

**Ideology and Normative Belief in New Social Movements**

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(ABSTRACT)

Researchers often focus on unconventional political participation. Protest activities have been examined and it can be said that participation in legal activities is no longer unconventional, it is accepted widely nowadays. The primary focus presently is on goal-oriented protest participation, like new social movements. The main goal of this paper is to find factor solutions for the movements to establish patterns concerning overall attitudes towards new social movements. Causal models will be developed for Germany, the Netherlands, Italy, France and Great Britain. The normative belief in new social movements will be examined by using ideological variables like the left-right dimension, the materialist- post-materialist scale, a measurement of social change, education and age. The aim is to establish certain patterns among the countries and to find a model that fits all countries.

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## INTRODUCTION

Until fairly recently Political participation in Western countries focused on conventional behavior, i. e. voting, campaigning, or supporting a candidate. In the past few decades, however, unconventional political behavior has become more and more important. Researchers have focussed on different kinds of participation that are known as protest participation nowadays. Protest participation, otherwise known as unconventional political activity, constitute means for people with political goals to produce a maximum of media coverage, thus getting people to support their ideas. This is supposed to lead to a certain amount of responsiveness from the government, which could lead to a change in existing policies. However, demonstrations might also have a negative impact, because of the increasing violence of these events. This violence is usually carried out by a small group of protesters, that nevertheless receive substantial media coverage. Existing research has shown that different kinds of protest activities can very well be explained by a underlying concept, called protest. Marsh<sup>1</sup> developed a scale to measure these activities. His variables range from peaceful demonstrations and signing petitions to violence against people and damaging property, and he found that certain kinds of activities like demonstrations or petitions are socially acceptable, while others are not, i. e, violence against people.

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<sup>1</sup> Alan Marsh, Explanations in Unorthodox Political Behavior. A Scale to measure 'protest Potential', European Journal of Political Research, 2 (1974), 107-129

As we can see, protest has been treated as a global concept; it is not issue oriented. People have just been asked if they would like to join a demonstration or if they would like to sign a petition. Researchers nowadays use an overall terminology for describing protest potential. They use the concept of protest movements, which are usually supported by young, middle-class college-educated people, and which actions consist of signing petitions, organizing strikes or participation in demonstrations. The main organizational force behind most of the movements in Germany is the Green Party, and it is partially supported by the young socialists (Jusos), which are the young party members of the Socialist Democratic Party. Four mainstreams are important for this paper: (a) Nature Protection Movement (b) Ecology Movement (c) Anti-Nuclear Power Movement (d) Anti-Nuclear War movement

The Nature Protection Movement deals with pollution aspects, i.e. The acid rain fall-out all over Europe, or diminishing the danger or exhaustion smoke. It is mostly smaller scale operations and it is mainly on local level.

There are some connections to the Ecology movement, which is oriented towards larger-scale environmental catastrophies, such as poisoning the Rhine, Germany's most important river, or the problems of nuclear waste dumps close to communities. Acid rain is also one of the subjects concerning supporters of the Ecology movement.

More specifically, and oriented towards one kind of pollution, is the Anti-Nuclear power movement. Their goal is to eliminate, or at least to diminish the number of nuclear power plants. The main concern here is nuclear waste or how to get rid of it, effectively and safely. The heat produced by nuclear cooling towers leads to warmer rivers, which increases the growth of seaweed. This might decrease the amount of oxygen in the water and this leads to a possible extinction of the fish in the rivers. The main focus here is also environmental problems.

The Anti-nuclear war movement has a strong connection to the peace movement. The people supporting this movement are mainly concerned with a possible extinction of mankind and animal kind in case of a nuclear war. The installation of nuclear warheads, like the Pershing 2 in Germany and other European countries is another issue. It has been argued that in case of an accident, or a wrong decision, the time of negotiating with the potential enemy would be too short. It takes about 4 minutes for a Minuteman cruise missile to reach Moscau, started from any point in West Germany. This might lead to a nuclear war. Theories, like the Nuclear Winter Theory confirm this 'anxiety'.

The purpose of this paper is to find attributes and characteristics of movement supporters in Germany. A causal model will be developed for Germany, and will be tested in four other European countries: The Netherlands, France, Great Britain and Italy. The main focus is to find an overall functioning model, where the dependent variable (movement)

will be treated as one (in the case of Germany) or two underlying concepts (four other countries)

The first chapter will give an introduction to the movements, it will consider different kinds of activities, and will discuss the dependent and independent variables. The influence of the materialist-post-materialist dimension on normative belief will be examined and the different attitudes of left-wing oriented people compared to right-wing persons will be shown. The problems of these two indicators will be examined. A "social change" variable will be introduced and finally it will be determined if a cognitive mobilization index is of importance for this analysis.

The analysis part of this section starts with the methodology, following the hypotheses. Of main concern for this paper is the development of the dependent variables. Factor solution for movement approval will be shown, where there is a one factor solution in the case of Germany and a two-factor solution for the other countries. A causal model will be developed for the German data and compared to causal model for the other countries. Similarities and differences will be shown in the comparison part of the analysis.

## LITERATURE REVIEW

### THE MOVEMENTS

The origin of new social movements can be set in the early 1960's, where the new government (SPD-F.D.P. Alliance) encouraged people to get involved into politics, i.e. joining, or supporting local citizen initiatives. <sup>2</sup> "The initial impulse to resist came from a conservative, rural population, which sought to preserve its way of life." <sup>3</sup> Nelkin and Pollak state, that " the anti-nuclear power movement began in the 1970s with a series of local siting disputes that aroused public concern about the risks of nuclear power and established the right to resist." <sup>4</sup> However, they had no impact on existing policies. The government continued to build nuclear power plants.

Between 1973 and 1976 we can find a drastic change in attitudes towards nuclear power, and therefore a possible destruction of life produced by nuclear waste, or nuclear accidents. In 1973 48% of all people asked thought nuclear power bears risks, compared to 40%, who saw no danger in producing energy by using nuclear sources. In 1976 70% thought of nuclear

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<sup>2</sup> compare to Elim Papadakis, The Green Movement in West Germany St. Martins Press, New York, 1984, pp 64,65

<sup>3</sup> ibid. p 65

<sup>4</sup> Dorothy Nelkin and Michael Pollak The Atom Besieged MIT Press 1981 p57

energy as being dangerous, while just 19% still believed in the security of nuclear power plants <sup>5</sup> Out of this growing awareness of environmental problems and the development of the Green Party and their support the movements became more and more important. The connection between the ecology movement and the anti-nuclear power movement is obvious. Nuclear disasters, like the accident of the Three-Mile Island, and more recently Chernobyl, show that radioactive poisoning poses dangers not only for people, but also for the environmental stability. The following is a summary of the main events of the Ecology movement and the Anti-Nuclear Power Movement. <sup>6 7</sup>

**1976** Mass Mobilization against nuclear energy (Brokdorf,Whyl).

**1977** Further mass demonstrations in Grohnde Brokdorf and Kalkar.

**1978** Protests against nuclear reprocessing plant in Gorleben.

**1979** 100,000 protest in Hannover and 150,000 in Bonn against government policies on nuclear policies.

**1980** Creation of alternative village in Gorleben, mass protest against extension of Frankfurt Airport.

**1981** 100,000 at Brokdorf and 100,000 at Wiesbaden; violence around Frankfurt Airport.

**1982** Less prominent, but continual protest activities at a local level

**1983** Acid-rain debate in Federal Elections.

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<sup>5</sup> E. Noelle-Neumann (ed.) Allensbacher Jahrbuch der Demoskopie 1977, Vol VII p. 196.

<sup>6</sup> Compare to Elim Papadakis, The Green Movement in West Germany St. Martins Press, New York, 1984

<sup>7</sup> As discussed above, the connection between anti-nuclear power and ecology movement is very strong. As we will see later this is true in the case of Germany. In other european countries the distinction is not so clear.

As we can see, in the past few years quite a few demonstrations occurred. This leads to the question. "Are Protest movements successful?" Tilly et al. state "Violent events often mirror the society that produces them." <sup>8</sup> If this is true, and democracy reflects the will of the people, then the government(s) should react to serious demonstrations. Movements can be seen as the release of people's willingness to change existing policies. It is not only the people actually participating in any form of protest, it is the support of other people that might be more important. More over media coverage of the events can positively influence the efficiency of demonstrations. For example in Germany four nuclear power plants <sup>9</sup> have been stopped by German courts. <sup>10</sup> These nuclear reactors are not by coincidence the ones where the most demonstrations and sit-ins occurred. So we can conclude that unconventional political participation can have an impact on existing policies. Of main interest for this paper is the normative belief in new social movements, or the approval of them. Therefore the effectiveness of new social movements will not be examined, although it might have some impact on normative belief.

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<sup>8</sup> C. Tilly et al The Rebellious Century Harvard University Press 1975, p23.

<sup>9</sup> Brokdorf, Whyl, Grohnde, Kalkar.

<sup>10</sup> see p. 203 in D. Nelkin and M. Pollak The Atom Besieged MIT Press 1981.

## ATTITUDES OF MOVEMENT SUPPORTERS

### Left-wing versus right-wing

Lipset et al. <sup>11</sup> present an overall definition of the left-right dimension: " By Left shall we mean advocating social change in the direction of greater equality-political, economic, or social; by Right we shall mean supporting a traditional, more or less hierarchical social order and opposing change toward greater equality."

It has been argued that left oriented people are more likely to participate in protest than are right-wing persons. As the definition above shows, right oriented people are more willing to support a regime--they do not question authority. Leftists are more likely to support social change, e.g. by participating in activities which question policies or even the government.

Ideology and partisan ship play an important role in determining left or right <sup>12</sup> The left-right scale is partly able to explain ideology. However,

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<sup>11</sup> Lipset, Seymour, Paul Lazarsfeld, Allen Barton and Juan Linz, The Psychology of Voting: An Analysis of Political Behavior, in Gardner Lindzey (ed.) Handbook of Sociology (vol 2) Addison-Wesley, Reading Mass. 1954. p1135

<sup>12</sup> Compare to Asher Arian and Michael Shamir: The primarily Political Functions of the Left-Right Continuum, in Comparative Politics (Vol 15) #2 Jan 1983. and in R. Inglehart and Hans Klingemann: Party Identification, Ideological Preference and the Left-Right dimension among Wester Mass Publics, in Ian Budge Ivor Crewe Dennis Farlie (ed) Party Identification and Beyond.ehpl. John Wiley & Sons New York.

there are some problems involved with the measurement of left or right. Do people really know what these dimensions really mean. Arian and Shamir<sup>13</sup> state that these expressions are well known by publics (at least in western democracies), but do people really know the distinction? If people don't know where to place themselves they use the midpoint of the scale, which functions then as another "don't know" category. Klingemann and Inglehart<sup>14</sup> try to avoid this dilemma by introducing a ten-point scale, ranging from (1) left to (10) right, leaving out the midpoint, thus forcing people to decide in which category they belong. Another unsolved problem is that respondents don't know exactly where to place themselves, i. e., a respondent might place himself on (6) while in fact his score would be (7).

Still, the left-right dimension is an important factor in determining people's willingness to participate in certain kinds of politics, or the willingness of people to support certain parties, movements or candidates. Therefore it should be included in the analysis.

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<sup>13</sup>    ibid

<sup>14</sup>    see above

## Materialist versus Post-Materialist Values

Inglehart <sup>15</sup> argues that "materialists" are people who favor security values (like money) and sustenance (i.e. stable prices, stable economy), while "post-materialists" are more likely to favor esthetic values, self-realization, or a friendlier, less impersonal society. However, these values are somewhat similar to some of the values associated with the left-right dimension, which leads to the question if these two indicators measure two different things. In the analysis a factor will be introduced (consisting of the materialist-post-materialist scale and the left-right scale) to find a underlying concept called ideology.<sup>16</sup> Post-materialists are convinced that unconventional political activities, like protest, or movement participation are normatively justified; "...they are more than four times as likely to favor the demonstrations as are the Materialist respondents."<sup>17</sup> They are, therefore, more willing to accept new social movements (or protest) as a legitimate means to change existing policies. On the other hand, materialists accept authority and favor their own security in terms of a stable job market and a stable economy. Thus they are less likely to support groups that might question

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<sup>15</sup> Ronald Inglehart: The Silent Revolution Princeton University Press 1977.

<sup>16</sup> This factor produced explained less variance in the dependent variable, more over the goodness of Fit Index show less good results, so it was indeed better to use the two indicators seperately.

<sup>17</sup> Ronald Inglehart The Silent Revolution Princeton University Press 1977 p. 30

the necessity of a stable economy in favor of a cleaner environment. Post-materialism, it is argued, emerged from a satisfaction of basic needs, like food and shelter. These needs were not satisfied during the Second World War. The Materialists wanted to satisfy these needs right after the end of the war and established this in a relatively short time. The next generation of people grew up in relative affluence; their basic needs were satisfied <sup>18</sup> and they focussed on other needs, like esthetic needs, as mentioned above. We are dealing here with a hierarchy of needs, which expresses itself in the support for post-materialist values.

#### **Cognitive Mobilization: Meaningful or not?**

Cognitive mobilization is supposed to measure the willingness of people to participate in any kind of political discussion where they try to convince their discussion partners. <sup>19</sup> This kind of involvement in politics represents the potential presence of political skills, and a willingness to participate in politics on a very low level. Because of this willingness to discuss political issues, these people might also be interested in higher levels of political participation, which, of course, means an increase in the costs of political action. Is this really the case?

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<sup>18</sup> compare to Abraham Maslow Motivation and Personality Harper, New York, 1954 and Inglehart The Silent Revolution Princeton University Press 1977

<sup>19</sup> Compare to Ronald Inglehart, The Silent Revolution p 310.

There are some problems involved with this dimension--it is very close to the materialist-post-materialist scale in a sense that post-materialists are willing to discuss politics and their potential to change existing policies. It might measure parts of the materialist- post-materialist index. <sup>20</sup> As discussed above leftist oriented people are more likely to approve protest or to support it. This can also be applied to cognitive mobilization: People can be highly mobilized. If they are right-wing they would never support a new social movement. Statistically, this indicates an interaction effect of left-right on cognitive mobilization, i. e. it is only leftist cognitve mobilized people that would support new social movements. The rightist cognitive mobilized people would not do so. <sup>21</sup> There is one more aspect to the cognitive mobilization index: it measures the willingness of people to convince other people of their political opinion. It is not necessarily the case that people actually have the skill for political participation. They might do that out of different reasons, like the lust of defeating other people in a discussion. A distinction has to be made between people with political skill and people without it. Therefore, and because of the other reasons mentioned above, the cognitive mobilization index has not been included in the analysis. The question still remains, if it is meaningful or not.

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<sup>20</sup> In a early similar analysis to the one discussed later on where age, education and cognitive mobilization had been regressed on an additive index of movement approval the cognitive mobilization index had a significant impact on the dependent variable. Including the left-right scale and mat-p-mat scale into the analysis made the cognitive mobilization index insignificant.

<sup>21</sup> Analysis showed that this interaction effect has almost no impact, so it had to be left ou of the analysis.

It is meaningful to measure the mobilization of a person but it isn't if we try to apply it in the present analysis.

### **Social Change**

Compared to the social change attitude of leftist oriented people the concept measures the potential of a person to have a revolutionary tendency, i. e. if a person is willing to be engaged in revolutionary action in order to change society. There might be some impact of this variable especially on the approval of the anti-nuclear weapon movement. It certainly can be explained by the left-right dimension and the pat-p-mat scale, because in the leftist group and the post-materialists there is a small amount of people involved into radicalism, or changing the system. Its impact on the dependent variables should be rather small, but significant.

### **Age and Education**

"...Political passivity increases linearly with age."<sup>22</sup> Age seems to be a very important factor determining political participation. On the one hand, young people don't have many responsibilities; they are usually not married, they are often in school, their need for financial security is

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<sup>22</sup> Samuel H. Barnes, Max Kaase et al., Political Action: Mass Participation in Five Western Democracies Beverly Hills, CA. Sage, 1979.

not yet developed. So one can say they are available for political participation.<sup>23</sup>

The post-materialist phenomenon has been discussed earlier, but there are more aspects to it. Age has a strong impact on the post-materialist scheme. Young people are far more likely to belong to that group than older people. If we combine age and education, i.e. young people with a high education, the proportion of post-materialists versus materialists is far higher. In fact, this is the only case, where post-materialists outnumber materialists.<sup>24</sup> This is due to the fact that university students are more or less isolated from other people and that they are together with people of their own kind, which could mean that there is some kind of peer pressure or socialization involved.<sup>25</sup> But youth and education is not only visible in the case above. The university itself is of some importance. Habermas<sup>26</sup> states,

Students are not only preparing for roles that have political significance, the university itself is an agent of social change. It generates both new, technically exploitable knowledge and the consciousness of modernity, with all of its practical consequences. Thus merely belonging to a university provides an impulse toward entering the struggle against the traditionalism of inherited social structures.

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<sup>23</sup> Compare to Muller's availability index in Aggressive Political Participation Princeton University Press 1979

<sup>24</sup> See Inglehart The Silent Revolution p.82

<sup>25</sup> See Klaus R. Allerbeck, Some structural conditions for Youth and Student Movements in International social Science Journal 24, 2 1972 pp.257 to 270

<sup>26</sup> Juergen Habermas Towards a rational Society: Student Protest, Science, and Politics, Beacon Press Boston, 1970 pp 13/14

There is certainly another aspect to the importance of universities: The knowledge, transmitted by university officials, of ones rights and duties is a very important factor. Many people simply do not know that legal protest is a part of a functioning democracy. Moreover it is another way of participating in politics. It is widely believed that the peace movement is undermined by communist groups. These communists are in favor of changing the existing social system. Many people are afraid of this thread. Therefore these people are not willing to support a movement, or to approve to it. Others are in favor of approving new social movements. Nelkin and Pollak <sup>27</sup> state:

Many anti nuclear activists are students. Others are intellectuals who were socialized during the student movement of the 1960s with a concern about the social and political implications of technological change and a scepticism of authority. this group fully expected that its knowledge and political skills would yield political influence.

The peace movement is heavily sponsored by young, better educated people. Their willingness to want peace is obvious if we look at the number of people in Germany who are not willing to join the army.<sup>28</sup> " Over the past few years 55,000 young people have, every year, submitted objections to carrying out military service."<sup>29</sup> They do this, even if they have disadvantages finding jobs later on.

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<sup>27</sup> Dorothy Nelkin and Michael Pollak The Atom Besieged p 108

<sup>28</sup> Army service is mandatory in West Germany.

<sup>29</sup> Elim Papadakis, The Green Movement in West Germany St. Martin's Press New York, 1984 p 140

As we can see, youth and higher levels of formal education are important for determining normative beliefs about protest movements. It is almost always the young and better educated who think positively about the purpose of new social movements. They have some advantages over the older generation, like availability or a higher sense of efficacy (i.e. utilitarian belief) but the approval of movements is slowly progressing towards the older and the lesser educated. There is no doubt that nuclear catastrophies like the one in Chernobyl increase support for the ecology and the anti-nuclear power movements, especially when the radioactive fallout forces people to change their life style for a certain amount of time.

## ANALYSIS

### Hypotheses

The impact of ideological values on normative belief will be the main hypotheses.<sup>30</sup> The overall attitudes towards new social movements will be examined. It is therefore not necessary to interrogate certain kinds of movements. Factor(s) will be introduced which measure normative belief for new social movements in Germany (one Factor loading on ecology movement, anti-nuclear power movement and anti-nuclear war movement, called support for environmental issues) and a two factor solution in case of the four other european countries (one factor loading on nature protection movement and ecology movement, called support for environmental protection, the other factor loads on the anti nuclear power variable and the anti-nuclear war variable, named support for anti-nuclear issues). The impact of the following variables will be examined: education, age, left-right orientation, materialist-post-materialist and social change orientation Similarities and differences will be examined in a comparison of the models.

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<sup>30</sup> The data have been provided by Jacques-Rene Rabier, Helene Riffault and Ronald Inglehart in Eurobarometer 21: Cleavages in the European Community, April 1984 1.st ICPSR ed. Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research, 1985.

## Methodology

The nature of the analysis requires causal modelling combined with factor analysis. This could be done using regression analysis. However, there are some advantages with the LISREL software package, which make it essential to use LISREL. To estimate the dependent variable it was necessary to run several factor analysis for each country to find the best fitting result. LISREL provides an factor analysis comparison option, which was used to determine how well the factor loadings fitted in various countries. These factors will function as the main dependent variable. Advantages of LISREL

LISREL has several advantages. These are: (a) Combination of factor analysis with causal modeling, (b) LISREL provides coefficients of determination for the equations the factors and the model as a whole, (c) Distinction between equation errors and measurement errors (d) LISREL calculates the coefficients in the first step with Two Stage Least Squares and in the second step with Maximum Likelihood function, which makes it easy to introduce potential reciprocal links, (e) Goodness of Fit Indices like Chi-square, which is the result of a comparison between the estimated model and the best fitting model, (e) Modification Indices, which are very useful for improving the fit of a model.

## The Factors

As discussed above overall support of new social movements is important. Therefore factor analysis is the first step in determining the overall evaluation of protest movements. Four variables are available: (a) Approval or disapproval of the nature protection associations, (b) Approval or disapproval of the ecology movements, (c) Approval or disapproval of the anti-nuclear power movement, (d) Approval or disapproval of the anti-nuclear war and anti-nuclear weapons movements.

They are all coded from (1) approve strongly to (4) disapprove strongly.

Factor analysis was performed for each country. For the German case the best fitting model was a one-factor solution, leaving out the nature protection variable. <sup>31</sup>

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<sup>31</sup> this variable had the weakest loading on the different factors in all country, but in Germany the difference in loadings to the other variables was significantly too big.

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Table 1. Factor Solution West Germany (1 Factor)

Variables	Factor Loading	Theta Delta	Coefficient of determination
Ecology	.829	.345	.666
Anti-nuclear power	.821	.393	.632
Anti-nuclear war	.818	.300	.690

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The total coefficient of determination for all endogenous variables, i. e. the movement variables is .856, and can be explained as 85.6% of the variance in the x-variables is explained by the environmental factor. The model is full identified with no degrees of freedom, therefore the chi-square measure is not possible. As we will see in the factor analysis case Germany constitutes an outlier. The other countries have a two-factor solution, and in three countries, Netherlands, France and Great Britain this solution works so well that there are relatively small differences between the countries.<sup>32</sup>

Why does the German sample produce only one factor? As we have seen earlier, the movements are close together, i. e., the issues of the three movements are sometimes overlapping. The most important issue for the ecology movement is the stopping of nuclear power plants, mainly because of possible radiation in case of a nuclear accident. But this happens also to be the most important issue for the anti nuclear power movement. They have the same arguments: Nuclear energy is not safe enough, e. g. accidents like Chernobyl show this. Another problem is nuclear waste, for which the half-time is about 10,000 years. Moreover, warm water coming from the cooling towers has a positive impact on plant growth, thus, having a negative impact on the survival of fish. The anti-nuclear war movement is mainly concerned about nuclear fallout, which can also happen with a nuclear power plant accident. Their major concern, however, is

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<sup>32</sup> The methodology will be discussed later

nuclear winter and the possible death of millions of people. In Germany these movements go together, which explains the one factor solution.

We get a different picture for the other countries --two-factor solutions. Italy is another outlier, because its variable loadings, although they are in the right direction and to the right variables, differ significantly from the variable loadings from the Netherlands, Great Britain and France:

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Table 2. Italy: Two Factor Solution

Variable	factor loadings		Theta Delta	Coefficients of determination
	nature	nuclear		
Nature prot	.839		.296	.704
Ecology	.870		.243	.757
Anti-nuclear power		.538	.710	.290
Anti-nuclear war		.892	.205	.795
Phi = .492				

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The goodness of fit index is almost perfect with .999, and chi-square with one degree of freedom is 1.95, which results in a insignificant probability level, which is desirable. The total coefficient of determination for the x-variables is .965. Result: the factor solution works very well in this case. It is not astonishing that the movements with a concern towards environmental problems constitute one factor, while the movement variables with nuclear subject tendency constitute the other factor. The first two movements have an overall concern about the environment --both deal with 'nature protection' the one movement in a larger scale the other movement in smaller scale. The anti- nuclear issue movements also have a relation in common. This is issue specific, and both want to prevent radioactive fallout, and therefore they constitute the other factor.

Group comparison of different factors <sup>33</sup> shows that the factors of the Netherlands, France and Great Britain are close together, i.e. treating the error term and the correlation of the error terms of the factors and the loadings as invariant, the chi-square adjusted by degrees of freedom show a good and slightly insignificant increase in goodness of fit. But first we have to have a look at the factor solutions for each country before we explain the similarities of the constructs.

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<sup>33</sup> see LISREL-option above

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Table 3. France, Netherlands, Great Britain: Two Factor Solution

Two Factor Solution France

Variables	Factor Loadings		Errors	Coefficient of determination
	nature	nuclear		
nature prot	.368		.263	.340
ecology	.743		.093	.856
anti-nuc power		.671	.555	.448
anti-nuc war		.837	.409	.631

Phi = .40

Total coefficient of determination for x-variables is .958  
 chi-square with 1 degree of freedom is 6.25 (prob. level = .012)  
 goodness of fit index is .998  
 adjusted goodness of fit index is .980

Two factor solution Netherlands

Variables	Factor Loadings		Errors	Coefficient of determination
	nature	nuclear		
nature prot.	.467		.781	.219
ecology	.920		.154	.846
anti-nuc power		.696	.515	.485
anti-nuc war		.833	.306	.696

Phi = .562

Total coefficient of determination for x-variables is .956  
 chi-square with 1 degree of freedom is .01 (prob. level = .913)  
 Goodness of Fit Index = 1.000  
 Adjusted goodness of Fit Index = 1.000

Two factor solution Great Britain

Variables	Factor Loadings		Errors	Coefficients of determination
	nature	nuclear		
Nature prot	.592		.65	.35
Ecology	.828		.314	.686
Anti-nuc power		.815	.335	.665
Anti-nuc war		.736	.458	.542

Phi = .367

Total coefficient of determination for x-variables is .930  
 chi-square with 1 degree of freedom is .90 (prob. level = .342)  
 goodness of fit index = 1.000  
 adjusted goodness of fit index = .996

---

As we can see the factor solution works quite well for almost all the countries. To establish the similarities of patterns over the countries we have to use the LISREL option of comparing groups. The German factor solution had to be omitted from this group comparison. Moreover, another country's (Italy) variables didn't fit well, thus reducing the amount of comparable group to three. In the first analysis, where the same pattern of the groups is examined, we can see if there are major differences between the groups --Chi-square with 3 degrees of freedom is 8.53. Adjusting the chi-square by degrees of freedom, i. e. deviding it by df gives us as a result a chi-square (adj.) of less than 4, which is necessary to establish a functioning goodness of fit. The similarities of the loadings between the countries are tested in the second step. The results are as follows: chi-square with 11 degrees of freedom is equal to 27.06, which makes up for a chi-square difference of 18.56 with 8 degrees of freedom. This is significant at the .01 level. Because insignificance is desired, the loadings of the factors are not equal; however, they are somewhat similar. The last step is to test the relation of the loadings and the variances combined. Chi-square with 13 df is 44.13, which results in a chi-square difference of 17 with 2 degrees of freedom which is significant even at the .001 level. We can say the variances of the factor do differ significantly.

Overall, we can say that the two-factor solution (new social movements) works pretty well for the Netherlands, France and Great Britain. The loadings are somewhat similar, but the variances are definitely not. We can say that the factor solution for the four european countries follows

the same pattern, but the differences are real. In the German case the two factor solution didn't work at all, but there we got a functioning one factor solution, where the nature protection movement is excluded. We can conclude that latent constructs can explain an over all support for new social movement. Normative belief in protest does not necessarily have to focus on a certain kind of movement, it can very well be treated as a underlying concept.

### Association Between the Variables

The initial goal of the paper was to develop a causal model for germany, which should also fit for four other european countries. This was not possible, because the german model proved to be the outlier. However, the variables in the model were the same for each country, but they had different impacts on the dependent variable(s).

The impact of the left-right scale on approval for new social movements has been discussed in a previous chapter. It has been argued that leftist oriented people are the most likely to approve, support, or actually participate in new social movements. Right-wing, or conservative oriented people are more willing to support conventional political participation.

---

Table 4. Left-Right Scale and Approval for New Social Movements

Movements	Countries									
	Germany		France		Netherlands		Italy		Great Britain	
	le	ri	le	ri	le	ri	le	ri	le	ri
Nature prot	52	40	59	54	68	51	63	58	45	36
total N	264	533	344	457	113	145	514	262	205	473
Ecology	42	5	42	27	64	29	59	48	43	20
total N	269	524	329	453	112	144	493	254	199	461
Nuc power	43	4	24	16	54	11	41	27	41	9
total N	265	536	317	433	112	145	490	243	201	467
Nuc war	57	11	42	23	68	14	65	46	51	11
total N	276	534	324	433	110	147	509	254	200	463

the numbers in the tables are percentages. Respondents have been asked if they strongly approved to one of the new social movements. Center category in the left-right scale has been left out. It has to be interpreted in the following way: 52% of the german leftist oriented people strongly approve the nature protection movement, while 40% of the rightist oriented people do so.

---

As we can see the hypotheses is consistent with the datae. Leftists throughout Europe are more likely to support new social movements, especially the ecology movement, the anti-nuclear power movement and the anti-nuclear war movement. The distinction between left and right in the case of the nature protection movement is not as obvious. Here the rightist oriented people do slightly less approve to this movement than do left-wing persons. <sup>34</sup>

Inglehart's <sup>35</sup> materialism-postmaterialism dimension is the construct of two goal attending questions, which ask respondents opinion about major issues of the future. Postmaterialist are people that want to protect the freedom of speech and want to have more say in important government decisions, while materialists like to maintain order in the nation and want to fight rising prices. The following table shows association between this index and normative belief in new social movements:

---

<sup>34</sup> The normative belief variables are coded into four categories ranging from (1) strongly approve to (4)strongly disapprove. The left-right scale, originally a ten point scale had been transformed to a three category variable where the first three categories have been treated as 'left' and the last four categories as 'right'.

<sup>35</sup> compare to Ronald Inglehart, the Silent Revolution and The Euro-Barometer 21 Code Book

---

Table 5. Materialist-Post-Materialist and New Social Movements

Movement	Countries									
	Germany		France		Netherlands		Italy		Great Britain	
	M	PM	M	PM	M	PM	M	PM	M	PM
Nature Prot	29	55	50	66	47	70	49	74	38	47
Total N	373	367	620	223	98	102	819	178	402	295
Ecology	5	42	32	45	36	58	40	68	24	38
Total N	373	346	588	226	97	101	780	174	374	284
Nuc power	3	41	16	26	16	47	23	44	13	33
Total N	368	330	561	216	97	100	757	166	402	291
Nuc war	10	57	28	44	27	59	39	70	14	40
Total N	371	352	574	213	99	101	790	170	398	289

The numbers in the table are percentages of materialists and post-materialists. Again, the strongly approve the movements category had been taken, and the center category of the materialist-post-materialist has been left left out.

---

Postmaterialists are more likely to approve to new social movements, than are materialists, however, the distinction is not as obvious as it is with the left-right scale. It shows that this variable has a more or less strong impact on movement agreement, depending on the country. The strongest association is in the case of Germany where postmaterialists are at least twice as likely to approve to the movements than are materialists. Again, the nature protection variable shows the smallest percentage differences. On average, postmaterialists in the remaining countries are 1.5 times to twice as likely to accept the movements than are the materialists. This is consistent with Inglehart's theory.

Attitudes towards social change are the last endogenous variable I want to discuss using crosstabulation. Respondents have been asked, with which of the following statements would they agree: (1) Society has to be changed by using revolutionary means (2) Society must be gradually improved by reforms (3) Society must be defended against all subversive forces

The table below shows the impact of this variable on movement approval.

---

Table 6. Social Change and the Movements

Association between 'attitudes towards social change' and movement approval:

Movement	Country									
	Germany		France		Netherlands		Italy		Great Britain	
	(1)	(3)	(1)	(3)	(1)	(3)	(1)	(3)	(1)	(3)
Nature prot	44	36	68	52	52	62	58	61	39	41
Total N	52	671	112	425	18	116	115	342	71	410
Ecology	30	7	53	29	59	39	59	48	42	19
Total N	54	657	110	407	16	117	109	323	66	390
Nuc power	34	5	43	19	47	17	41	29	45	13
Total N	54	669	107	399	18	117	107	312	65	410
Nuc war	33	14	49	28	61	21	65	46	56	16
Total N	56	686	109	387	16	117	109	323	69	406

Numbers in the table are percentages. the categories for the social change variable are: (1) revolutionary (3) non-revolutionary. Interpretation has to be done carefully, because of the low number of cases.

---

This table can be interpreted almost the same way as the other two tables (left-right dimension and materialist-postmaterialist index). The nature protection variable does not fit as well as the remaining movement variables. In the Netherlands, Italy and Great Britain 'non-revolutionaries' are more likely to approve to the nature protection movement. For all other countries the following interpretation is valid: the more revolutionary a person is the more this person is likely to approve to new social movements. In almost all of the cases, 'revolutionaries' are more than twice as likely to accept social movements than are 'non-revolutionaries'.

Two more variables are now introduced--age and education. As discussed above , mainly young and well educated people support protest movements. I will provide empirical support for this statement, using the same methodology as above. Later these results will be verified in a causal model to estimating the impact of these variables on normative belief in new social movements.

Table 7. Age and Education and the Movements

Education and new Social Movements										
Movement	Country									
	Germany		France		Netherlands		Italy		Great Britain	
	lo	hi	lo	hi	lo	hi	lo	hi	lo	hi
nature prot	36	57	55	60	58	67	55	67	36	42
Total N	1553	410	1352	481	265	220	1499	446	1547	239
ecology	13	31	36	35	42	46	47	59	23	34
Total N	1489	393	1302	472	311	167	1419	436	1420	238
nuc power	12	30	20	22	28	28	28	33	16	27
Total N	1464	395	1232	456	315	168	1383	421	1512	241
nuc war	21	48	31	36	37	37	48	58	21	39
Total N	1537	411	1243	457	315	168	1434	436	1515	235

The cut-off point for low education was chosen to be 19 years of education finished, because a university students needs about 20 years of education till he reaches his diploma or masters degree. The numbers in the tabel are percentages, and just the strongly approve category has been taken to establish the patterns.

Age and new social movements.

Movement	Country									
	Germany		France		Netherlands		Italy		Great Britain	
	yo	ol	yo	ol	yo	ol	yo	ol	yo	ol
Nature prot	47	35	58	54	60	62	59	56	33	41
Total N	920	1043	943	889	265	135	951	995	900	886
Ecology	23	10	37	35	47	39	51	48	21	27
Total N	893	988	928	845	261	216	914	941	822	836
Nuc power	24	8	25	16	31	25	32	27	22	14
Total N	887	972	881	808	265	218	889	914	880	873
Nuc war	35	20	37	28	39	34	53	48	29	17
Total N	920	1028	885	815	263	220	916	954	880	870

The numbers in the table are percentages. Age had been coded in the following way. Up till 40, people were considered as being young, above that, they were treated as being old.

These two exogenous variables don't show as obvious patterns as the endogenous variables. In Germany young people are far more likely to support new social movements, with a rate of about twice as great as other Germans. The young French, Netherlandish and Italians were slightly more interested in supporting protest movements than their older people. In Great Britain older people are more likely to support the two ecology movements while their younger counterparts supported the nuclear issue movements. In either case the differences are not very large, so we cannot assume a strong correlation between age and movement support.

A similar pattern is visible if we use education as a predictor of movement approval. Highly educated people in Germany are about twice as likely to support the movements than do their counterparts. The differences for the rest of the countries examined are not very large, but there is a tendency that higher education is associated for protest approval. Although the impact of the exogenous variables on movement approval is not very large, they are still important for determining the endogenous variables. <sup>36</sup>

### The Models

The goal for this paper was to develop a functioning model in the case of Germany; this model had to be compared with models for four other European countries. Similarity between all the countries was desired.

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<sup>36</sup> these results can be seen in the appendix.

However, this proved to be impossible: the dependent variable, i.e., the movement approval factor, differed between the countries. In Germany I was able to develop one factor, consisting of the ecology movement variable, the anti-nuclear power movement variable and the anti-nuclear war movement variable. The samples of the other countries produced a two-factor outcome, where the first factor explained approval for the environmentlist group and the second factor explained the anti-nuclear issue group.

In developing the models there were further dissimilarities worthy of note. In France the materialist-post-materialist scale produced insignificant results on the two dependent factors. There also were no indirect effects on movement approval; therefore this scale had to be left out. We have now three models for five european countries: <sup>37</sup>

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<sup>37</sup> the models with all coefficients will be shown in the appendix.

---

Germany:

Education	Mat-Post-M	
	Left-Right	Movement Approval
Age	Social Change	

Figure 1. Causal Model Germany

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France:

Education	Left-Right	Nature movement approval
Age		Nuclear movement approval
	Social Change	

Figure 2. Causal Model France

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Netherlands, Italy and Great Britain

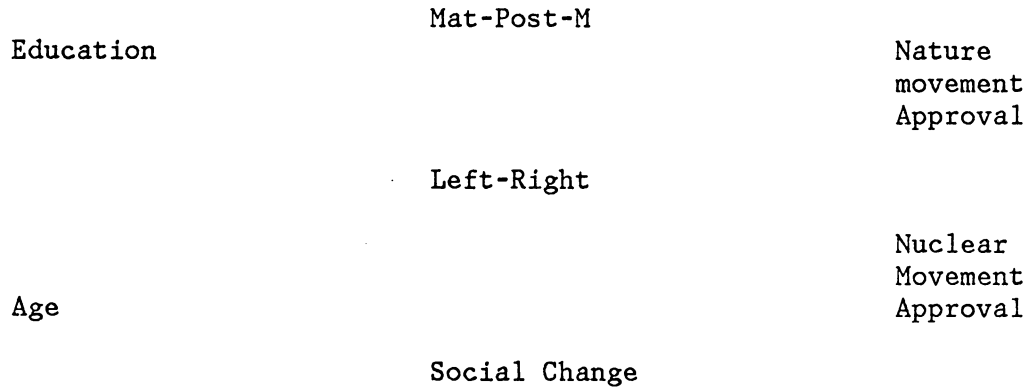


Figure 3. Simplified Model for Netherlands, Italy and Great Britain

---

The beta weights are of course different, and so are some of the links-  
-especially where the exogenous variables are involved, some of the links  
do not exist.

In Germany, where the one factor solution makes up the endogenous di-  
mension, the equations are as follows:

$$\text{Approval} = .171 * \text{MAT-P-MAT} + .329 * \text{LEFT-RIGHT} + .104 * \text{SOCIAL CHANGE} - \\ .167 * \text{EDUCATION}$$

Here, 27% of the variance in the dependent variable is explained. The  
numbers are standardized coefficients, and all of the coefficients are  
significant at the .05 level.<sup>38</sup>

$$\text{MAT-P-MAT} = .252 * \text{LEFT-RIGHT} - .258 * \text{EDUCATION} + .102 * \text{AGE} \text{ (Ccoefficient}$$

of determination is .175, all weights are significant at the .05 level)

$$\text{LEFT-RIGHT} = .150 * \text{AGE} \text{ (R-square} = .023)$$

$$\text{SOCIAL CHANGE} = .170 * \text{MAT-P-MAT} + .241 * \text{LEFT-RIGHT} - .085 * \text{EDUCATION} + \\ .080 * \text{AGE} \text{ (R-square} = .153).$$

---

<sup>38</sup> The standardized coefficients have been taken for all equations, to  
make comparisons within the model possible. For the comparison be-  
tween the groups, the unstandardized coefficients will be shown.

The left-right scale has the highest impact on protest approval and its influence is almost twice as strong as the influence of the materialist-post-materialist scale. The social change variable has a slightly lower impact on approval than the value-variable. The strong impact can better be illuminated if we have a look at the total effects:

---

	ETA1	ETA2	ETA3	ETA4
ETA1		.284	.170	
ETA2				
ETA3		.252		
ETA4	.104	.404	.189	

where

ETA1 = Social Change

ETA2 = left-right scale

ETA3 = materialism-post-materialism

ETA4 = normative belief in new social movements

Figure 4. Total Effects of Endogenous Variables on Endogenous Variables

---

Although the coefficients and the coefficients of determination are acceptable, the goodness of fit indices show that the model does not fit as well as the models for the other countries do. A chi-square of 402 with 13 degrees of freedom is far too high, and even adjusted, i.e. divided by df, it does not even come close to the conventional upper limit of 4.0. The Goodness of Fit Index with .918 is acceptable and so is the Adjusted goodness of Fit Index with .774. We can conclude that this model failed, although its determinants are high enough.

The impact of the variables on normative belief in new social movements for the other countries is as follows:

#### NETHERLANDS

$$\text{Nuclear} = .428 * \text{Left-Right} + .074 * \text{Mat-P-Mat} + .080 * \text{Social Change}$$

(9.27)                      (1.723)                      (1.871)

$$\text{Nature} = .280 * \text{Left-Right}$$

(5.884)

where NATURE is explained by 7.8% and NUCLEAR by 23.3%. The values in parenthesis are T-values.

$$\text{MAT-P-MAT} = .28 * \text{Left-Right} - .219 * \text{Education}$$

(5.845)                      (-4.723)

$$\text{Social Change} = .121 * \text{Mat-P-Mat} + .246 * \text{Left-Right}$$

(4.997)

(2.461)

Left-Right = .120 \* Age

(2.439)

Where

Mat-P-Mat is explained by 12.8%

Social Change by 1.4%

Left-Right 9.2%

In the Netherlands, approval of the anti-nuclear movement is well explained with an R-square of 0.233. The left-right scale has by far the largest impact on the approval factor and is about five times as strong as both materialist-post-materialist scale and the social change variable. Moreover, the regression coefficients of the latter variables are insignificant which leads to the conclusion that the left-right scale is so dominant that it actually explains a large amount of variance of the two variables.

The nature protection approval is not very well explained. With an R-square of .078 it is just a third of the variance explained compared to the anti-nuclear factor. Here, only the left-right scale had a significant impact on the endogenous construct. It is the case that ideology has more impact on the anti-nuclear movement approval construct, so there might be other variables important for explaining variance in this factor. Re-

garding the rest of the endogenous variables, education plus the left-right scale explain variance in the materialist-postmaterialist

factor, where higher education goes together with a higher post-materialist point of view and where leftist oriented people are more likely to be post-materialist. Social change is a function of left-right and materialist- postmaterialist where leftist oriented people and postmaterialist are more likely to be in favor of social change. Left-right is a function of age, with younger people are slightly more in favor of being left. The impact of indirect effects is obvious. the total effect of left-right on the nuclear factor is high with a weight of .469.

#### GREAT BRITAIN

$$\begin{aligned} \text{NUCLEAR} = & .145 * \text{MAT-P-MAT} + .245 * \text{LEFT-RIGHT} + .091 \text{ SOCIAL CHANGE} - \\ & (5.5) \qquad \qquad (8.9) \qquad \qquad (3.4) \\ & .068 * \text{EDUCATION} + .085 * \text{AGE} \\ & (2.4) \qquad \qquad (2.9) \end{aligned}$$

$$\begin{aligned} \text{NATURE} = & .119 * \text{LEFT-RIGHT} - .154 * \text{EDUCATION} + .104 * \text{AGE} + .067 \text{ SOCIAL} \\ & (4.1) \qquad \qquad (5.1) \qquad \qquad (3.4) \qquad \qquad (2.3) \end{aligned}$$

$$\begin{aligned} \text{LEFT-RIGHT} = & .18 * \text{AGE} \\ & (6.5) \end{aligned}$$

$$\begin{aligned} \text{MAT-P-MAT} = & .201 \text{ LEFT-RIGHT} - .074 * \text{EDUCATION} + .074 * \text{AGE} \\ & (7.2) \qquad \qquad (2.5) \qquad \qquad (2.5) \end{aligned}$$



likely to approve to this kind of movement. Young people and people oriented towards societal change are also likely to approve this movement. Left-right is just a function of age. Materialism-post materialism is explained by left-right education and age, and social change is just a function of education and age. Again the impact of indirect effects is obvious, i. e. , Left-right scale has a total effect on the approval construct of .228, which is about half of the impact the scale in the Netherlands. <sup>39</sup>

#### ITALY

$$\text{NUCLEAR} = .141 * \text{MAT-P-MAT} + .203 * \text{LEFT-RIGHT}$$

(5.4)                      (7.8)

$$\text{NATURE} = .102 * \text{MAT-P-MAT} + .118 * \text{LEFT-RIGHT} - .050 * \text{CHANGE} - .096 \text{ EDUC}$$

(3.7)                      (4.4)                      1.99)                      3.7)

$$\text{MAT-P-MAT} = .172 * \text{LEFT-RIGHT} - .246 * \text{EDUC} + .110 * \text{AGE}$$

(6.9)                      (8.5)                      (3.8)

$$\text{LEFT-RIGHT} = .070 * \text{AGE}$$

(2.6)

---

<sup>39</sup> As I mentioned above, the coefficients in the equations are unstandardized; however, they differ from the standardized coefficient by a margin of .001, which makes it possible to compare within and between models.

$$\text{SOCIAL CHANGE} = .217 * \text{LEFT-RIGHT} - .081 * \text{EDUCATION}$$

(8.4)                      (3.1)

Coefficients of determination:

NUCLEAR	= .072
NATURE	= .043
MAT-P-MAT	= .136
LEFT-RIGHT	= .005
SOCIAL CHANGE	= .055

The variances in the Italian endogenous variables are explained as follows: 7.2% for the nuclear factor and 4.3% for the nature factor. Again the nuclear factor is better explained than the other one. Post-materialists and leftists are more willing to approve to the anti-nuclear movement, whereas the left-right scale has a stronger impact on the dependent variable than materialism-post materialism. The nature movement is influenced by materialism-post materialism, left-right scale, social change and education. The impacts are about the same with one exception. People with a lesser potential for social change are more likely to approve to this kind of movement than do people with a greater potential. It is possible that in Italy people with a lesser potential for revolutionary ideas do have more sense of environmental protection. The outcome of this analysis could verify that. Materialism-post materialism is influenced by left-right, by education and age, where leftist oriented



LEFT-RIGHT = .007

SOCIAL CHANGE = .025

France was the only country in this comparison where the materialist-post-materialist scale had to be removed because of insignificant Beta-coefficients. The explanation of the dependent variables is not very high. Moreover this is the only country where the nature factor is better explained than the nuclear construct, i.e., it is 4.4% for nature versus 3.7% for nuclear approval. Both factors are influenced by the left-right scale and the social change variable, where the left-right scale has the strongest impact on both factors. Again, the direction of the impact is as desired: leftists and "revolutionaries" are more likely to support new social movements. Left-right is explained by education and age, where lesser educated people are more willing to have leftist tendencies than do the higher educated counterparts and younger people are more leftist oriented too. Social change is a function of left-right and age. the younger and more leftist someone is the more likely is he to support revolutionary ideas. The total effect of left-right scale is fairly strong and about equal for both constructs.

The Goodness of Fit Indices are as follows:

---

	Netherlands	Italy	Great Britain	France
chi-square (df)	(23) 57.6	(20) 77.1	(15) 73.96	(16) 44.9
GFI	.970	.988	.987	.992
AGFI	.941	.974	.962	.981

Figure 5. Goodness of Fit Indices Europe

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As we can see above the goodness of Fit measures are acceptable for all the countries except Great Britain, where the model is slightly significant. The adjusted chi-square for the Netherlands Italy and France do not exceed an upper limit of 4.0, as it is the case for Germany. The GFI and AGFI for the four countries are almost perfect, so we can indeed say that the models do have an acceptable goodness of Fit, except for the models of Germany, which has an unacceptable Fit, and Great Britain, which is slightly significant.

To interpret the data in the right way, we have to include one more measurement, the total effects. As it was done above, I want to focus on the total effect of the endogenous variables only:

---

Total Effects Netherlands

	ETA1	ETA2	ETA3	ETA4	ETA5
ETA1		.279	.121		
ETA2					
ETA3		.271			
ETA4		.280			
ETA5	.080	.469	.083		

TOTAL EFFECTS ITALY

	ETA1	ETA2	ETA3	ETA4
ETA1		.217		
ETA2				
ETA3		.172		
ETA4	-.050	.125	.102	
ETA5		.228	.141	

TOTAL EFFECTS GREAT BRITAIN

	ETA1	ETA2	ETA3	ETA4
ETA1		.230	.053	
ETA2				
ETA3		.201		
ETA4	.067	.135	.004	
ETA5	.091	.295	.150	

where

ETA1	is	SOCIAL CHANGE
ETA2		LEFT-RIGHT
ETA3		MATERIALIST-POST-MATERIALIST
ETA4		NATURE PROTECTION FACTOR
ETA5		NUCLEAR ISSUES FACTOR

Figure 6. Total Effects Netherlands, Italy Great Britain

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	ETA1	ETA2	ETA3
ETA1		.105	
ETA2		.113	
ETA3	.123	.169	
ETA4	.071	.180	

where

ETA1	is	SOCIAL CHANGE
ETA2		LEFT-RIGHT
ETA3		NATURE PROTECTION FACTOR
ETA4		NUCLEAR ISSUE FACTOR

Figure 7. Total Effects France

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## Comparison

As we can see a comparison between all the countries is difficult to make. There are two extreme outliers: Germany, where the endogenous construct had to be built of three variables leaving out the nature protection approval variable, and France where the Materialist-Post-Materialist scale had to be left out. However, the left-right scale, and the social change variable had, with one exception, Italy, where the social change indicator had negative impact, a more or less strong impact at least on the approval for the Anti-nuclear construct. Materialism-post materialism was also influential, except in France where it had to be omitted from the analysis. In either case the most dominant indicator for protest approval was the left-right scale, which always had the highest impact on both endogenous constructs. <sup>40</sup>

The total coefficients of determination vary from 27% variance explained in the one factor solution in Germany to 3.7% variance explained for the anti-nuclear movement factor in France. The anti-nuclear movement factor was, with one exception, better explained than the nature protection movement. The nuclear factor for the Netherlands was explained by 23% and the same factor for Great Britain had variance accounted for of 15%. All the other constructs for all countries were explained by less than 10%, which leads in case of the nature protection factor to the conclusion that

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<sup>40</sup> Only exemption here Great Britain, where education had a little more influence than left- right on the nature protection factor.

there are better variables to be found. Additionally, it shows that the impact of materialism-post-materialism in France has no impact if variables like the left-right scale are included. Moreover it shows that not every dimension is of equal strength in each country.<sup>41</sup> A model which fits for one country must not necessarily be equivalent to a model for another country. Other variables might be involved. Because of the different political structure of the countries new variables have to be found in order to get to a best fitting model.

The impact of the exogenous and endogenous variables on movement approval are mostly in the right direction. There are two outliers, Italy and France where one variables each was the other way around. In France lower educated people are more likely to be on the left side of the left-right scale and in Italy people with a less potential for 'revolution' are more willing to approve to the nature protection movement. I was able to show that leftist oriented people are indeed more likely to approve the new social movements than do rightist oriented people. Post-materialists were in either case more willing to approve to new movements. Approval of the movements was also given by people with a tendency towards social change. It was mainly people with a higher education who thought that movements should be supported. Regarding age, young people have a greater tendency to approve of new social movements.

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<sup>41</sup> Compare Countries like Germany and Netherlands to Italy and France.

## CONCLUSION

To find an overall fitting model for the examined nations is a very difficult task. Differences in political culture and political structure, different history and major issues make it almost impossible to get an all-inclusive result. However, similar patterns between the countries can be shown and verified. These are indicators like the factor model, where four nations have similar pattern, or indicators like the left- right scale, which had always the strongest impact on the dependent variable.

The nature of this analysis required factor analysis to estimate overall perceptions of approval of new social movements. This was done using confirmatory factor analysis in LISREL. It was not possible to build constructs which fitted the data for every country. Germany proved to be the outlier. Here one latent construct was built of the following variables: approval of ecology movement, approval of anti-nuclear power movement, and approval of the anti-nuclear war movement. The loadings were very high and the factor explained a large amount of variance in the endogenous variables. In contrast, a two-factor solution was valid for the Netherlands, Italy, France, and Great Britain, where the approval of nature protection and the approval of the ecology movement load on one factor and the two anti-nuclear movement variables load on the other factor. The patterns of item loadings for the countries were identical but not the magnitude of loadings or the variances in the factors. However, they were similar enough to permit comparative analysis.

While the factors showed a certain amount of similarity, the causal models were not similar at all. For France the materialism-post-materialism scale had to be excluded, because the beta coefficients proved to be insignificant. The exogenous variables had different impacts on the endogenous variables. Also some of the links had to be omitted.

A fair amount of variance in the movement factors could be explained--ranging from a high of 27% in Germany to a low of 3.7% in France. The variables had the hypothesized direction of impact on the dependent variables. The goodness of the model fit indices suggested that the models were correctly specified. In Germany the model fit was unacceptable. However this was the country where the factor was explained best compared to other countries. With the exception of some outliers it was proven that left-oriented people have a strong tendency to approve any kind of protest movement. Post-materialists also approve new social movements in all countries. Here the coefficients were less strong than for left-right orientation. The attitudes of people with a revolutionary tendency were also towards the approval of the movements over all the countries. Again, the theories that it is mainly young and high educated people who approve to protest could be verified for all countries. Problems occurred when I tried to build a factor of left-right scale and materialism-post-materialism. Not only the goodness of fit got worse but also the coefficients of determination did so as well. So this factor solution had to be abandoned. An index built of the variables cognitive mobilization and left-right scale was produced. Dummy variables had been constructed, arguing that cognitive mobilization only works for leftist oriented people.

However the results were not significant, so this was excluded too. Finally, i was able to show that the introduced variables are able to determine a fair amount of variance explained in the factors, and I was further able to show that the causal models had a acceptable fit for all the countries and that all variables influenced the factors in the proposed way.

## APPENDIX I

### THE CORRELATION MATRICES

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	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1.00								
x2	.36	1.00							
x3	.24	.65	1.00						
x4	.34	.68	.66	1.00					
x5	.19	.41	.40	.34	1.00				
x6	.07	.38	.42	.41	.27	1.00			
x7	-.21	-.27	-.24	-.24	-.30	-.01	1.00		
x8	.10	.24	.29	.21	.24	.15	-.39	1.00	
x9	.07	.28	.31	.28	.28	.30	-.17	.19	1.00

Number of cases = 1217

Figure 8. Germany

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	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1.00								
x2	.43	1.00							
x3	.18	.36	1.00						
x4	.22	.43	.58	1.00					
x5	.18	.18	.26	.24	1.00				
x6	.09	.28	.37	.47	.28	1.00			
x7	-.12	-.08	.01	-.01	-.23	-.04	1.00		
x8	.01	.12	.11	.12	.15	.12	-.46	1.00	
x9	-.01	.10	.21	.22	.19	.28	-.07	.13	1.00

Number of cases = 408

Figure 9. Netherlands

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	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1.00								
x2	.49	1.00							
x3	.17	.25	1.00						
x4	.17	.22	.60	1.00					
x5	.03	.04	.16	.23	1.00				
x6	.02	.13	.27	.32	.22	1.00			
x7	-.03	-.13	-.09	-.15	-.12	-.08	1.00		
x8	-.06	-.01	.09	.19	.14	.18	-.40	1.00	
x9	-.03	.10	.14	.19	.12	.25	-.12	.15	1.00

number of case =1263

Figure 10. Great Britain

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	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1.00								
x2	.73	1.00							
x3	.21	.24	1.00						
x4	.37	.38	.48	1.00					
x5	.17	.15	.11	.18	1.00				
x6	.09	.13	.16	.23	.19	1.00			
x7	-.12	-.12	.01	-.03	-.31	-.04	1.00		
x8	.06	.07	.06	.08	.25	.07	-.52	1.00	
x9	-.04	-.02	.07	.02	.08	.22	-.09	.05	1.00

Number of cases =1417

Figure 11. Italy

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	x1	x2	x3	x4	x5	x6	x7	x8	x9
x1	1.00								
x2	.54	1.00							
x3	.19	.24	1.00						
x4	.17	.29	.53	1.00					
x5	.10	.07	.06	.04	1.00				
x6	.10	.17	.13	.18	.10	1.00			
x7	-.08	-.04	-.03	-.03	-.32	.04	1.00		
x8	.08	.07	.09	.05	.20	.04	-.53	1.00	
x9	.06	.14	.06	.09	.06	.11	-.08	.12	1.00

Number of cases = 1348

Figure 12. France

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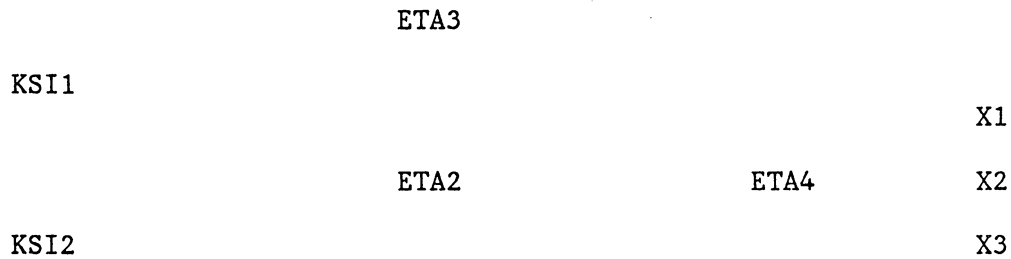


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x1 = approval of nature protection movement  
 x2 = approval of ecology movement  
 x3 = approval of anti-nuclear power movement  
 x4 = approval of anti-nuclear war movement  
 x5 = Materialist-Post-Materialist Scale  
 x6 = Left-Right scale  
 x7 = Education  
 x8 = Age  
 x9 = Social Change

---

**APPENDIX II**



ETA1

where

KSI1 = Education	LX 4 1 = .680
KSI2 = Age	LX 4 2 = .660
ETA1 = Social Change	LX 4 3 = 1.0
ETA2 = Left-Right scale	BE 1 2 = .241
ETA3 = Materialism-Post-Materialism scale	BE 1 3 = .170
ETA4 = Factor movement approval	BE 3 2 = .252
X1 = ecology movement	BE 4 1 = .104
X2 = anti-nuclear power movement	BE 4 2 = .331
X3 = anti-nuclear war movement	BE 4 3 = .171
	GA 1 1 = -.085
PSI:	GA 1 2 = .080
ETA1 = .850	GA 2 2 = .150
ETA2 = .977	GA 3 1 = -.258
ETA3 = .830	GA 3 1 = .102
ETA4 = .737	GA 4 1 = -168

PHI:  
KSI1-KSI2 = -.390

TE:  
ECO = .538  
POW = .564

Figure 13. German Model

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	ETA2		X1
KSI1		ETA3	X2
			X3
KSI2		ETA4	X4
	ETA1		

where

KSI1 = Education	LY 5 3 = .530
KSI2 = Age	LY 4 1 = .540
ETA1 = Social Change	BE 1 2 = .105
ETA2 = Left-Right	BE 3 1 = .123
ETA3 = Nature Protection Movement Approval	BE 4 1 = .071
ETA4 = anti-Nuclear Issue movement approval	BE 3 2 = .156
X1 = Nature protection variable	BE 4 2 = .172
X2 = Ecology movement	GA 1 2 = .116
X3 = Anti-Nuclear power movement	GA 2 1 = .085
X4 = Anti-Nuclear War movement	GA 2 2 = .085

PHI:

KSI1-KSI2 = -.530

PSI:

ETA1 = .975

ETA2 = .993

ETA3 = .956

ETA4 = .963

ETA3-ETA4 = .251

TE:

NAT = .708

POW = .719

Figure 14. French Model

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Netherlands

KSI1	ETA3	ETA4	X1
			X2
KS2	ETA2		X3
		ETA5	X4
	ETA1		

where

LY 4 1 = .430	GA 2 2 = .120	PS
LY 5 3 = .580	GA 3 1 = -.219	ETA1 = .908
BE 1 2 = .246		ETA2 = .986
BE 1 3 = .121	PHI	ETA3 = .874
BE 3 2 = .271	KSI1-KSI2 = -.460	ETA4 = .922
BE 4 2 = .280		ETA5 = .761
BE 5 1 = .080	TE	ETA4-ETA5 = .289
BE 5 2 = .427	NAT = .815	
BE 5 3 = .073	POW = .664	

Figure 15. Netherlands

---

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KSI1	ETA3	ETA4	X1
			X2
	ETA2		X3
KSI2		ETA5	X4
	ETA1		

Where

LY 4 1 = .490	BE 5 3 = .145	GA 5 2 = .085
LY 5 3 = .600	GA 1 1 = -.065	PHI
BE 1 2 = .219	GA 1 2 = .077	KSI1-KSI2 = -.400
BE 1 3 = .053	GA 2 2 = .180	PSI
BE 3 2 = .201	GA 3 1 = -.074	ETA1 = .919
BE 4 1 = .067	GA 3 2 = .074	ETA2 = .968
BE 4 2 = .119	GA 4 1 = -.154	ETA3 = .937
BE 5 1 = .091	GA 4 2 = -.103	ETA4 = .957
BE 5 2 = .245	GA 5 1 = -.068	ETA5 = .845
TE		ETA4-ETA5 = .165
NAT = .760		
POW = .640		

Figure 16. Great Britain

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KSI1	ETA3	ETA4	X1
			X2
	ETA2		X3
KSI2		ETA5	
	ETA1		X4

where

LY 4 1 = .730	GA 1 1 = -.081	PSI
LY 5 3 = .480	GA 2 2 = .070	ETA1 = .945
BE 1 2 = .217	GA 3 1 = -.246	ETA2 = .995
BE 3 2 = .172	GA 3 2 = .110	ETA3 = .863
BE 4 1 = -.050	GA 4 1 = -.096	ETA4 = .957
BE 4 2 = .118	PHI	ETA5 = .928
BE 4 3 = .102	KSI1-KSI2 = -.520	ETA4-ETA5 = .333
BE 5 2 = .203		TE
BE 5 3 = .141		NAT = .467
		POW = .770

Figure 17. Models Netherlands, Italy, Great Britain

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- KSI1 = Education
  - KSI2 = Age
  - ETA1 = Social Change
  - ETA2 = left-Right scale
  - ETA3 = Materialist-Post-Materialist Scale
  - ETA4 = Nature Protection Factor
  - ETA5 = Nuclear Issue Factor
  - X1 = Approval for nature protection movement
  - X2 = Approval for ecology movement
  - X3 = Approval for anti-nuclear power movement
  - X4 = Approval for anti-nuclear war movement
-

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