin 1987).

While we cannot fully replicate Bürklin's analysis because of the absence of comparable attitude variables in our dataset, we can test whether the social integration index proposed by Bürklin is able to add to our explanation. We constructed such an index, following Bürklin's model exactly. To compare with Bürklin's social integration index, we also constructed a dummy variable based on occupational status in which those outside mainstream economic activity, namely students and the unemployed, are pitted against the rest of the population.

Is lack of social integration, as conceived by Bürklin, related to green voting? The bivariate relationships as detailed in Table 6 suggest two things: first, the role of 'social marginality' as a predictor of green voting is essentially limited to Germany, and b) the index does not produce significantly higher correlation coefficients than the occupational marginality variable, with the exception of Germany. To the contrary, occupational marginality has a slightly higher predictive capacity (outside Germany) than social marginality.

-----Table 6 about here -----

Such a comparison is, necessarily, rather crude if compared with multivariate analysis. It remains to be seen, for example, whether any of these variables still play a role once we control for age and education levels. Bürklin's marginality index, however, does not have any broad international appeal: it fits the German situation quite well, but social marginality defined in these terms clearly is largely unrelated to actual and potential voting in other European countries.

Overall, we have tested a number of hypotheses on the relationship between green voting (actual and potential) and various socio-economic background variables. The trend we could establish is a very clear one: these variables play quite a major role for green voting in Germany, but have far less importance elsewhere. We will have to analyse how the total predictive qualities of all socio-economic variables taken together in a multivariate analysis compares with this preliminary assessment.

Before we go on to such an analysis, we first have to look at a number of other variables which could be important. As we have seen, few theories of green politics rely on socio-economic variables alone. The dominant notion, as proposed by Inglehart and others, predicts a convergence of left-wing attitudes and post-material values. Alternatively, Rüdig (1990) has argued that these theories completely neglect the dominant concern of green parties with the environment. Thus, the question is what, if any, influence left-right orientation, post-materialist values and environmental concern and consciousness respectively have on green voting.

Left-right placement

In some countries, green parties are clearly placed on the left of the political spectrum, and such parties define themselves as part of "the left". Thus we would expect some relationship between left-right self placement and green voting in Germany and the Netherlands. In other countries, however, green parties deny any association with "the left". Do their actual and potential voters share this political world view? As can be seen from

Tables 7 and 8, green voting is associated with a more left than average self-placement everywhere, the only exception is Italy.

The most left wing green voters are found in the Netherlands. This is not particularly surprising, since "Rainbow" is a group which consists of small left parties (rather than independent greens). Britain and Ireland have the most right-wing green electorate. Even here green voters fall to the left of an electorate which is particularly right wing in comparison with the average scores found in other countries.

Overall, the expectation that the German and Dutch Greens are further to the left than other green parties is confirmed by the data on the left-right orientation of their actual and potential supporters. While German and Dutch Greens clearly are positioned more to the left of the political spectrum, differences between the self placement of greens and that of the general population is often not very great elsewhere.

Remarkably, the differences between actual and potential green voters are not very substantial either. Only in Belgium and Ireland do potential green voters appear to be slightly more right wing. In all other countries, the differences between actual and potential voters is fairly minute. Somewhat surprisingly, this is also the case for Britain and France. Obviously, there is no untapped potential which is defined in left-right terms for these parties.

Post-materialism

Turning to post-materialism, we would expect a fairly substantial relationship between green voting and a preference for post-materialist values, given the importance of this approach in the literature. We can find a relationship in all countries between potential green voting and post-material values. In the case of actual green voting, however, the relationship is rather weak in most countries, with the exception of Germany and the Netherlands (see Table 8).

-----Table 9 about here-----

Again, the major pattern we already identified for socio-economic variables repeats itself. For actual voters, there are fairly strong relationships between post-materialism and green voting in Germany and the Netherlands. For potential voters, the strongest correlation is again found for German potential greens. This time, however, Britain is not far behind while the correlation is weakest in France. For the other countries, the correlation is not strong even for potential voters. Again, we have to emphasize that the real test of the predictive capabilities of post-materialism requires a multivariate analysis (see below).

Environmental Concern

Are green parties a political manifestation of a new "post-materialist" or "left-libertarian" cleavage or are they, as Rüdig (1990) argues, the expression of a new "ecological" cleavage which is based on a structural conflict about the environment? Arguably, it is difficult if not impossible to come to a final conclusion about the nature of green parties on the basis of an analysis of the attitudes of green voters. But, undoubtedly, the "ecological cleavage" hypothesis would have little currency if we could find no relationship whatsoever between environmental concern and green voting. Equally, this hypothesis would be difficult to sustain if the influence of environmental concern would be superseded by any other "single issue" concern.

We are restrained in our analysis of these factors by the variables we have available in the dataset of a survey which was not specially designed to test this type of hypothesis. The only variable which is at all suitable in this context concerns the importance of individual political issues. Respondents were asked to list the three most important political issues in order of importance. Environmental pollution was one such issue. We would thus expect that Greens would consider the environment to be an important political issue, and that we would find a correlation between the importance of environmental pollution as a political issue and green voting (actual and potential).

Table 10 shows that for green voting across Europe, there are fairly

strong correlations between actual and potential green voting and the importance of the environment as a political issue.

-----Table 10 about here -----

The minimal hypothesis about the relationship between environmental concern and green voting is thus confirmed. Looking at other issues, we cannot find any similarly convincing relationship. Other issues for which we have data include unemployment, European integration and agricultural surpluses, none of which showed consistently significant relationships. Arms limitation was of some importance, with correlations in the region of 0.1, as was the importance of stable prices, which had a negative relationship with green voting of about the same magnitude.

In the ideal case, we would have liked to explore the relationship between other environmental issues, for example concern over nuclear energy, or global warming, and green voting. But on the basis of the slim database we have, we can say that green voters all over Europe are strongly concerned about the environment. Green voting does not appear to be an aimless protest.

As expected, British and French Greens are more concerned about "the environment" than, say, their Dutch and German counterparts, but the difference between the coefficients is not that great. Significantly, post-materialism and left-right orientation are feature more strongly at the bivariate level in the latter two countries. From these comparisons, we could form the expectation that environmental concern would be overshadowed by post-materialism and left-right orientation in the case of "red-green" parties with the opposite being the case for "green-green" parties. Multivariate analysis (see below) will enable us to make an assessment of which is more important when the other is taken into account, and it is to this that we now turn.

5. A multivariate approach to explaining green voting

All of the analyses presented so far have been bivariate in nature. We have looked at relationships between a number of variables and green voting, but we have taken the independent variables one at a time. Such a procedure lends itself to in-depth discussion of the possible reasons for observed findings, but needs all the time to bear in mind the possibility that the findings might be quite different when other variables are simultaneously taken into account. For example, education and age are closely related. Bivariate analysis shows both of them to be important correlates of green voting, but does education add anything to our ability to explain green voting once age has been taken into account?

To conduct a multivariate analysis in a way which would allow us to compare our results between countries, we first selected all variables which had shown some promise at bivariate levels, and transformed them into dummy variables in each case.⁴ Among the socio-demographic variables, education, occupation sector, being a student or unemployed, age, and sex were found to be useful in this context. For attitudinal variables, left-right orientation, post-materialism, and the importance of environmental pollution and arms limitation were included. Any other variables mentioned in previous parts did not add to our model in any significant way and were excluded.

--- Tables 11a and 11b about here ---

Tables 11a and 11b show the results of two different multiple regression analyses (labelled A and B) for each of the countries in which any significant amount of green voting took place, and overall for all of these countries taken together. Tables 12a and 12b do the same for potential green voting. The coefficients given in the body of each table (except those

⁴ Our dataset consists of a number of separate national datasets. Therefore, we cannot use standardized regression coefficients (beta) as a basis for comparisons between countries as these are standardized in relation to each national dataset. Therefore, we are using unstandardized regression coefficients, *b*. In order to compare the regression coefficients relating to different datasets, we can only do so if all independent variables are constructed as dummies.

relating to variance explained) are the unstandardised regression coefficients b and give the effect of each variable on the probability of green voting or on potential green voting. Thus, in the overall analysis "A" in Table 11a, those with more than an average level of education are seen to be 9 % more likely to vote Green than those with less than an average level of education.⁵ Most of the independent variables similarly index the effects of having more or less than an average score on the predictor concerned, though sector and sex are of course dichotomies and yield effects based on whether respondents have some particular characteristic or not. All coefficients shown in these tables are significant at the $p \leq 0.001$ level.⁶

--- Tables 12a and 12b about here ---

The two analyses reported in these tables are distinguished according to whether attitudinal variables are included. The "A" analysis in each case focuses upon socio-demographic characteristics, while the "B" analysis in each case shows the consequence of introducing attitudinal variables in addition.

The first important finding to emerge from these tables is the fact that socio-demographic characteristics have relatively little role to play in determining who will vote green and who will not. Education, employment sector, age and sex and being a student or unemployed all add to variance explained but together they explain only 5.5% of variance in green voting over Europe as a whole, and no more than 10.5% in any country.

What is the most important of these socio-demographic

⁵ In the case of potential green voting, the dependent variable is interval-level, recording the probability of a green vote as reported by each respondent on a scale of 0-1. In the case of actual green voting, the dependent variable is a dichotomy, recording whether the respondent voted green (1) or not (0). A dummy variable of this kind is badly skewed when the number of voters is small (as in this case), and will yield coefficients that may contain some bias. In this article, our main focus is upon the relative magnitude of effects, which will all be similarly biased and thus remain comparable, and upon variance explained in each analysis, which is not subject to the same kind of bias.

⁶ If no coefficient is shown, this does not necessarily mean that this variable is unrelated to green voting but only that this variable does not add significantly to the variance explained once the variables for which coefficients are shown are in the regression equation.

characteristics? Age and education figure most strongly. As the younger generations usually enjoy a higher level of formal education, one could expect that education is only related to green voting through age (cf. Alber 1989, p. 205). However, our analysis does not provide much support for this thesis. In many cases, both age and education make a contribution, even if the other variable is in the regression equation. Overall, this means that higher educational achievements are a good predictor of green voting, independent of age. Of the other socio-demographic characteristics that play some role, public sector employment is a fairly good predictor in Belgium, but also plays a role in Italy and Ireland. Students and unemployed figure quite strongly in Germany, Italy, the Netherlands, and Belgium, while female green voting is only a factor in Germany and the Netherlands.

However, if we turn to potential green voting, the picture changes somewhat. The overall predictive capacity of these variables is still rather low at about 7% of variance explained. But if we look at individual countries, we find a major difference between Germany on the one hand where 18% of potential green voting is explained by these variables and countries such as France, Britain and Ireland where the variance explains is 4.2% at best. Here we do have a very significant finding: socio-demographic background variables explain quite a considerable amount of the potential for green voting in Germany which is limited to certain strata of the population, while no similar definition, or limitation, of green potentials can be found in other countries.

Turning to attitudinal effects, we find that, overall, they are rather more pervasive. When their effects are taken into account, variance explained increases substantially everywhere except in Italy; and, in Germany, the inclusion of attitudes in our attempt to explain potential green voting yields an astonishing 35.3 % of variance explained; a statistic that would be impressive in most social science contexts.

The overall analysis of actual and potential voting confirms that left-wing orientation, post-materialist values and the importance of the environment as a political issue all make an independent contribution to the explanation of the potential green vote. Their relative importance, for all

countries together, is very similar. However, the relative importance of these three variables does vary not insignificantly from country to country.

First, it is worthwhile noting that there is only one variable, the importance of the environment as a political issue, that is associated with actual and potential green voting in all countries. There are important differences, however, in its relative importance. For actual green voting, the importance of the environment as an issue is clearly the dominant variable in France, Britain, and Ireland. In Italy and Belgium it is more important than other attitude variables. In Germany and the Netherlands, however, there is still a statistically significant relationship to green voting, but its predictive value is rather more limited in comparison with both socio-demographic variables as well as left-wing orientation and post-materialism. Turning to potential green voting, we still find that pro-environmental attitudes are a very strong predictor in France, Britain, and Belgium, with a slightly more marginal role in Ireland and Italy. In Germany, it also figures as an important predictor but is clearly overtaken in importance by left-wing orientation and post-materialism.

As we saw in the bivariate analysis, this does not mean that German (and Dutch) green voters do not think that the environment is important: it is because in Germany and the Netherlands, pro-environmental attitudes are so prevalent that they have relatively little explanatory power on their own.⁷ We can thus conclude that environmental concern is an important, independent predictor of actual and potential green voting, even if we control for socio-demographic variables as well as post-materialism and left-wing orientation.

If we look at the other attitude variables, we find that left-wing orientation and post-materialism are important variables, but that their predictive capabilities are rather more limited. They figure very strongly in Germany, particularly for potential green voting, with the importance of the environment as an issue coming a rather poor third together with arms limitation. For actual voting, the cases of Germany and the Netherlands look

⁷ In Germany, only 38.6% did not mention the environment as one of the three most important issues. This is only topped by the Netherlands with 25.1%. The least environmentally concerned are the Irish with 81.2%, followed by the French (76.3%), the British (67.8), the Italians (52.5) and the Belgians (47.4).

remarkably similar, in both cases left-wing orientation and post-materialism are the most important attitude variables. In other countries, the role of post-materialism is rather limited. It is quite a good predictor of potential green voting in Britain, but in many cases, it does not add anything, or very little, to the variance explained once socio-demographic variables, environmental concern and left-wing orientation are taken account of.

What we have established is that actual and potential green voting across Europe is related to environmental concern, as measured here by the importance given to the environment as a political issue, even if post-materialism and left-wing orientation are in the equation. Furthermore, while there are substantial differences in the relative importance of post-materialism and left-wing attitudes amongst various green parties, environmental concern is always present as a determinant of green voting.

6. Conclusions

With very few exceptions, theories of green politics have hitherto been tested only on the basis of empirical data taken from individual countries, and many theoretical constructs clearly reflect particular national experiences. Our data on green voting in the European elections of 1989 provide us with a first opportunity to test the wide range of hypotheses which have emerged from this theoretical literature.

First, our results show that theories of green politics have probably overestimated the role of a range of socio-demographic variables. It is true that overall we do find support for the thesis that highly educated young voters employed in the public sector or outside full-time employment are more likely to vote green than others; but overall, socio-demographic variables only explain 5.5% and 7.2% of the variance in actual and potential green voting, respectively, a clear indication that green voting is somewhat less clearly defined than previously thought.

However, what we do find is that these variables are rather more important for the explanation of German and Dutch green voting in 1989 and future potential green voting in Germany. One possible conclusion

which could be drawn from this is that the German Greens are more than other green parties tied to particular social strata of the population, especially the young and marginal. The age distribution of its voters clearly suggests that their future depends on their continued ability to attract first-time voters. To that extent, we can confirm some of Bürklin's previous findings. Whether this profile of actual and potential German Green voters does or does not bode well for the stability of the green vote is a different question. There is some evidence, discussed elsewhere (Rüdig and Franklin 1991), to suggest a rather stronger attachment of green voters in Germany to their Party than in other countries. In other words, other green parties broadly appeal to a wider section of the population but they are not necessarily in a better position to mobilize a higher share of the popular vote in national elections.

Secondly, looking at the profile of green voters in terms of left-right placement, post-materialism, and the importance of environmental issues, we found that all of these factors, independently, contribute significantly to an explanation of actual and potential green voting. Environmental concern was clearly the single variable which had the broadest appeal across all countries. The influence of post-materialism and left-wing orientation was more patchy, but in some cases, in particular in Germany, these variables were far stronger predictors than environmental concern.

Again, what we find is that the dominant theories of green politics (such as Inglehart's theory of post-materialist value change and Kitschelt's theory of "left-libertarian parties") do receive support from our analysis of German green voters. They do not receive much support from the analysis of the green voters of other parties, however.

Again, the difference between Germany and other countries does appear to reflect a genuine difference in social reality: German green voters have more definable characteristics both in terms of their socio-demographic profile and their values and attitudes than green voters of other countries. This finding suggests that stability may be a characteristic of German green voting while other green parties have to contend with more flexible, but also more volatile green electorates.

However, we have to end with a note of caution on the validity of this

interpretation. First, any consideration of stability has to take into account other factors, such as the attachment of green voters to green parties, an analysis beyond the scope of this particular paper (see Rüdig and Franklin 1991). Second, it is obvious from the literature that the various theories of green politics we discussed were developed by closely analysing the German Greens. Not much attention was paid to green parties elsewhere. Both the theoretical approaches and the empirical means for analysing green votes were developed in the context of German developments and may be biased as a result. In fact, our analysis provides strong evidence that the theories which have dominated the academic literature on green politics are applicable mainly to the German Greens or other green parties elsewhere which follow the model of the German Greens closely. It was the German Greens who first brought the phenomenon of green parties to worldwide attention but it is clearly mistaken to assume that green parties in other countries share their characteristics. A 'general' theory of green politics based on the German experience is bound to fail in the explanation of the phenomenon of green politics as a whole.

One implication of our analysis is that it is probably misleading to talk about a "European" green voter as somebody with specific characteristics. The variability of our findings from country to country does suggest that differences between countries may be more pronounced than hitherto assumed. What is necessary, therefore, is to look more closely at countries other than Germany. The fact that we cannot explain actual and potential voting in these countries as well as in Germany may well be a distinctive characteristic of green voting in these countries, but it cannot be excluded that green voting and its determinants do not fit the German-derived concepts which have been used to analyse green voting so far.

References

Alber, J. (1985). "Modernisierung, neue Spannungslinien und die politischen Chancen der Grünen", *Politische Vierteljahresschrift*, Vol. 26, pp. 211-226.

Alber, J. (1989). "Modernization, cleavage structures, and the rise of green parties and lists in Europe", in Müller-Rommel 1989a, pp. 195-210.

Bürklin, W.P. (1987). "Governing left parties frustrating the radical non-established left: the rise and inevitable decline of the Greens", *European Sociological Review*, Vol. 3, pp. 109-126.

Bürklin, W.P. (1984). *Grüne Politik* (Opladen: Westdeutscher Verlag).

Curtice, J. (1989). "The 1989 European election: protest or green tide?", *Electoral Studies*, Vol. 8, pp. 217-230.

Van der Eijk, C and E. Oppenhuis (1990) "European Parties' Performance in Electoral Competition", *Electoral Studies*, Vol 9, in press.

Franklin, M. (1985). *The Decline of Class Voting in Britain* (Oxford: Oxford University Press).

Franklin, M., T. Mackie, H. Valen, et al. (1992) *Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries* (Cambridge: Cambridge University Press) (in press).

Inglehart, R. (1989). *Culture Shifts in Advanced Industrial Society* (Princeton, N.J.: Princeton University Press).

Kitschelt, H. (1988a). "Left-libertarian parties: Explaining innovation in competitive party systems", *World Politics*, Vol. 40, pp. 194-234.

Kitschelt, H. (1988b). "The life expectancy of left-libertarian parties: Does structural transformation or economic decline explain green party innovation? A response to Wilhelm P. Bürklin", *European Sociological Review*, Vol. 4, pp. 155-160.

Kitschelt, H. (1989). *The Logics of Party Formation: Ecological Politics in Belgium and West Germany* (Ithaca, N.Y.: Cornell University Press).

Kitschelt, H. and Hellemans, S. (1990). *Beyond the European Left:*

Ideology and Action in the Belgian Ecology Parties (Durham, N.C.: Duke University Press).

Lowe, P.D. and Rüdig, W. (1986). "Political ecology and the social sciences: the state of the art", *British Journal of Political Science*, Vol. 16, pp. 513-550.

Mackie, T.T. (ed.) (1990). *Europe Votes 3: European Parliamentary Election Results 1989* (Aldershot: Dartmouth).

Müller-Rommel, F. (ed.) (1989a). *New Politics in Western Europe: The Rise and Success of Green Parties and Alternative Lists*. (Boulder, CO.: Westview Press).

Müller-Rommel, F. (1989b). "The German Greens in the 1980s: Short-term cyclical protest or indicator of transformation?", *Political Studies*, Vol. 37, pp. 114-122.

Niedermayer, O. (1989). "Die Europawahlen 1989: Eine international vergleichende Analyse", *Zeitschrift für Parlamentsfragen*, Vol. 20, pp. 469-487.

Poguntke, T. (1989). *An Alternative Politics? The German Green Party in a Comparative Context* (Unpublished Ph.D. thesis, European University Institute, Florence).

Reif, K. (1984). "National electoral cycles and European elections 1979 and 1984", *Electoral Studies*, Vol. 3, pp. 244-255.

Rüdig, W. (1985). "The Greens in Europe: Ecological parties and the European elections of 1984", *Parliamentary Affairs*, Vol. 38, pp. 56-72.

Rüdig, W. (1990). *Explaining Green Party Development: Reflections on a Theoretical Framework*, Strathclyde Papers in Government and Politics, No. 71 (Glasgow: Department of Government, University of Strathclyde).

Rüdig, W. and Franklin, M.N. (1991). "Green prospects: The Future of Green Parties in Britain, France and West Germany", in Rüdig, W. (ed.), *Green Politics Two 1991* (Edinburgh: Edinburgh University Press).

Rüdig, W.; Bennie, L.G.; Franklin, M.N. (1991a). *Green Party Members: A Profile* (Glasgow: Delta Publications).

Rüdig, W.; Mitchell, J., Lowe, P.D. and Chapman, J. (1991b). "Social movements and the social sciences in Britain", in Rucht, D. (ed.), *Research*

Greening of Europe

on Social Movements: The State of the Art in Western Europe and the USA (Frankfurt: Campus/Boulder, Co.: Westview), pp. 121-148.

Young, K. (1990). "Living under threat", in Jowell, R., Witherspoon, S. and Brook, L. (eds.), *British Social Attitudes: the 7th Report* (Aldershot: Gower), pp. 77-108.

Greening of Europe

Table 1: Green Votes

Country	Votes Cast for Greens in EE 1989 ^a	Recalled to have voted Green in EE 1989 ^b	Potential Green Voting ^c	Claimed to have voted in EE 1989	Actual turnout
	%	n	%	%	%
France	10.6	77	13.3	55.7	55.6
Great Britain	14.9	81	15.7	42.0	54.3
Germany	8.4	86	9.7	40.3	73.8
Italy	6.2	73	8.5	43.3	85.0
Netherlands	7.0	53	8.5	-	64.4
Belgium	13.9	118	14.0	51.1	82.0
Ireland	3.8	25	3.3 ^d	46.2	73.9

(N = 7224)

a. Source: Mackie 1990.

b. Excluding non-voters.

c. Average probability of voting green in European elections at any future time.

d. 4.6% in the constituencies contested.

Greening of Europe

Table 2: Green Voting According to Age a)

COUNTRY	TOTAL	AGE GROUP					60 and over	r ^b
		18-24	25-34	35-44	45-59			
France	13.3	21.7	19.2	19.4	10.3	5.2	-.179***	
GB	15.7	25.7	24.4	19.2	13.0	8.9	-.172***	
Germany	9.7	20.3	16.5	8.8	3.9	1.7	-.230***	
Italy	8.5	21.8	12.6	8.8	3.3	1.8	-.230***	
Netherl.	8.5	18.3	16.5	6.8	4.1	2.5	-.207***	
Belgium	14.0	21.0	20.2	18.4	8.2	5.0	-.180***	
Ireland	4.6	13.8	4.1	4.4	2.2	3.7	-.105***	
Total	10.6	20.3	16.0	12.0	6.0	4.2	-.184***	

a. Cell entries are average percentage voting green.

b. Equivalent to Phi when computed for a 2x2 contingency table.

Level of statistical significance: * $p \leq 0.05$ *** $p \leq 0.001$ n.s. not significant

Greening of Europe

Table 3: Potential Green Voting According to Age a)

COUNTRY	TOTAL	AGE GROUP					r ^{b)}
		15-24	25-34	35-44	45-59	60 and over	
France	55.7	58.2	63.1	56.6	53.1	46.6	-.163***
GB	42.0	52.7	45.3	42.1	38.9	35.0	-.199***
Germany	40.3	54.8	53.0	39.9	28.6	25.0	-.386***
Italy	43.3	57.5	50.1	43.5	37.1	29.2	-.303***
Belgium	51.0	58.2	58.6	56.4	45.1	38.2	-.230***
Ireland	46.2	52.3	49.0	50.3	44.9	32.0	-.186***
Total	46.2	55.6	53.4	47.8	40.2	34.6	-.248***

a. Cell entries are averages of the percentage probability for green voting.

b. Equivalent to Phi when computed for a 2x2 contingency table.

Level of statistical significance:

* $p \leq 0.05$ *** $p \leq 0.001$ n.s. not significant

Greening of Europe

Table 4: Education and Green Voting ^{a)}

COUNTRY	Education ^{b)}	
	Actual Green Voters	Potential Green Voters
France	.194***	.083**
GB	.200***	.165***
Germany	.232***	.252***
Italy	.220***	.224***
Netherlands	.222***	-
Belgium	.174**	.258***
Ireland	.087*	.169***
TOTAL	.193***	.210***

a. Cell entries are correlations (Pearson's r) between green voting (and potential green voting) and education.

Level of statistical significance:

* $p \leq 0.05$ ** $p \leq 0.01$

*** $p \leq 0.001$

b. Education: Age completed education, four categories: 1) 15 or younger, 2) 16-17, 3) 18-20, 4) 21 or older.

Greening of Europe

**Table 5: Occupation and Green Voting
(in %)**

Country	Total	Occupation of Respondent						Eta	
		Working Class	Middle Class	Retired	Housewife	Student	Unemployed		
France	A	13.3	19.8	16.6	6.0	11.5	24.0	8.3	.171
	P	55.7	61.2	59.0	46.9	53.6	56.4	54.2	.171
GB	A	15.6	15.0	23.8	8.1	8.3	38.5	20.0	.223
	P	42.0	44.1	42.7	34.4	37.6	59.0	47.6	.209
Germany	A	9.7	6.7	10.8	2.1	5.3	31.9	29.4	.267
	P	40.3	41.0	40.3	26.1	36.1	65.6	44.6	.313
Italy	A	7.2	8.1	8.4	3.5	4.8	35.0	7.9	.270
	P	43.3	44.3	45.0	30.1	40.6	60.7	46.7	.261
NL	A	8.5	6.4	11.4	1.8	4.7	24.5	25.0	.248
Belgium	A	14.0	15.5	16.6	5.4	13.0	23.8	13.1	.139
	P	51.0	54.1	54.8	36.6	49.1	60.0	54.3	.232
Ireland	A	4.6	4.5	5.6	4.8	3.6	9.1	4.0	.052
	P	46.2	45.4	45.2	41.8	42.6	57.2	49.3	.138
Total*	A	10.6	10.8	12.7	4.5	6.8	27.9	12.9	.179
	P	46.2	47.9	46.8	35.7	42.8	59.8	50.4	.204
	n	4846	1042	1387	911	938	290	233	

* Figures do not add up because other categories (don't Knows, etc.) have been excluded from the table.

A: Actual green voters (1989)

P: Potential green voters (Mean potential, scale 100 to 1)

n: Total number of cases for actual green voting, the number of cases for potential green voting varies slightly.

Greening of Europe

Table 6: Occupational and Social Marginality and Green Voting

COUNTRY	Occupational Marginality ^{a)}		Social Integration ^{b)}	
	Actual Green Voters	Potential Green Voters	Actual Green Voters	Potential Green Voters
France	.027n.s.	.001n.s.	-.044n.s.	-.037n.s.
GB .	.089*	.159***	-.045n.s.	-.102**
Germany	.240***	.248***	-.238***	-.301***
Italy .	.206***	.184***	-.117**	.112***
Netherlands	.217***	-	-.150**	-
Belgium	.054n.s.	.092**	-.096**	-.078*
Ireland	.006n.s.	.119***.	-.044n.s.	.030n.s.
TOTAL	.123***	.142***	-.121***	-.124***

a) Students and Unemployed vs. rest of population (dummy variable)

b) Bürklin's Social Integration Index, cumulative index of five dummy variables: marital status, number of children, church attendance, housing status, occupation.

Level of statistical significance:

n.s. not significant, * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Greening of Europe

Table 7: Average Placement of Actual and Potential Green Voters on Left Right Scale (1 - Far Left to 10 - Far Right)

Country	Average L-R Score (entire electorate)	Green Voters L-R Score	Diff.	Potential Green Voters L-R Score ^{a)}	Diff.
Belgium	5.4	4.6	-0.8	5.2	-0.2
France	5.1	4.3	-0.8	4.4	-0.7
GB	5.7	5.3	-0.4	5.1	-0.6
Germany	5.3	4.2	-1.1	4.1	-1.2
Italy	4.5	4.2	-0.3	4.3	-0.2
NL	5.2	3.2	-2.0	-	-
Ireland	6.4	5.1	-1.3	5.9	-0.5

a) Average L-R score of those scoring 7 or higher on the 1-10 probability scale for voting green in the future.

Greening of Europe

Table 8: Left-Right Orientation and Green Voting ^{a)}

COUNTRY	Left-Right Orientation ^{b)}	
	Actual Green Voters	Potential Green Voters
-----	-----	----
France	-.130**	-.235***
Britain	-.074n.s.	-.199***
Germany	-.189***	-.427***
Italy	-.036n.s.	-.32n.s.
Netherlands	-.275***	-
Belgium	-.140***	-.005n.s.
Ireland	-.131**	-.222***
TOTAL	-.136***	-.188***

a. Cell entries are correlations (Pearson's r) between green voting (and potential green voting) and post-materialism.

Level of statistical significance:

* $p \leq 0.05$ ** $p \leq 0.01$ *** $p \leq 0.001$ n.s. = not significant

b. Left-right scale from 1 (left) to 10 (right)

Greening of Europe

Table 9: Post-materialism and Green Voting ^{a)}

COUNTRY	Post-materialism ^{b)}	
	Actual Green Voters	Potential Green Voters
-----	-----	----
France	.154***	.098**
Britain	.091*	.249***
Germany	.239***	.334***
Italy	.034n.s.	.116***
Netherlands	.262***	-
Belgium	.071*	.138***
Ireland	.081*	.165***
TOTAL	.131***	.175***

a. Cell entries are correlations (Pearson's r) between green voting (and potential green voting) and post-materialism.

Level of statistical significance:

* $p \leq 0.05$ *** $p \leq 0.001$ n.s. = not significant

b. Postmaterialism: measures by standard four item battery, three categories: 1) Materialists, 2) Mixed, 3) Postmaterialists

Greening of Europe

Table 10: Environmental Concern and Green Voting a)

COUNTRY -----	Importance of Environmental Pollution as a political issue ^{b)}	
	Actual Green Voters	Potential Green Voters
-----	-----	-----
France	-.302***	-.288***.
GB	-.232***	-.288***
Germany	-.219***	-.243***
Italy	-.163***	-.183***
Netherlands	-.164***	-
Belgium	-.182***	-.262***
Ireland	-.194***	-.229***.
Total	-.183***	-.200***

a. Cell entries are correlations green voting (and potential green voting) on the one hand and various independent variables.

Level of statistical significance: * $p \leq 0.05$ *** $p \leq 0.001$

b. Importance of the Environment as a Political Issue: Four Categories, 1) Most important, 2) Second most important, 3) Third most important, 4) Not mentioned

**Table 11a: Explaining green votes cast in the European elections
(averaged over all countries)**

PREDICTOR	A	B
-----	---	---
Well-educated	.09	.06
Public & service sectors	.05	.05
Students & unemployed	.05	.05
Young	.07	.05
Female	.03	.04
Variance explained ^{a)}	5.5%	(socio-demographic variables only)
Left-wing		.06
Postmaterial		.06
Environment		.08
Arms limitation		.03
Variance explained ^{a)}		9.0% (includes attitudes and issue preferences)

a) r^2 adjusted

Greening of Europe

Table 11b: Explaining green votes cast in the European elections, by country

PREDICTOR	France		Britain		Germany		Italy		Netherl		Belgium		Ireland	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Well-educated	.08	-	.11	-	.12	.08	.05	.04	.10	.07	-	-	.07	.05
Public & service sectors	-	-	-	-	.04	-	.07	.07	-	-	.11	.09	.06	.05
Students & unemployed	-	-	-	-	.12	.10	.10	.10	.11	.13	-	-	-	-
Young	.10	.08	.10	.10	.07	.04	.07	.07	.06	-	.12	.11	-	-
Female	-	-	-	-	.06	.06	-	-	-	.05	-	-	-	-
Variance explained ^{a)}	3.7%		3.2%		10.5%		7.2%		8.9%		5.1%		2.1%	
Left-wing	-		-		.07		-		.11		.09		.08	
Postmaterial	.11		-		.10		-		.12		-		-	
Environment	.31		.19		.06		.07		.06		.11		.13	
Arms limitation	-		-		.05		-		.05		.08		-	
Variance explained ^{a)}	13.5%		6.9%		16.1%		8.2%		19.1%		9.0%		6.6%	

a) r^2 adjusted

Greening of Europe

**Table 12a: Explaining potential green votes in the European elections
(averaged over all countries)**

PREDICTOR	A	B
-----	---	---
Well-educated	.11	.06
Public & service sectors	.06	.05
Young	.17	.14
Female	.06	.07
Variance explained ^{a)}	7.2%	(socio-demographic variables only)
Left-wing		.15
Postmaterial		.10
Environment		.12
Arms limitation		-
Variance explained ^{a)}		12.7% (includes attitudes and issue preferences)

a) r^2 adjusted.

Greening of Europe

Table 12b: Explaining potential green votes in the European elections, by country

PREDICTOR	France		Britain		Germany		Italy		Belgium		Ireland	
	A	B	A	B	A	B	A	B	A	B	A	B
Well-educated	-	-	.07	-	.13	-	.12	.12	.13	.10	.17	.15
Public & service sectors	.08	.07	-	-	.06	-	-	-	.13	.11	-	.06
Students & unemployed	-	-	.10	.07	.11	.10	-	-	-	-	-	-
Young	.16	.12	.12	.08	.30	.24	.23	.21	.16	.15	.07	-
Female	-	-	-	-	.11	.08	-	-	.08	.08	-	-
Variance explained ^{a)}	3.3%		4.2%		18.3%		9.6%		7.9%		4.1%	
Left-wing	.21		.13		.32		.08		-		.16	
Postmaterial	-		.17		.20		-		-		.10	
Environment	.24		.21		.06		.07		.25		.13	
Arms limitation	-		-		.06		-		-		.07	
Variance explained ^{a)}	13.7%		14.4%		35.3%		10.3%		13.9%		9.7%	

a) r^2 adjusted