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VALUE CHANGE, GENERATIONAL REPLACEMENT
AND POLITICS IN SPAIN

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Introduction*

Spain, like most advanced industrial societies, is undergoing cultural change (Torcal 1989 and 1992; Orizo 1991; Díez Nicolás 1992a and 1992b). Generational replacement is the driving force behind this cultural change. However, this change presents its own features. We contend that these particular characteristics have resulted from the especial conditions of recent Spanish economic, social and political history. The hypothesis of value change is only plausible and understandable in Spain when these conditions of recent history are contemplated. From the early 1960s Spain experienced radical economic and social transformation.¹ The pace of this economic growth has produced levels of wealth comparable to those in other European countries, but also distinct levels of exposure to economic prosperity (security) among Spaniards due to the existence of remarkable social inequalities and a precarious welfare state. For a long period Spain had also been under an authoritarian regime. These conditions have produced a relatively high proportion of postmaterialists compared to those existing in other EC countries. However, they have also led to a peculiar coexistence of a relatively significant number of postmaterialists with a majority of materialists, even though the proportion of materialists has decreased substantially. These conditions have produced postmaterialists more concerned with fighting social inequalities and increasing social programs. Finally, they have signified the comparatively more conspicuous presence of an authoritarian/libertarian value conflict alongside the materialist/postmaterialist one. This paper will explore value change and its singularity in Spain, and to what extent this value change has altered political cleavages, political conflicts and the party system.

According to the cultural change hypothesis, younger generations have substantially modified their value systems, shifting from giving top priority to physical sustenance and safety

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¹ The average growth of the Spanish economy between 1961 and 1970 was 7.3 percent in real terms. This growth led to a notable modernization of Spanish society. In 1960, for instance, 41.5 percent of the active population worked in the primary sector, 23.3 in the secondary and 28.1 percent in the tertiary. In 1988, the distribution of the active population was 13.2, 21.1 and 47.2 percent respectively (García Delgado 1990).

toward placing greater emphasis on belonging, self-expression and quality of life. The unprecedented levels of economic prosperity, physical security and education that have prevailed in Western societies over the last four decades have brought about the shift. This new value system has been termed *value change* and is represented by the *materialist/postmaterialist dimension* (Inglehart 1977, 1988 and 1990a).

The value change hypothesis has been the topic of a great deal of research.² Moreover, it has become one of the most compelling hypotheses put forward to explain recent electoral changes in advanced industrial democracies (Dalton *et al.* 1984).³ For instance, the "new politics" literature takes this hypothesis as a point of departure for an explanation of electoral instability through new patterns of voting behavior. Besides focusing on the social bases of value changes, the new politics perspective is also an integrated approach which attempts to relate the materialist-postmaterialist dimension to changes in the political cleavage structure and electoral instability in Western democracies. The supporters of this approach maintain that the traditional structure of cleavages in Western politics (Lipset and Rokkan 1967) have lost some of their importance in favor of a value-based cleavage dimension (Knutsen 1989a, 498). They also maintain that the rise and success of Green parties and the proliferation of alternative electoral lists can be attributed to the increasing prevalence of this new dimension (Inglehart 1990a, 1990b, 1990c; Müller-Rommel 1989 and 1990).

Spain is an advanced industrial democracy undergoing fundamental value change. Yet studies of this change are limited. The purpose of this paper is to provide a more detailed

² The hypothesis of value change has been the focus of a lively debate in political science. While Boltken and Jagodzinski (1985), Zirakzadeh (1989), Trump (1991), Clarke and Dutt (1991) and Duch and Taylor (1993) have questioned the fundamentals, Lafferty and Knutsen (1985) and Mayer (1989) have criticized some of the items used. For some responses to these critiques see Inglehart (1985, 1990a), and Abramson and Inglehart (1992, 1993 and 1994).

³ In Western democracies, party systems have developed according to different patterns of stability and change. Various hypotheses have been proposed to explain stability. Lipset and Rokkan (1967) maintained that since the mid-twenties the majority of party systems have been structured around cleavages which resulted from the creation of the modern secular state and the arrival of the industrial revolution. According to these scholars, when the impact of these forces subsided, Western Europe saw a period of political stability, seen in the basic continuity of electoral results from the 1940s until the beginning of the 1970s (Rose and Urwin 1970). Thus, by the 1970s stability was thought to be the defining characteristic of Western European party systems. The electoral volatility observed by many scholars since then, however, has brought this pattern of stability into question (Pedersen 1983; Maguire 1983; Crewe and Denver 1985). Ersson and Lane (1982) and Shamir (1984), for example, have found that aggregated electoral results since the beginning of this century display remarkable patterns of *instability* as well as stability. Nevertheless, in a more recent and comprehensive study, Bartolini and Mair (1990) have demonstrated the stability hypothesis with data beginning in 1885.

analysis of the "nature" of value change in Spain and of some of its more conspicuous effects on Spanish politics. We will start with the study and evolution of the distribution of materialists and postmaterialists and some of their defining characteristics. We will continue with the spatial or dimensional definition of value change among Spaniards, as this enables us to confirm some of the distinctive points of cultural change. We will then analyze the generational replacement that constitutes the driving force behind the relative increase of postmaterialists and the significant decrease of materialists. Finally, working from existing analyses of the effects of value change on the Spanish party system (Montero and Torcal 1992), we will try to connect the materialist-postmaterialist dimension to some facets of Spanish politics. We will address the effects of value change on the structure of political cleavages, examine how value change alters the ideological spectrum of Spanish voters, and conclude with an assessment of the effects of cultural change on the Spanish party system.

Materialists and Postmaterialists in Spain

To what degree are postmaterialist values ingrained in Spanish society? What basic features distinguish materialists from postmaterialists? To answer these questions we have analyzed the data of five surveys conducted in Spain in 1980, 1988, 1991, 1992 and 1993.⁴ Considering the data of the last thirteen years in Table 1, we can observe that, with the exception of 1993, the percentage of postmaterialists has increased slightly, while the decline in the percentage of materialists has been remarkable (from 62 percent in 1980 to 43 percent in 1993)⁵. Therefore, in Spain comparatively high rates of economic growth did generate relatively high rates of decline of materialists over time, but not, as Abramson and Inglehart (1993)

⁴ The 1980 and 1988 surveys were carried out by the Centro de Investigaciones Sociológicas (CIS). The 1980 survey was undertaken in November, while the 1988 survey was actually performed in January of 1989; their samples were 3,193 and 3,346 cases respectively. The 1991, 1992 and 1993 surveys were performed in June of those years by the Centro de Investigaciones Sobre la Realidad Social (CIRES); 1,200 Spanish citizens were interviewed for each.

⁵ In Table 1 we have clustered individuals according to their factor scores on the materialist/postmaterialist dimension (first principal component) contained in Table 3; we have used the regression method to create and save the factor scores.

maintain, a corresponding increase in postmaterialist values. These assertions, nonetheless, should be interpreted carefully due to the short time period.

Table 1. Materialists, Mixed and Postmaterialists in Spain and in the EC, 1980-1993 (In percentages)

	Spain					EC*	
	1980	1988	1991	1992	1993	1980	1989
Materialists	62	47	52	47	43	44	22
Mixed	26	36	31	38	35	47	59
Postmaterialists	12	17	17	15	22	9	19
Total	100	100	100	100	100	100	100

* Mean of ten countries of the EC, excluding Spain and Portugal.

SOURCES: For 1980 and 1988, Centro de Investigaciones Sociológicas (CIS); for 1991, 1992, and 1993, Centro de Investigaciones para la Realidad Social (CIRES); for EC countries, Eurobarometer, 13 (June 1980) and 31 (June 1989).

On the other hand, the proportion of postmaterialists in Spain is very similar to the average for the ten EC countries (excluding Spain and Portugal), which also confirms that relatively high levels of GNP/capita predict relatively high levels of postmaterialists (Abramson and Inglehart 1994, 3).⁶ From the data included in Table 1, however, one can also perceive some comparative differences. In Spain, the percentage of materialists is higher than in other EC countries, while the percentage of mixed individuals is lower. It seems that in Spain the relatively high levels of the GNP/capita brought about by very rapid economic growth have produced a value change that differs from that of other European countries: the coexistence of a significant proportion of postmaterialists alongside a persistent majority of materialists.⁷

⁶ This finding is also an indirect corroboration of the increasing similarities of the values of Spanish citizens with those of the rest of Western Europe (López Pintor 1982; Orizo 1983 and 1991; Benedicto 1989).

⁷ Studies conducted in 1990 (Orizo 1991 43-46) confirm the continued increase of postmaterialists (20 percent) and mixed individuals (58 percent), and the consequent decline of materialists (22 percent). This distribution seems to dilute the peculiar importance of the materialists in Spain, apparently showing that the significant increase of *mixed* individuals has been realized at the cost of the materialists. Although the results of Orizo's 1991 study also confirmed the cultural change hypothesis, his method of grouping respondents into the categories of materialist,

In describing the basic social and attitudinal features of materialists and postmaterialists, we can say that postmaterialists are also distinguished in Spain by their higher levels of education⁸ (Figure 1) and interest in politics (Figure 2). This second characteristic is especially interesting when we recall the low level of political interest traditionally observed among the Spanish (Montero and Torcal 1990; Botella 1992). As can be seen in Figure 2, the Percentage Difference Index (PDI)⁹ is negative for those declaring a high level of interest in politics, which indicates the predominance of postmaterialists among those showing an interest in politics. This tendency is maintained for those declaring an average level of interest, and leads subsequently to a significant predominance of materialists among those showing little or no interest in politics.

The different characteristics of postmaterialists and materialists also emerge when analyzing some attitudes related to political participation. The characteristic passivity of Spanish political culture (Maravall 1984; Montero and Torcal 1990) is unequally distributed between materialists and postmaterialists. As can be seen in Figure 3, materialists are distinguished by their low tendency to participate in politics, while postmaterialists show a higher propensity to participate. However, it is important to point out that these tendencies depend heavily on the type of political participation. Postmaterialists show much stronger approval of unconventional methods of political participation than materialists. This situation is reversed when conventional mechanisms of participation are considered. In 1988, for instance, 44 percent of materialists declared that "Not voting is always a mistake", whereas only 18 percent of postmaterialists agreed with that statement. This finding seems to confirm other studies of value change and voter turnout (Crepaz 1990). Thus, in Spain, as in most Western European countries (Jennings and van Deth 1990; Dalton, Kuechler and Bürklin 1990), a new style of political action is developing as citizens shift from traditional methods of interest representation to a more unconventional participatory style. In Spain too, new postmaterialist

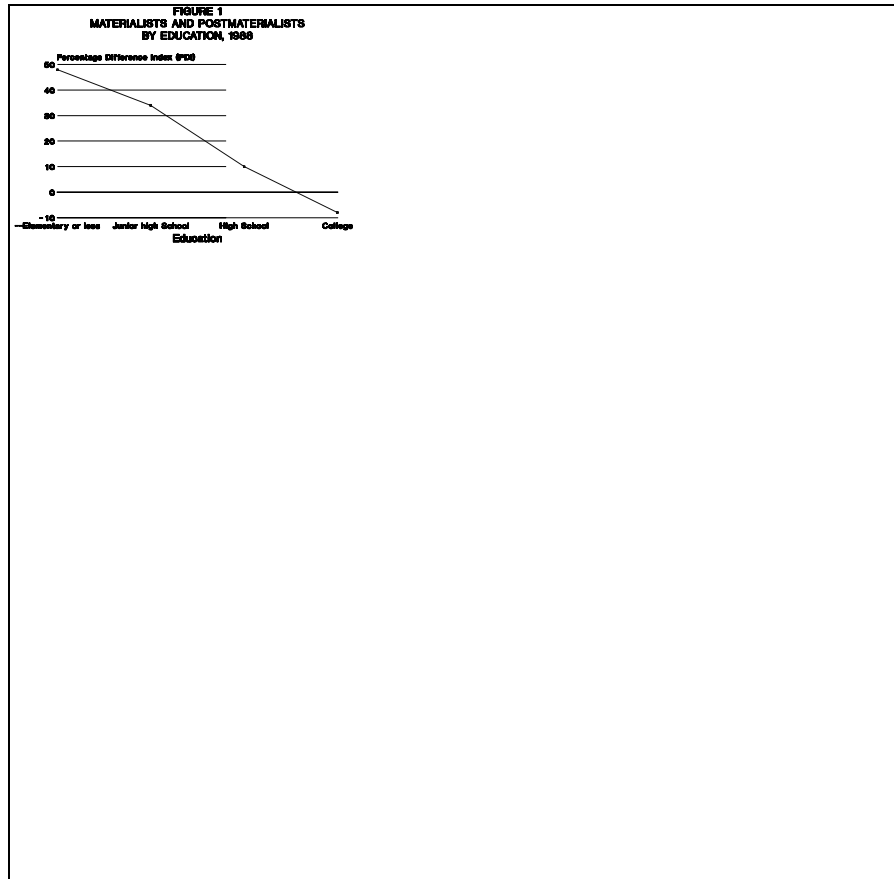
mixed and postmaterialist was somewhat different to ours (Montero y Torcal 1992, 71).

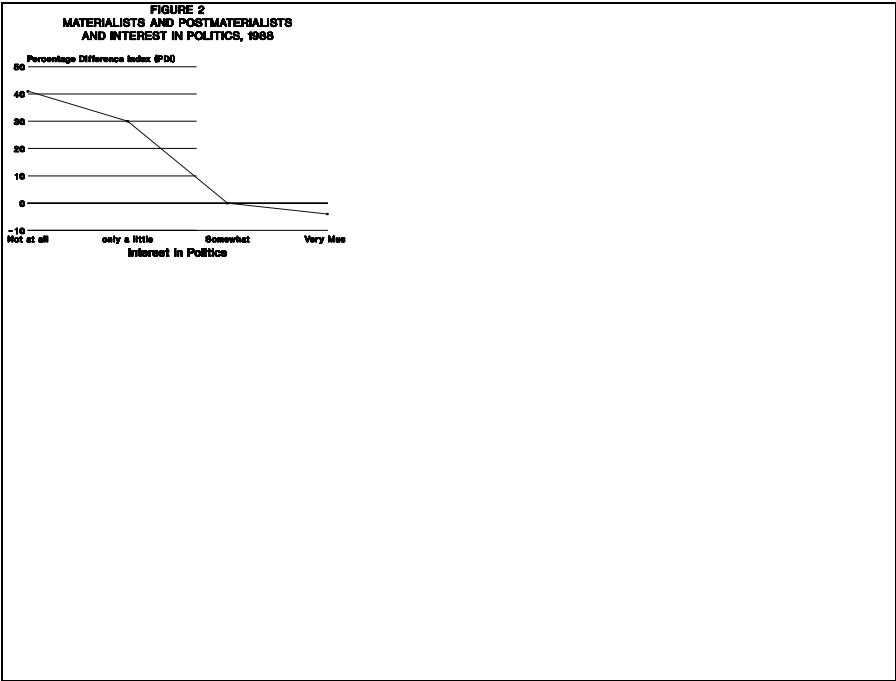
⁸ Some scholars have interpreted the importance of education mainly as the result of indoctrination through educational institutions (Duch and Taylor 1993). The Spanish case shows that education is more the simple result of institutional indoctrination. Until the mid-seventies, the best educated Spaniards obtained their education under an authoritarian regime; nevertheless, they tend to be libertarian and to locate themselves on the left side of the ideological spectrum (Díez Medrano et al. 1989).

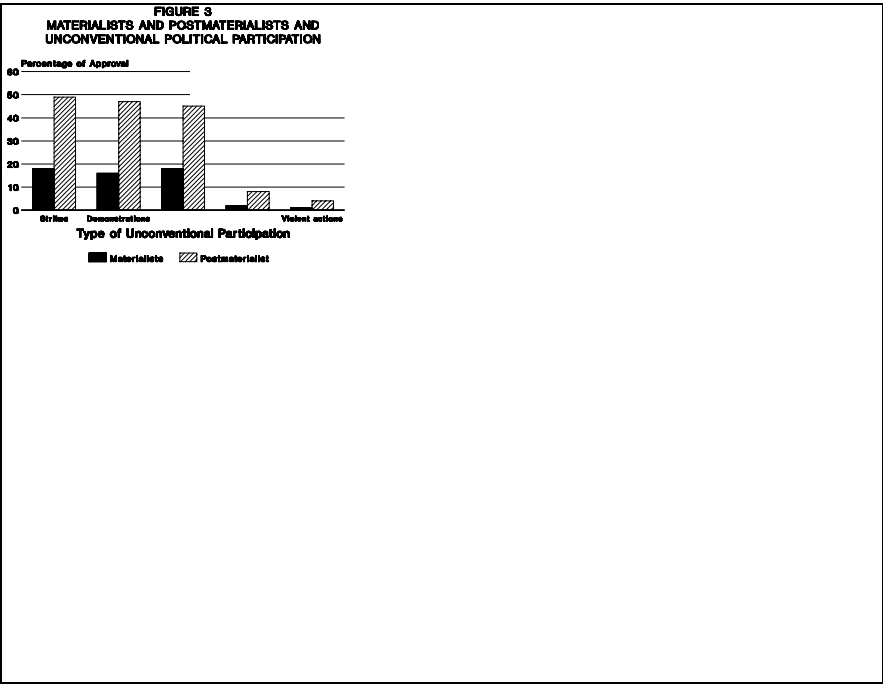
⁹ The Percentage Difference Index (PDI) is the difference between the percentage of materialists and postmaterialists.

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values seem to be one of the driving forces behind this new style of political action (Inglehart 1990a and 1990b).







Finally, another attitudinal difference between Spanish materialists and postmaterialists can be observed in the average sympathy for selected Spanish political and social institutions (Table 2). Responding to the expectations of the cultural change hypothesis, postmaterialists display in 1988 less sympathy than materialists towards institutions such as the Catholic church, the army and business, while they are more sympathetic to the press and the two largest Spanish trade unions.

Table 2. Sympathy of Materialists and Postmaterialists for Different Institutions and Groups, 1988*

Institution/Group	Materialists	Postmaterialists
Church	6.5	4.3
Army	5.4	3.6
Press	5.9	6.1
Business Organizations	5.1	4.1
CC.OO. (Communist Workers' Union)	4.2	5.0
U.G.T. (Socialist Workers' Union)	4.3	4.9
(N)	(2,626)	

* Figures are means on scales of one to ten.

The basic description of the main characteristics of postmaterialists and materialists in Spain corresponds, therefore, with what theory and other comparative studies would lead us to expect. Postmaterialists are better educated, more interested in politics and in modes of unconventional political participation; they also display less sympathy toward the more traditional and conservative political and social institutions. On the other hand, materialists are less educated, less interested in politics and unconventional political participation, and more sympathetic to traditional and conservative institutions.

Value Change and Dimensionality

Value change in Spain can be ascertained with a *dimensional analysis* which uses two procedures: principal components analysis and non-metric multidimensional scaling. This type of analysis is necessary for several reasons. First, because the study of stability and change in mass values and attitudes involves many controversial theoretical and methodological issues.¹⁰ Many of these issues arise because of the presence of measurement errors inherent in studies of values, a problem which can be overcome through dimensional analysis.¹¹ Furthermore, the

¹⁰ Questions related to stability and change in mass values and attitudes are of course difficult topics to address, and dimensional analysis and scaling techniques have become essential tools in studying them (Inglehart 1977 and 1990a; Knutsen 1989a and 1990). Short-term fluctuations can be identified easily, but long-term attitudinal traits can only be observed through longitudinal research. This research can be done using panel designs, which provide information about individual change, or repeated cross-sectional studies, which analyze aggregated change in a sample or subsample (cohort). Both types of design can provide information "at" and "for" different times (prospective or retrospective) and, therefore, can be considered longitudinal research. They present, however, various problems of cost and design. For a detailed discussion of these problems see Campbell and Stanley (1963), and Menard (1991).

Even when researchers overcome these problems their studies will unavoidably contain measurement errors that always go against the stability hypothesis. In part because of this, early scholars studying mass attitudes and political behavior, for example, concluded precipitously that the mass attitudes and values of American and British voters were inherently unstable and inconsistent. Using dimensional analysis techniques, scholars have subsequently concluded that stability and coherence could be found in a latent, underlying attitudinal dimension (Inglehart 1990a). Only with the application of dimensional analysis techniques, made possible by the radical advances of computer technology in the last twenty years, have researchers been able to minimize measurement error, avoid some misinterpretations of the past, and overcome some of the challenges of longitudinal research.

¹¹ Measurement is defined as the process of applying numbers to objects in meaningful ways. Numeric properties are not immutable: they are abstract models applied by researchers to represent different features of a set of empirical objects. Data values, therefore, cannot be taken as given quantities; they are the result of different measurement models, and their variability can be caused by either the substantive properties of empirical objects they measured or measurement errors (Jacoby 1991, 5-13). When a scaling procedure is used, errors can be therefore interpreted, in Jacoby's (1991, 34-5) words, in two different ways: "First, they may reflect the presence of an inappropriate scaling model. Either the dimensionality is wrong, or the geometric model is inconsistent with the empirical observations. If the researcher interprets the errors this way, then he or she is applying a *scaling criterion* (dimensional analysis). Second, scaling errors may simply be the 'fluctuations' that occur because of measurement errors, sampling errors or stochastic factors affecting the observations. If the researcher uses this interpretation, then he or she is explicitly accepting the dimensional structure; the procedure is used solely as a *scaling technique*. Indeed, the major objective of a scaling technique is to eliminate the effects of these kind of errors." In short, scaling techniques are the best methodological tool not only to detect and "clean" measurement errors, but also to falsify measurement models. For a discussion of scaling techniques for unidimensional phenomenon, see McIver and Carmines (1981).

inherent complexity of advanced industrial societies adds a new reason for using dimensional analysis. Complexity is often confusing, and this confusion is reflected in the way citizens organize their beliefs, values and attitudes around different dimensions of issues and topics. Dimensional analysis can determine whether these attitudes are the result of the instability of mass perceptions and evaluations of the world or whether they are an artifact of measurement error. This is especially important for the Spanish case, where the rapid pace of economic, social, and political changes has produced a distinct and more complex crystallization of value change.

Inglehart (1977 and 1990a) used principal components analysis to find a clear "latent" materialist/postmaterialist dimension in the structure of his data. We have also used principal components analysis with the data from five aforementioned surveys. Because the items used in these surveys are slightly different from those used by Inglehart, the Spanish data are not completely comparable to his.¹² The results are, nonetheless, revealing: they show both marked similarities and important differences when compared with Inglehart's results. The most important similarity is the duplication of the same basic bipolar structure of the materialist and postmaterialist items on the first principal component. The two most important differences are the presence on the postmaterialist side of *sociotropic*¹³ items; i.e., items with important social connotations like "Fight social inequalities", "Increase social programs" and secondly, the presence of a more defined authoritarian/libertarian value conflict within the materialist/postmaterialist dimension. The first peculiarity can be observed through the results of the principal component analysis. The presence of the authoritarian/libertarian value conflict emerges clearly from the data when non-metric multidimensional analysis is applied. However, we wish to make clear that the empirical support is not important enough to endorse the idea advanced by some scholars of the existence of an independent and well-defined authoritarian/libertarian dimension alongside the materialist/postmaterialist one (Flanagan 1982

¹² The use of different items in the Spanish surveys presents a problem for comparing their findings with those of other Western countries. However, the different items also help to capture some of the specific features of the Spanish case. For a detailed discussion of the benefits and disadvantages of using different items in Spain, see Torcal (1989 and 1992).

¹³ We are referring here to the concept of "sociotropic interest" (Kinder and Kiewiet 1979), by which the personal interest of some citizens in fighting social inequalities is not so much the result of their personal short-term material interest, but of their concern about social problems that will affect them directly or indirectly in the long-term.

and 1987; Flanagan and Dalton 1984 and 1990). The materialist/postmaterialist dimension, as Inglehart asserts, also comprises the authoritarian/libertarian value conflict which, we only suggest here, is stronger in Spanish society.

The materialist/postmaterialist dimension

Principal components analysis of the Spanish data reveals a clear materialist/postmaterialist dimension similar to that identified by Inglehart (Table 3). Moreover, although the use of different items presents serious problems for longitudinal comparison, the structure of these data was very similar over the thirteen years for which data were collected: a polarized dimension of materialist and postmaterialist items. Furthermore, the loadings on the principal component are very stable for the 1991, 1992, and 1993 surveys, years in which the same twelve items were used. The correlations among these latent structures are .91 between 1991 and 1992, .98 between 1992 and 1993, and .91 between 1991 and 1993. At the aggregate level, these data point to the consistency of the materialist/postmaterialist dimension.

The stability of this dimension in the last three years has not been undermined by drastic changes in the Spanish economic situation. A new macroeconomic scenario of recession, high inflation and increasing rates of unemployment has not substantially altered the consistency of value change among Spaniards. This finding goes against the scholars who have argued that value change is notably affected by the short-term effects of macroeconomics (Clarke and Dutt 1991). The immediate effects of Spain's serious economic recession are reflected in the slight proportional increase in scores associated with items such as "Fight unemployment", "Fight rising prices" and "Economic growth" in 1992 and 1993 (Table 4). However, even in the context of a deep economic recession, the item "Protect the environment" was selected with greater frequency as a second choice and with similar frequency as a first one in those same years. Furthermore, even though the distribution of these items varied somewhat, their loadings in the materialist/postmaterialist dimension in Table 3 remained stable, confirming the slight impact of short-term effects of macroeconomics on value change (Abramson and Inglehart 1994).

Table 3. Principal Component Analysis of Materialist/Postmaterialist Items in Spain, 1980-

1993

(Loadings of Given Items on First Principal Component)

Goal	1980	1988	1991	1992	1993
Fight social inequalities	--	.4588	.5888	.5574	.5296
More say at work	.6445	.2789	--	--	--
Ideas count	.0552	.3437	--	--	--
Freedom of speech*	.5152	.3240	.4305	.4695	.3545
Less impersonal society	--	.5955	--	--	--
More say in government	.6740	.5992	--	--	--
Protect the environment	--	--	.3049	.3865	.1538
Fight corruption in society	--	--	.3750	.2908	.3640
Increase social programs**	--	--	.2064	.1385	.2260
Economic growth	--	--	.2931	.3878	.3894
More beautiful cities	-.0714	-.4047	--	--	--
Fight terrorism	-.3327	--	-.5766	-.5459	-.5994
Fight crime	-.3231	-.6281	-.2771	-.1324	-.1703
Fight drug trafficking	--	--	-.6534	-.4025	-.6612
Maintain order	--	-.4661	--	--	--
Fight unemployment	-.1050	-.3795	-.0563	-.4508	-.1354
Stable economy	-.6982	--	--	--	--
Strong military defense***	-.3387	--	-.0084	-.0285	.0726
Fight rising prices	-.3821	-.3545	-.0224	-.1043	-.0075
Improve education & public health	--	-.5644	--	--	--
(N)	(2,948)	(2,626)	(1,143)	(1,181)	(1,187)
Percent of total variance explained by first component	17.6	21.6	14.5	13.6	13.5

* In 1991, 1992 and 1993, this item was "Protect civil rights".

** This item states exactly: "Increase social programs (unemployment, retirement, help to disabled and drug rehabilitation)."

*** In 1991, 1992 and 1993 this item was "Maintain the security of the country against other countries".

The item "More beautiful cities" is another example of the similarity between Inglehart's and our own results. This item appeared on the materialistic side in 1980 and 1988 (and therefore with negative loadings in Table 3), indicating that in Spain, as in other Western societies, this item may depict considerations of personal security in cities and ideas of a safer and slower-moving society rather than merely evoking aesthetic and ecological concerns

(Inglehart 1977, 45-51; and 1990a, 137).¹⁴ In accordance with the expectations of the original hypothesis, postmaterialist ecological concerns appeared clearly on the postmaterialist side of the dimension when the item "Protect the environment" was used in the 1991, 1992 and 1993 surveys. Moreover, as can be seen in Table 4, this item ranked fifth among those most frequently selected in the surveys of those years. We may conclude, therefore, that concern with ecological issues is not only relatively important among Spanish citizens in general, but is also essential among postmaterialists. This conclusion is supported by other studies (Orizo 1991) which contend that ecological concerns are an important part of the new values of postmaterialists in Spain.¹⁵

Table 4. Distribution of Materialist/Postmaterialist Items in Spain, 1991-1993
(In percentages).

Goal	1991		1992		1993	
	1st*	2nd**	1st	2nd	1st	2nd
Fight social inequalities	16.2	3.7	19.0	4.6	16.5	6.5
Protect civil rights	2.9	3.0	1.2	2.7	1.7	3.1
Protect the environment	5.3	3.1	6.1	8.9	4.8	9.9
Fight corruption in society	2.8	4.2	3.0	4.6	3.5	7.4
Increase social programs**	3.7	5.5	4.3	7.0	2.8	5.7
Economic growth	2.1	3.1	2.5	4.1	4.0	5.4
Fight terrorism	13.6	26.3	12.9	22.9	4.8	15.8
Fight crime	1.9	7.4	2.4	5.2	1.5	4.0
Fight drug traffic	38.9	14.9	32.3	15.6	28.5	17.6
Fight unemployment	11.0	17.2	14.3	19.8	29.3	20.8
Strong military defense***	0.3	0.7	0.3	0.3	0.4	0.6
Fight rising prices	1.3	2.3	1.7	4.4	2.1	3.2
(N)	(1,143)		(1,181)		(1,187)	

* First choice.

** Second choice.

*** This item states "Increase social programs (unemployment, retirement, help to disabled and drug rehabilitation)."

**** This item was "Maintain the security of the country against other countries."

¹⁴ For a detailed discussion of the relationship of this item with concerns with security and order in Spain, see Torcal (1989 and 1992).

¹⁵ Based on research in Norway, Lafferty and Knutsen (1985) have also found that the item "Protect the environment" better represents ecological concerns.

Nevertheless, not everything in Tables 3 and 4 corroborates the value change hypothesis. Several items did not reproduce the findings that the theory and other comparative studies would lead us to expect. We are going to comment on these differences in some detail because they enable us to better understand the nature of Spanish value change and its peculiarities. One item that deserves special attention is "Fighting social inequalities". Contrary to the cultural change hypothesis, fighting social inequality should be both a strong and stable postmaterialist value and one of the items most frequently selected in Table 4. Other studies have previously demonstrated a strong relationship between this and other postmaterialist items in Spain (Torcal 1989 and 1992). The structure of the data in the 1991, 1992, and 1993 surveys strongly confirms these previous findings. In these last three surveys, the item "Fight social inequalities" consistently displays positive correlation only with the item "Protecting civil rights", and, very significantly, it shows the strongest negative correlations with the items "Fight drug trafficking", "Fight terrorism" and "Fight crime", which carry a conservative or authoritarian overtone. Most strikingly, it also shows a relatively strong negative association with the economic (materialist) items "Fight unemployment" and "Fight rising prices", although the correlation with the latter is weaker. (The correlation matrices are included in Appendix A.)

An explanation for these results can be found in Spanish history, as social inequalities and the precariousness of the welfare state have been outstanding features until very recently (Maravall 1993). Economic growth and the related modernization process of the 1960s and 1970s partially mitigated and diffused these inequalities, but in many cases they were only replaced by others resulting from the new socio-economic structure. Thus, the replacement of the traditional social inequalities of pre-industrial Spain by "softer industrial ones" facilitated the creation of a sort of "social mattress" which eased the political transition to democracy and helped to avert the dramatic struggles and radicalism Spain had experienced in the past (López Pintor 1982, 47-52). This did not imply, however, the elimination of social inequalities still present at the beginning of the political transition (Murillo and Beltrán 1983).¹⁶ This fact, together with the existence of only very weak efforts to redistribute wealth

¹⁶ The Gini index in Spain in 1974 was 0.54. Furthermore, 1 percent of the richest families enjoyed 27 percent of the GNP (Maravall 1984, 148-149).

in Spanish society until the arrival of the Socialist party in government (Maravall 1992) and the precariousness of the Spanish welfare state help to explain the overwhelming presence of social and political reformists among Spaniards (Linz 1984; Montero and Torcal 1990; Gunther 1992), as well as, at a different level, the tendency of postmaterialists to be concerned with fighting the major social inequalities existing in Spanish society. We argue, therefore, that in Spain, more than in any other industrial society (Dalton 1988), values expected to be materialist sometimes reflect the "*sociotropic* interest" of most postmaterialist citizens. This may explain why items such as "Fighting social inequalities", and other presumed materialist items, appear on the postmaterialist side of the cultural change dimension. There are also other reasons for the presence of this item on the postmaterialist side. The existence, as we hope to demonstrate later, of an important authoritarian/libertarian conflict in Spain, legacy of the long exposure of an important part of the population to the dominant values of the Franco's regime, forces this item to appear on the postmaterialist side of the dimension. The aforementioned correlations demonstrate the libertarian overtone acquired by this item: relatively important negative correlations with those measuring order and authority and the positive strongest one with "Protecting civil rights".

There is still one further example of the presence of an item with *sociotropic* connotations. For instance, the item "Increase social programs", presumed to be materialist, is chosen by postmaterialists. This item unexpectedly appears on the postmaterialist side of the dimension in 1991, 1992 and 1993 (since it has a positive sign in Table 3), apparently challenging the value change hypothesis. It is likely that the Spanish postmaterialists interpreted this item as another "*sociotropic* interest" with a libertarian overtone, explaining its position on the postmaterialist side of the dimension. This assertion is based on the fact that this item appeared on the surveys with a longer wording referring specifically to new social programs such as disability and drug rehabilitation. More relevant, this item had the strongest negative correlation with all the items of order and security, especially with the item "Fight drug trafficking". These findings seem to indicate that the Spanish materialists prefer the more traditional way of dealing with drugs (police prosecution), whereas the postmaterialists endorse social programs focused on prevention and rehabilitation. The correlations of the item "Increase social programs" not only explain its position on the postmaterialist side of the dimension, but also point once again to the important role played by the authoritarian/libertarian value conflict in the definition of value change in Spain.

Finally, another presumed materialist item, "Economic growth", was also located on the postmaterialist side of the dimension in 1991, 1992 and 1993, again challenging the consistency of the value change hypothesis in Spain. However, only 2 to 4 percent of Spaniards selected this item as the most relevant in Table 4. Even during the current economic crisis, ecological concerns appear to be more important. Furthermore, we will contend that the strong influence of the authoritarian/libertarian value conflict in Spain forced the item "Economic growth" to emerge on the postmaterialist side when *stricto sensu* it is a materialist value. In the correlation matrix (included in Appendix A), this item presents the strongest negative correlations with items measuring order, security and authoritarian values such as "Fight drug trafficking", "Fight terrorism" and "Fight crime".

The authoritarian/libertarian value conflict

Using principal components analysis to reveal the structure of his data, Inglehart (1990a, 37) maintains that, although the materialist/postmaterialist dimension is clearly recognizable, "a number of dimensions are needed to capture the configuration of responses". We have observed that this is true in Spain as well.¹⁷ Among these other dimensions one seems particularly meaningful and influential in defining value change in Spain. As we have already stated, we argue that this dimension is the authoritarian/libertarian value conflict.

Nevertheless, as already stated, this argument is different to the one proposed by some scholars (Flanagan 1982 and 1987; Flanagan and Dalton 1984 and 1990) concerning the coexistence of an independent and well-defined authoritarian/libertarian dimension alongside the materialist/postmaterialist one. We only contend that the authoritarian/libertarian value conflict is strong in defining value change in Spain. This is the result of the long exposure of older Spanish citizens to the authoritarian values of Franco's regime.

We have already observed that in Table 3 the first principal component displayed an underlying materialist/postmaterialist dimension, and have also hinted at the presence of an

¹⁷ Although it is true that the materialist/postmaterialist dimension emerges clearly and remains stable, it is also true that a number of dimensions are needed to capture the configuration of responses: this first dimension (as expressed by the first principal component) explained only a small percentage of the variance --the largest being 21.6 in 1988.

authoritarian/libertarian conflict. Further analysis with this procedure did not produce meaningful results.¹⁸ Given that we are dealing with two spatial dimensions, there is perhaps another more efficient procedure than principal component analysis to test the dimensional structure of the Spanish survey data. First of all, it does not seem suitable for the type of data we have;¹⁹ and secondly, the mathematical assumptions of this procedure are not always the most appropriate, in our opinion, to use as scaling criterion.²⁰ Hence, we used a non-metric multidimensional scaling procedure.²¹

The use of this technique with two dimensions revealed the existence of an authoritarian/libertarian conflict in the structure of the Spanish survey data. In 1988, two clusters of items divided by the vertical axis appeared, corresponding exactly with the materialist/postmaterialist dimension we found using principal components analysis (Figure 4). However, we can also observe a distinctive pattern in the *vertical distances* between materialist items, displayed on the right side of Figure 4. Those related to order and authority appear above the imaginary horizontal line that cuts across the middle of the graph (for instance, "Maintain order" or "Fight crime"), whereas the materialist ones *stricto sensu* appear below it (for example, "Fight unemployment" or "Fight rising prices"). The presence and salience of the authoritarian/libertarian conflict seems to be dividing materialists between

¹⁸ Neither the second principal component, nor the varimax rotation of the axes produced meaningful results.

¹⁹ The data used in these surveys are *similarity data* with an ordinal level of measurement, while principal components analysis might be performed with *single stimulus data*, with an interval or ratio level of measurement. For a discussion of this topic, see Jacoby (1991).

²⁰ As we have discussed (see note 10 above), any scaling procedure can be used either as a scaling criterion (dimensionality) or as a scaling technique. Unlike other scaling procedures, principal components has no underlying statistical model. It only tries to explain the total variation in the observed variables. It is a linear transformation of the observed variables into a smaller set of uncorrelated variables which seeks to maximize the common variance among them. The aim of this type of analysis is parsimony, and therefore, it assumes that all the variance among the variables can be explained by the latent ones. There is no room for uniqueness, as is assumed in factor analysis, so there is no room for measurement error. Also, an orthogonal second component is left to explain the variance 'not explained' by the first one. This is useful for finding the structure of data in one common dimension (scaling technique), but not to test multidimensionality (scaling criterion). For a more detailed discussion of this, see Dunteman (1989) and Jacoby (1991).

²¹ To perform this procedure, indirect dissimilarities were computed over a rectangular matrix of correlations (included in Appendix A) in which negative correlations were treated as *distances*, and the positive ones as *proximities*. This scaling technique considers these distances as an ordinal non-metric function of (di)similarities, respecting the ordinal level of our original data. However, it produces graphical results that contain metric information, where the distances in the plane represent the (di)similarities among the items or inputs. See Davison (1992).

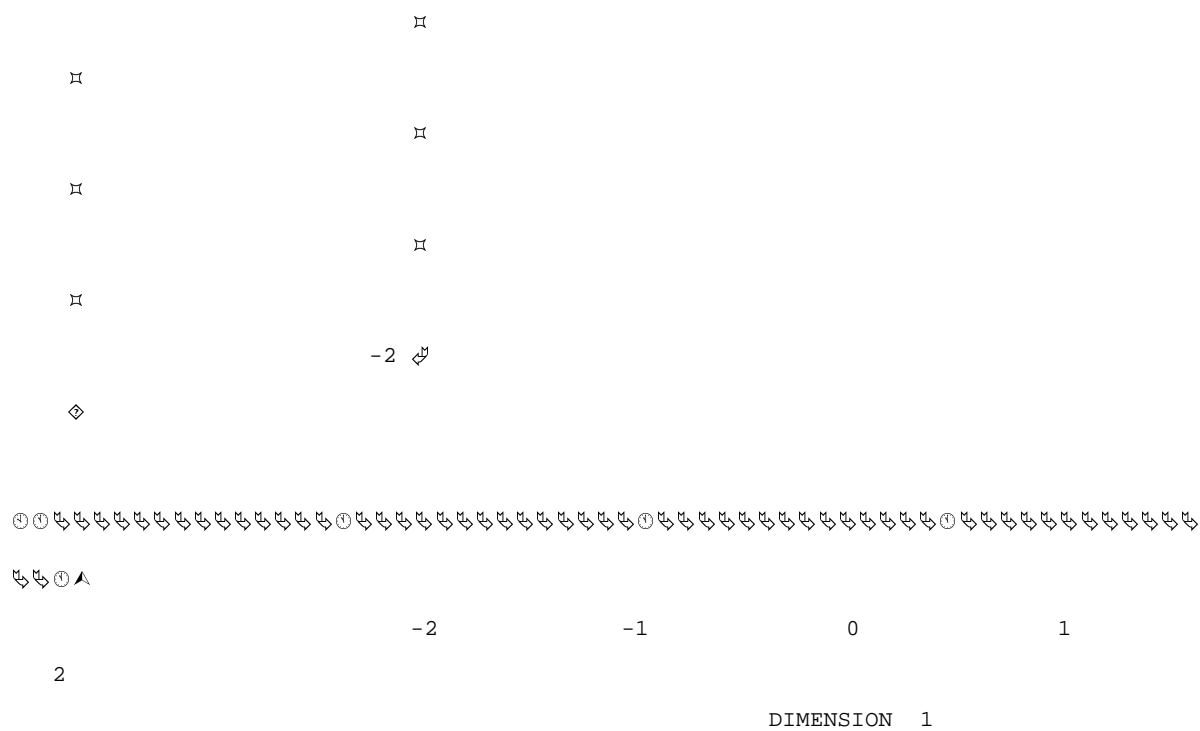
pro-authoritarians and those materialists strictly concerned with economic-oriented values. This pattern, although also clear in the other side of this figure, is more difficult to distinguish in the postmaterialist cluster (displayed at the left side of Figure 4) because most of those items have a clear libertarian meaning.

The existence of the materialist/postmaterialist dimension is also quite clear in the structure of the 1991, 1992 and 1993 data. For instance, in Figure 5, which represents the 1991 data, a vertical line at value 0 of the horizontal axis bisects the items into the same clusters of materialist and postmaterialist items we observed with principal components analysis. However, comparing the location and distances of the items along an imaginary horizontal dimension, we might conclude that the distance between authoritarian (i.e., "Fight terrorism", "Fight drug trafficking" or "Fight crime") and libertarian items (i.e., "Fight social inequalities" or "Protect civil rights") is much greater than the distance between the materialist and postmaterialist ones. Furthermore, the materialist/postmaterialist items are located in the upper part of the figure (with the exception of "Protect the environment"), while the authoritarian/libertarian are in the lower part (with the minor exception of "Fight crime"). The same items were used in 1992 and 1993, and a clearer reproduction of the same pattern was obtained.

Figure 4. Monotonic Multidimensional Scaling with 12 Materialist/Postmaterialist Items, 1988 (Kruskal stress --form 1-- in 2 dimensions)



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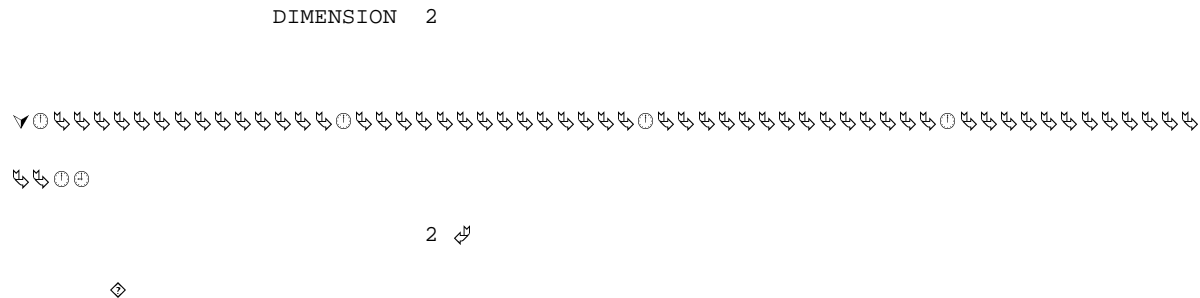


STRESS OF FINAL CONFIGURATION IS .14845
PROPORTION OF VARIANCE (RSQ) IS .86160

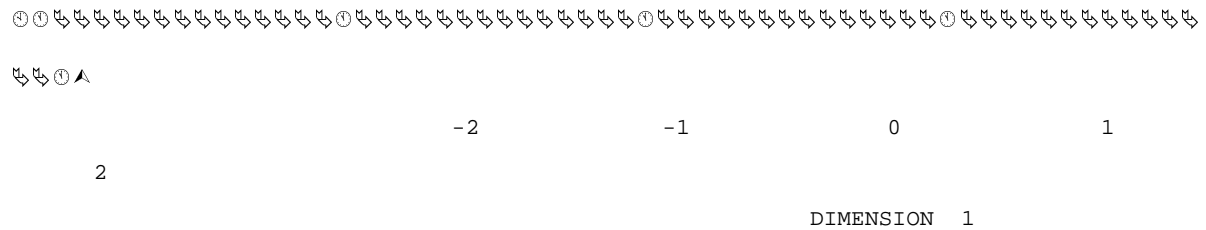
LABELS OF ITEMS

- | | |
|--|-----------------------------------|
| CRIME. Fight crime. | IMPERS. Less impersonal society. |
| CITIES. More beautiful cities. | SPEECH. Freedom of speech. |
| ORDER. Maintain order. | INEQU. Fight social inequalities. |
| UNEMP. Fight unemployment. | JOB. More say at work. |
| EDUC. Improve education and public health. | GOVER. More to say in government. |
| PRICES. Fight rising prices. | IDEAS. Ideas count. |

Figure 5. Monotonic Multidimensional Scaling with 12 Materialist/ Post- materialist Items, 1991 (Kruskal stress --form 1-- in 2 dimensions)



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STRESS OF FINAL CONFIGURATION IS .09394
PROPORTION OF VARIANCE (RSQ) IS .94539

LABELS OF ITEMS

UNEMP. Fight unemployment.
CRIME. Fight crime.
PRICES. Fight rising prices.
FORCES. Strong armed forces
GROWTH. Economic growth.
TERROR. Fight terrorism.

RIGHTS. Protect civil rights.
INEQU. Fight social inequalities.
ENVIR. Protect environment.
CORRUPT. Fight corruption.
DRUG. Fight drug trafficking.
PROGRAMS. Increase social programs.

Both Figures 4 and 5, even though produced with different items, illustrate the importance of the authoritarian/libertarian conflict among the Spanish in contributing to value change. However, these figures do not strongly support the existence of a clear and defined independent authoritarian/libertarian dimension claimed by some scholars.

We have observed, therefore, two main findings in these dimensional analyses. First, materialist values with *sociotropic* and libertarian overtones can be chosen by postmaterialists. Second, the authoritarian/libertarian value conflict is an important element in defining value change. Both conclusions are strongly connected to two different aspects of recent Spanish history. The first is associated with the heritage of the previous authoritarian regime. It is very conceivable that the presence of a strong value conflict between those citizens exposed to the predominant authoritarian values of Francoism and those who have hardly been exposed to them, has become an essential element in defining value change. The second is connected to the economic, social, and political changes experienced by Spanish society. Rapid economic growth has produced a relatively wealthy country, but perceptions of economic prosperity are conditioned by the relatively low level of security provided by a still precarious welfare system and the existence of important social inequalities. Hence, in Spain the effects of economic growth on value change are different from the effects of

economic prosperity, especially as the latter have produced different perceptions of insecurity. In general, these findings underline the significance of the Spanish data as an interesting case in the debate about value change. They also stress that the hypothesis of value change is only plausible and understandable in Spain when these aspects of recent history are taken into account. However, while our findings may further an understanding of value change in countries experiencing similarly rapid rates of economic, social and political transformation --not surprisingly Flanagan's 1982 conclusions are based on the Japanese case-- , they should not be generalized to all other cases.

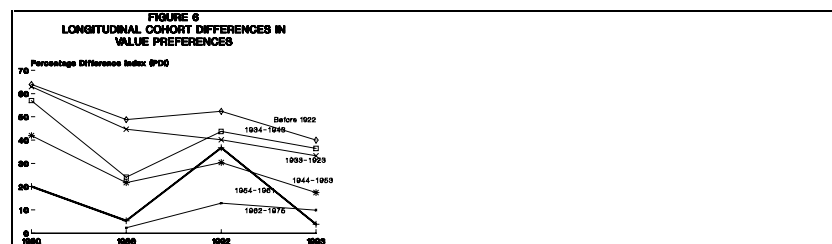
Generational Replacement and Value Change in Spain

Generational replacement is an essential element in the cultural change hypothesis (Inglehart 1977 and 1990a). In Spain, as in other advanced industrial societies (Abramson and Inglehart 1986, 1987, 1992 and 1993; Dalton 1988; Knutsen 1989b), generational replacement is contributing to the growth of postmaterialism. Despite some variations in the results, the analysis of generational differences shows the presence of cultural change through generational replacement. We have used the PDI to analyze dissimilarities between materialists and postmaterialists by cohorts in 1980, 1988, 1992 and 1993.²² As can be seen in Figure 6, younger cohorts account for a large proportion of postmaterialists, a proportion which is maintained in the wider process as each cohort comes of age. The resulting PDI among younger cohorts is generally smaller than that among older cohorts. The data in Figure 6 support the hypothesis of cultural change and generational replacement in Spain and

²² Cohort is defined as "those people within a geographically or otherwise delineated population who experienced the same significant life event within a given period of time." (Glenn 1977, 8). Cohort boundaries can be arbitrarily delineated "given any standard period of time", or can be based on some historical events. In this study we have fixed the cohort boundaries based on a number of historical, social and economic events of recent Spanish history. For a more detailed explanation, see Torcal (1989).

confirm results of previous studies (Orizo 1991; Montero and Torcal 1990 and 1992).²³ However, despite the overall persistency of differences between cohorts, some of the lines of this figure seem to indicate the presence of period effects, as well as some instability among cohort differences, two tendencies which are at odds with the generational replacement hypothesis.

The variation in the PDI displayed in Figure 6 can be attributed to three kinds of effects. Those produced by influences associated with aging are *age effects*; those produced by influences associated with birth cohort membership are *cohort effects*; and those produced by influences associated with each period of time are *period effects*. Unfortunately, a linear relationship between cohort, period and age effects leads each of these to be confused with the other (Glenn 1977; Menard 1991).²⁴ Thus, these effects cannot be discerned merely by examining Figure 6, or any other table presenting percentages.



²³ Torcal (1992) has underlined the relevance of cohorts for the definition of the materialist/postmaterialist dimension, and has demonstrated that value change in Spain shows a clear *time developmental model* or *circular dimensionality* (Weisberg 1974), in which the younger the cohort, the closer its position to the most libertarian and postmaterialist items.

²⁴ The influence of these three effects is difficult to distinguish for two additional reasons. As stated by Glenn (1977, 12), first, in survey data "much of the variation in percentages (or other values) among cells of a cohort table reflects sampling variability." Second, "as the birth cohort grows older, it suffers attrition due the death of some of its members".

We resolved this problem using a somewhat different design, namely a longitudinal research design.²⁵ Our conclusion is that, although the data reflect some period effects, the variability of postmaterialists is driven primarily by cohort effects, confirming the generational replacement hypothesis. Different longitudinal models were used to study separately period, cohort, and age effects on the variation of a postmaterialism index between 1988 and 1993 (Table 5). In the first Model in Table 5 we regressed a postmaterialist index (factor scoring) on twenty dummy independent variables, representing the nine different cohorts, nine age groups and two periods included in this design (1988 and 1993).²⁶ The

²⁵ Some authors use the adjective *longitudinal* to refer to both cohort trend studies with repeated cross-sectional studies and panel studies (Glenn 1977; Menard 1991), whereas some terminological *purists* apply this adjective only to panel studies. For a more detailed discussion about longitudinal research design, see above note 10.

²⁶ These dummy variables were created from a cohort table using only two years (1988 and 1993). The intervals of age and cohort have to correspond exactly with the interval of time between the surveys. Therefore, age and cohort were grouped in five-year intervals which correspond with the five years between these two surveys (1988-1993). We obtained nine five-year intervals of cohort and age excluding, for theoretical reasons, those individuals aged over sixty. This is also the reason why we could not include more periods in the model. The interval of time in

partial regression coefficients of this first model indicate that cohort effects explained most of the variability in the postmaterialist index. Compared with cohort effects, period and age effects were negligible. The sign and amount of these coefficients shows that the younger the cohort, the more positive the postmaterialist index. However, none of the coefficients produced by this Model 1 are statistically significant, something we believe is due to the high multicollinearity among these variables.²⁷

After confirming that the lack of statistical significance of cohorts effects is due to multicollinearity,²⁸ we attempted to break it by performing a transformation of the age variable (quadratic and age minus the average age).²⁹ The importance of cohort effects on the dependent variable was clear from the results of Model 2 in Table 5, confirming the generational replacement hypothesis. Partial regression coefficients of the younger

Table 5. Different Regression Models with Dummy and Transformed Variables to Distinguish Cohort, Aging or Period Effects Between 1988 and 1993 (Regression Coefficients)

Variables	MODEL 1	MODEL 2
Cohort 1	.704	.542***
Cohort 2	.461	.390***
Cohort 3	.451	.380***
Cohort 4	.307	.206
Cohort 5	.417	.294
Cohort 6	.297	.154
Cohort 7	-.010	-.074
Cohort 8	*	-.046

between the other surveys is different, making it impossible to include them in the model. For a detailed discussion of this model, see Mason et al. (1973).

²⁷ Tolerance among all these variables was very low and the variance-inflation factor (VIF) very high, indicating high collinearity among the variables. Linear relationships between the independent variables cause least-squares regression coefficients to be unstable. Coefficient standard errors are inflated, leading to the possibility of failing to reject the null hypothesis when it is not true (error type II). Small changes in the data can alter the regression coefficients substantially, without hardly increasing the sum of squared residuals (SME) (Fox 1991, 10-21).

²⁸ To confirm the statistical significance of some of the cohort variables, we performed a Joint Hypothesis Testing for Collinearity, finding a significant F statistic. Multicollinearity among these variables was, therefore, leading us to fail to reject the null hypothesis.

²⁹ These are standard procedures in many longitudinal studies attempting to evaluate period, cohort and age effects. For a detailed discussion of this topic, including some applications, see Menard (1992).

Cohort 9	*	*
Age 1	*	-
Age 2	*	-
Age 3	-.008	-
Age 4	-.081	-
Age 5	-.175	-
Age 6	-.032	-
Age 7	-.129	-
Age 8	.050	-
Age 9	-.095	-
Period 1	*	*
Period 2	.144	.126***
Quadratic transformation of age	-	.001
Age minus the average age	-	.000
Intercept	-.324**	-.302
R Squared	.98	.96
F value	18.27**	8.02***

	MODEL 3	MODEL 4
Average Education by Cohort	-.225****	-.195****
GNP/Capita by Cohort	(not included)	.008
Period	-.011	-.001
Age	.000	.000
Intercept	.244	.195
R Squared	.93	.87
F value	32.61****	23.39****

* Excluded from the model (reference variables).

** Statistically significant at 0.1

*** Statistically significant at 0.05

**** Statistically significant at 0.01

cohorts were very high and statistically significant. Although the partial regression coefficient is not very important, Period 2 is also statistically significant, confirming the relative importance, claimed by some scholars (Shively 1991), of period effects in the variability of postmaterialism.

We further substantiate the importance of cohort effects by substituting the nine cohort dummy variables with one variable representing the average education of each cohort; the results are included in Model 3 on Table 5. The partial regression coefficient of average education by cohort was statistically significant and in the expected direction (in accord with the cultural change hypothesis). No other regression coefficient was statistically significant. Indeed, cohort replacement seems to be the major force driving value change in Spain.

Finally, we wanted to test Duch's and Taylor's (1993) argument about the relative importance of education over GNP/capita in generational replacement as the driving force behind value change. For that purpose, we decided also to include in the model the average GNP/capita by cohort. The results of Model 4 on Table 5 apparently support the importance of education as the principal force behind cultural change. The partial regression coefficient of average education by cohort was the only significant one. In the model, GNP/capita was not statistically significant.

These results apparently confirm Duch's and Taylor's hypothesis. However, as Abramson and Inglehart (1993) argue, GNP/capita measures economic security very imperfectly, only reflecting the overall level of economic prosperity at some time in the past. It does not capture other major factors shaping economic security, such as the degree to which the nation's social welfare system has developed. We contend that GNP/capita does not capture economic security in Spain either. As we have said before, rapid economic growth in Spain has created new social inequalities without so far creating a full-fledged welfare system capable of compensating for them. Through the dimensional analysis discussed earlier, we observed the relevance of economic insecurity to cultural change in Spain, yet GNP/capita does not capture the source of this insecurity. Education, a complex variable, better captures the different levels of security experienced by important sectors of Spanish society; this is why education appears in Table 5 as the only relevant variable in defining value change.

Abramson's and Inglehart's (1993) contention that effects of economic growth are different from the effects of economic prosperity is, therefore, correct. Spain's high rate of economic growth, which has resulted in a comparatively wealthy country, has also, however, produced both relative economic prosperity for some sectors of society and precariousness for others. These conditions have led, consequently, to the coexistence of significant numbers of postmaterialists and of materialists. GNP/capita does not capture these features; education does. In Spain, as the cultural hypothesis argues, the driving force of value change is a combination of economic security (measured by socio-economic status) and education (Díez Nicolás 1992b).

The Structure of Political Cleavages and Value Change

In Spain, value change has had an impact on the structure of political cleavages, modifying traditional cleavages and replacing them with new ones. In this section it will be demonstrated that, due to its rapid economic, social and political transformation Spanish society is undergoing, this impact is unique to Spanish society.

To identify Spanish cleavage dimensions, we used the left-right scale. In contrast to party identification,³⁰ the concepts 'left' and 'right' are firmly anchored in Spanish political culture (Barnes, McDonough and López Pina 1985; Sani and Montero 1986), and Spaniards' self-location on this scale is very stable (Linz et al. 1981; Montero and Torcal 1990). This dimension seems to simplify the universe of political conflicts and issues for people, making it more understandable, meaningful and comprehensive. The left-right scale serves as an axis along which all their political attitudes and behavior are structured. Therefore, the classical cleavages of Spanish society --including them class and religion-- are mostly represented on this ideological scale. As a result, it is frequently used as an spatial and ideological reference to evaluate political parties, political leaders and other political institutions in Spain.

Some studies have found that postmaterialists tend to locate themselves on the left side of the ideological continuum, whereas materialists more often choose the right side (Orizo 1991; Montero and Torcal 1992). How important, however, is the materialist/postmaterialist conflict in defining the structure of political conflicts represented in the left-right dimension? To answer this question, we have embraced the two main traditions in the study of political cleavages (Knutsen 1989a, 495). One approach has been focussed on using statistical techniques like regression to define different social characteristics that may explain political preferences and behavior. The other tradition has sought to identify empirical cleavages using dimensional analysis. In the next sections, we will present the results obtained when these two traditions were followed to examine the effect of value change on the structure of political cleavages in Spain.

Postmaterialism and the Structure of Political Cleavages

³⁰ Party identification in Spain is not relevant to the study of political conflicts and political behavior (Richardson 1990; Del Castillo 1990). Furthermore, regardless of the different measures used, the levels of party identification observed among Spaniards are very low (Gunther 1992).

In this phase of the analysis we regressed a postmaterialist index (factor scores) on the left-right scale. We also incorporated into the model two other variables representing traditional cleavages in Spanish society: the materialist class conflict (class self-consciousness)³¹ and the religious cleavage.³² We also added to the model the urban-rural cleavage, measured by city size. Finally, because gender, education and attitude toward social change have been shown to have an important effect on the ideology of Spaniards (Sani and Del Castillo 1983; Díez Medrano et al. 1989; Linz 1984), we added these variables as well. The inclusion of these variables allows a better evaluation of the direct effects of the different measures of political cleavages and avoids model specification problems.

The results of analyses performed on the 1988 data show the relative importance of value change in defining the left-right dimension (Table 6). On average, the more materialist the citizen, the more s/he tended to locate her/himself on the right. However, the religious cleavage and materialist class conflict were also very important in defining the left-right dimension, showing the coexistence of these two traditional cleavages with the materialist/postmaterialist one. Of the other socio-demographic and attitudinal variables included in the model, only gender appeared to influence respondents' position on the left-right scale.

Table 6. Political Cleavages and the Left-Right Dimension in Spain, 1988
(Ordinary Least Square Estimators)

Variables	Regression Coefficients	Standard Coefficients
City Size	-.0001	-.0001
Class Self-Consciousness	-.6764*	-.1840
Postmaterialist Index	.3782*	.1752
Religiosity	.5689*	.3995
Education	-.0024	-.0023
Gender	-.2418**	-.0599
Attitude towards social change	-.0233	-.0075

³¹ People were asked: "What social class do you think you belong to?" We would have liked to have some variable to measure objective social class, but unfortunately this variable was not included in this survey. Income was, however, included in the CIRES surveys, but it turned out to be statistically insignificant.

³² The variable used here is the frequency of church attendance.

Intercept	5.9998**
R Squared	.26
F value	63.83*
(N)	(1,314)

* Statistically significant at 0.01

** Statistically significant at 0.05

To confirm these findings, we repeated the analysis with the 1993 data, although some of the variables were measured with distinct scales.³³ The results were somewhat different from those obtained with the 1988 data (Table 7). Class-consciousness and religious cleavages were still remarkably important, but the postmaterialist and gender indices appeared to be irrelevant. However, when the conclusions presented in previous sections are considered, these results do not pose a serious challenge to the cultural change hypothesis. As we have seen before, rapid economic growth and social modernization in Spain has led some postmaterialists to hold "*sociotropic* concerns", introducing some additional difficulties in the standard definition of the postmaterialist/materialist dimension. These conditions have also caused a relatively large number of postmaterialists to coexist with a majority of materialists. Therefore, it should be expected that some traditional cleavages would still remain as the dominant force defining the structure of political conflicts. Nonetheless, postmaterialists are especially important among younger cohorts, and these citizens are precisely those who constitute the main source of changes in the structure of political cleavages.

Table 7. Political Cleavages and the Left-Right Dimension in Spain,
1993
(Ordinary Least Square Estimators)

Variables	Regression Coefficients	Standard Coefficients
Income	.0043	.0048

³³ The dependent variable in this model was a 1 to 7 ideological scale, whereas in the previous one there were positions 1 to 10. The religious cleavage in this model was measured on a 1 to 7 scale of religiosity. In this second model we also included income to measure objective class conflict, but education and attitude towards change we dropped as they were not statistically significant.

Class Self-Consciousness	-.2305*	-.1126
Postmaterialist Index	.0127	.0087
Religiosity	.3553*	.3461
Gender	-.0581	.1000
Intercept	3.3164*	
R Squared		.12
F value		22.14*
(N)		(1,131)

* Statistically significant at 0.01

Table 8 confirms these expectations. We repeated the previous analysis of political cleavages with the 1993 data, but included in the regression model variables which represent the interaction of variables measuring political cleavages and cohort effects.³⁴ The results showed the materialist/postmaterialist dimension to be an important conflict that defines the left-right scale of younger cohorts, while it is irrelevant for older ones. Class conflict and religiosity, on the other hand, appear to be relevant only to older cohorts.

Table 8. Political Cleavages, Generational Replacement and the Left-Right Dimension in Spain, 1993 (Ordinary Least Square Estimators)

Variables	Regression Coefficients	Standard Coefficients
Class Self-Consciousness	-.1811**	-.0875
Class Self-Consciousness by Cohort1(a)	-.0796	-.0941
Class Self-Consciousness by Cohort3(b)	-.1251***	-.1570
Religiosity	.2589*	.2505
Religiosity by Cohort1(a)	.0214	.0190
Religiosity by Cohort3(b)	.1404**	.1404
Postmaterialist Index	.1352	.0938
Postmaterialist Index by Cohort1(a)	-.1813***	-.0863
Postmaterialist Index by Cohort3(b)	-.0909	-.0360
Intercept	3.4969*	
R Square		.14

³⁴ We grouped the six cohorts of Figure 6 into three cohorts, creating dichotomous variables with each. We multiplied the youngest and oldest cohort by each variable that measured a political cleavage. Finally, we regressed the left-right scale on those new variables representing the interaction of political cleavages with older and younger cohorts.

F Value	16.29*
(N)	(1,131)

* Statistically significant at 0.01

** Statistically significant at 0.05

*** Statistically significant at 0.10

(a) These variables represent the original variables multiplied by a variable that groups the two youngest cohorts of Figure 6.

(b) These variables represent the original variables multiplied by a variable that groups the two oldest cohorts of Figure 6.

We contend that these results, together with the generational replacement observed in the previous section, show that the traditional materialist cleavages of Spanish society are giving way to new values as the defining force behind political conflicts. Of the traditional cleavages, only religiosity still exerts a dominant influence, confirming the enduring nature of this cleavage observed in other Western industrial societies (Knutsen 1988, 1989a and 1990; Inglehart 1989 and 1990a). Therefore, it seems that in Spain, as in many other Western European countries (Knutsen 1988; Inglehart 1990c and 1990d), more value-oriented or ideological cleavages, including new cultural and religious values, are the shapers of political conflict.

Spatial Definition of Political Conflicts

What is the spatial configuration of the political conflicts that result from the emergence of the materialist/postmaterialist dimension? The answer to this question is related to the second analytical tradition that has sought to identify empirical cleavages using dimensional analysis. Figures 7 and 8 present the results of non-metric multidimensional scaling analyses with the twelve items of value change and the different positions of the left-right scale.³⁵

In 1988, the spatial representation of the ideological scale on the horizontal axis reproduced the expected order from left to right. Only the variables measuring center-right and right deviated from the expected order. The right and center-right variables were close to

³⁵ This different positions in the scale were measured by dichotomous variables.

authoritarian items, although the right variable was closer to materialist items. This unusual exchange of positions seems related to the presence of the authoritarian/libertarian value conflict. This is even clearer on the other side of the ideological spectrum. Although the variables left and center-left maintain a sequential order in the horizontal dimension, they are very distant in the vertical one. Left is part of the libertarian cluster of items, while center-left is closer to other social concerns. As we said before, due to the important presence of the authoritarian/libertarian value conflict, Spanish materialists were divided between pro-authoritarian and materialists *stricto sensu*, while Spanish postmaterialists were split between pro-libertarian and those who are *sociotropically* concerned. Indeed, as we can see, the interaction of these two conflicts of cultural change is cutting across the traditional cleavages of Spanish society, altering and redefining, as a result, the spatial order of the ideological scale.

Figure 7. Monotonic Multidimensional Scaling with 12 Materialist/Postmaterialist Items and Ideology, 1988 (Kruskal stress --form 1-- in 2 dimensions)



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PROPORTION OF VARIANCE (RSQ) IS .72531

LABELS OF ITEMS

L. Left.

CL. Center-left.

C. Center.

CR. Center-right.

R. Right.

CRIME. Fight crime.

CITIES. More beautiful cities.

ORDER. Maintain order.

UNEMP. Fight unemployment.

EDUC. Improve education and public health.

PRICES. Fight rising prices.

IMPERS. Less impersonal society.

SPEECH. Freedom of speech.

INEQU. Fight social inequalities.

JOB. More say at work.

GOVER. More say in government.

IDEAS. Ideas count.

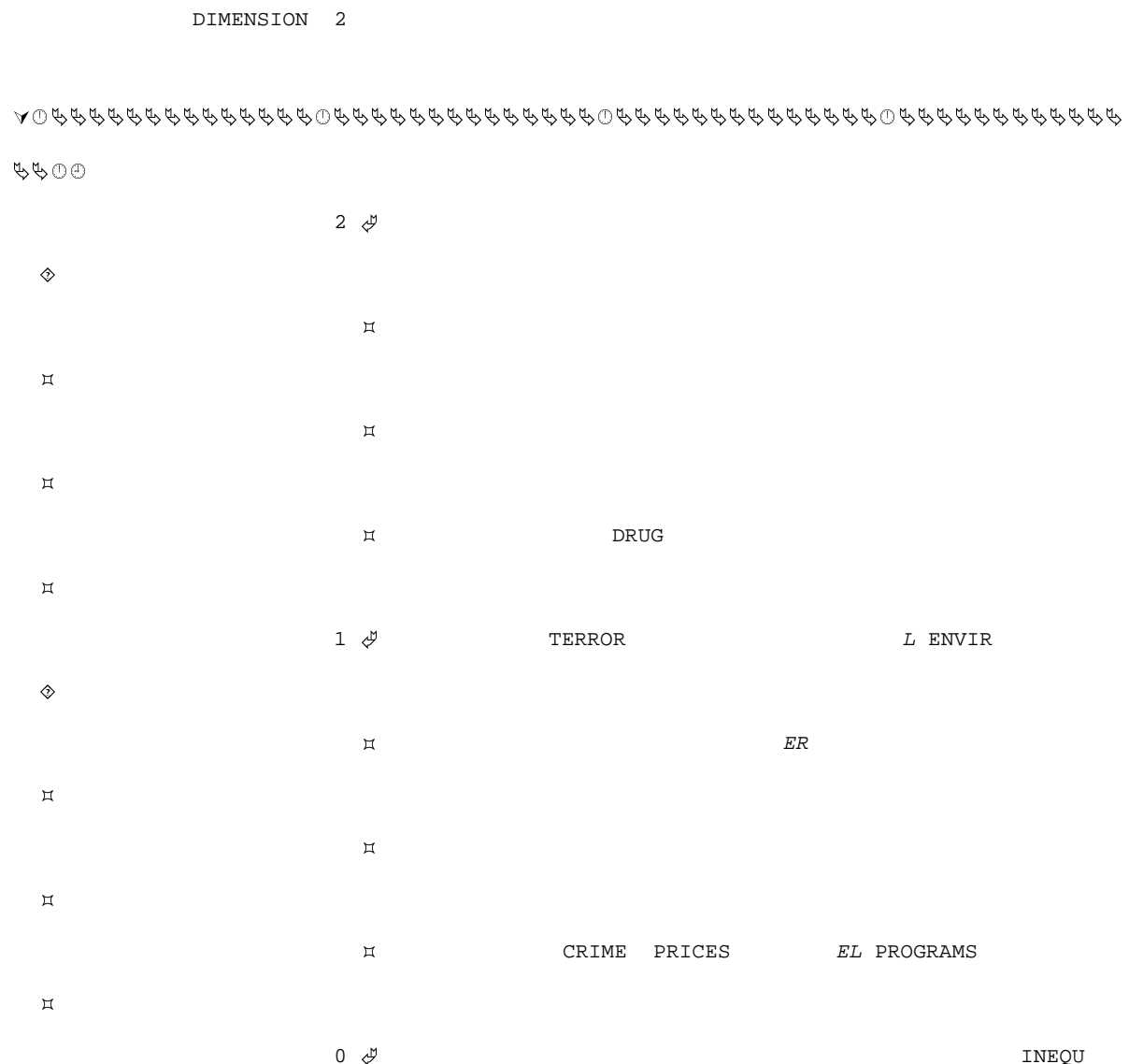
This hypothesis is further confirmed in Figure 8, although we grouped the ideological scale differently.³⁶ The counter-intuitive order of the ideological categories is even clearer in the structure of the 1993 data (Figure 8). In this figure, left is located in a more extreme position than extreme left. On this postmaterialist side, extreme left is closer than left to some materialist concerns, such as "Increase social programs", while the left seems more concerned with environmental protection. On the other side of the ideological spectrum, the right is also placed on a more extreme position than the extreme-right. The right is closer than the extreme right to items such as "Fight unemployment" and "Fight inflation", whereas the extreme-right seems less oriented to material goals. The resulting paradox is that the extreme right and the extreme left are closer to each other on the spectrum than are the right and left.

In conclusion, we can say that the new dimensions emerging as a result of value change are cutting across the traditional cleavages of Spanish society, altering, at least partially, the meaning of the ideological scale and the spatial definition of political conflicts. Moreover, as new generations enter the political system, their new values will gradually transform existing political conflicts. However, we do not contend here that all political conflicts will eventually be based on the materialist/postmaterialist dimension. Especially in countries such as Spain, with rapid economic growth, inadequate welfare systems and important social inequalities, the reality will be far more complex. The survival of some of the more enduring traditional cleavages, and the persistence of materialist demands resulting from varying levels of

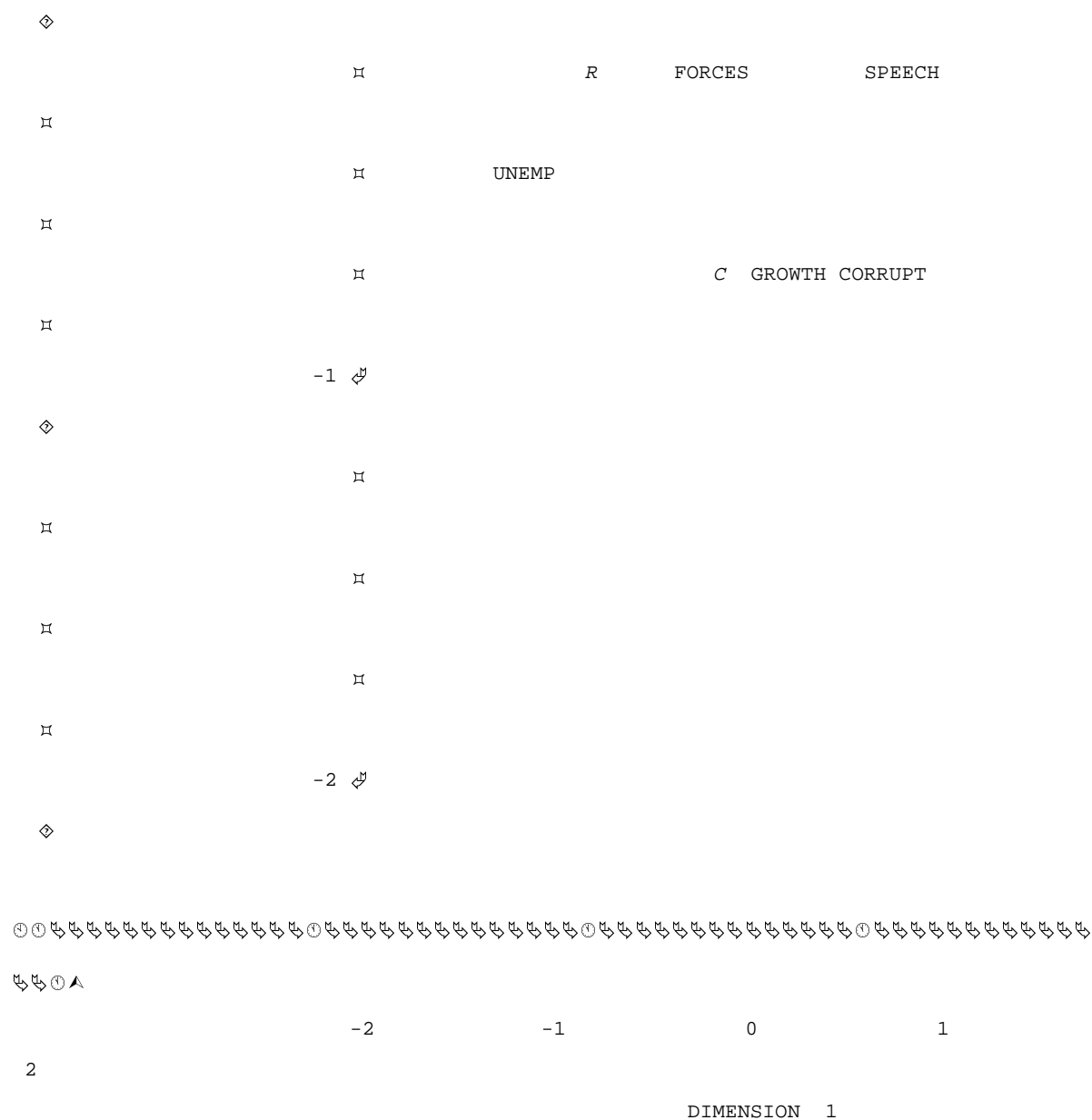
³⁶ In the 1993 survey a 1-7 ideological scale was used. We, thus, grouped these values as follows: (1) Extreme-left, (2 and 3) Left and Center-left, (4) Center, (5 and 6) Right and Center-right, and (7) Extreme-right.

economic insecurity, will be sources of potential conflict, as will be disputes over strategies political elites design to deal with these conflicts. For, as Savage (1985) maintains, some postmaterialists will agree about the priority of certain issues but will disagree about the policies to resolve them, for example marketplace remedies vs. strong governmental intervention to address environmental problems. These different perspectives will create yet another cleavage that cuts across the materialist/postmaterialist one.

Figure 8. Monotonic Multidimensional Scaling with 12 Materialist/Postmaterialist Items and Ideology, 1993 (Kruskal stress --form 1-- in 2 dimensions)



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STRESS OF FINAL CONFIGURATION IS .27048
PROPORTION OF VARIANCE (RSQ) IS .52168

LABELS OF ITEMS

- EL. Extreme left.
- L. Left and Center-left.
- C. Center.
- R. Right and Center-right.
- ER. Extreme right.
- UNEMP. Fight unemployment.
- CRIME. Fight crime.
- PRICES. Fight rising prices.
- FORCES. Strong armed forces.
- RIGHTS. Protect civil rights.
- INEQU. Fight social inequalities.
- ENVIR. Protect environment.
- CORRUPT. Fight corruption.

GROWTH. Economic growth.
TERROR. Fight terrorism.

DRUG. Fight drug trafficking.
PROGRAMS. Increase social programs.

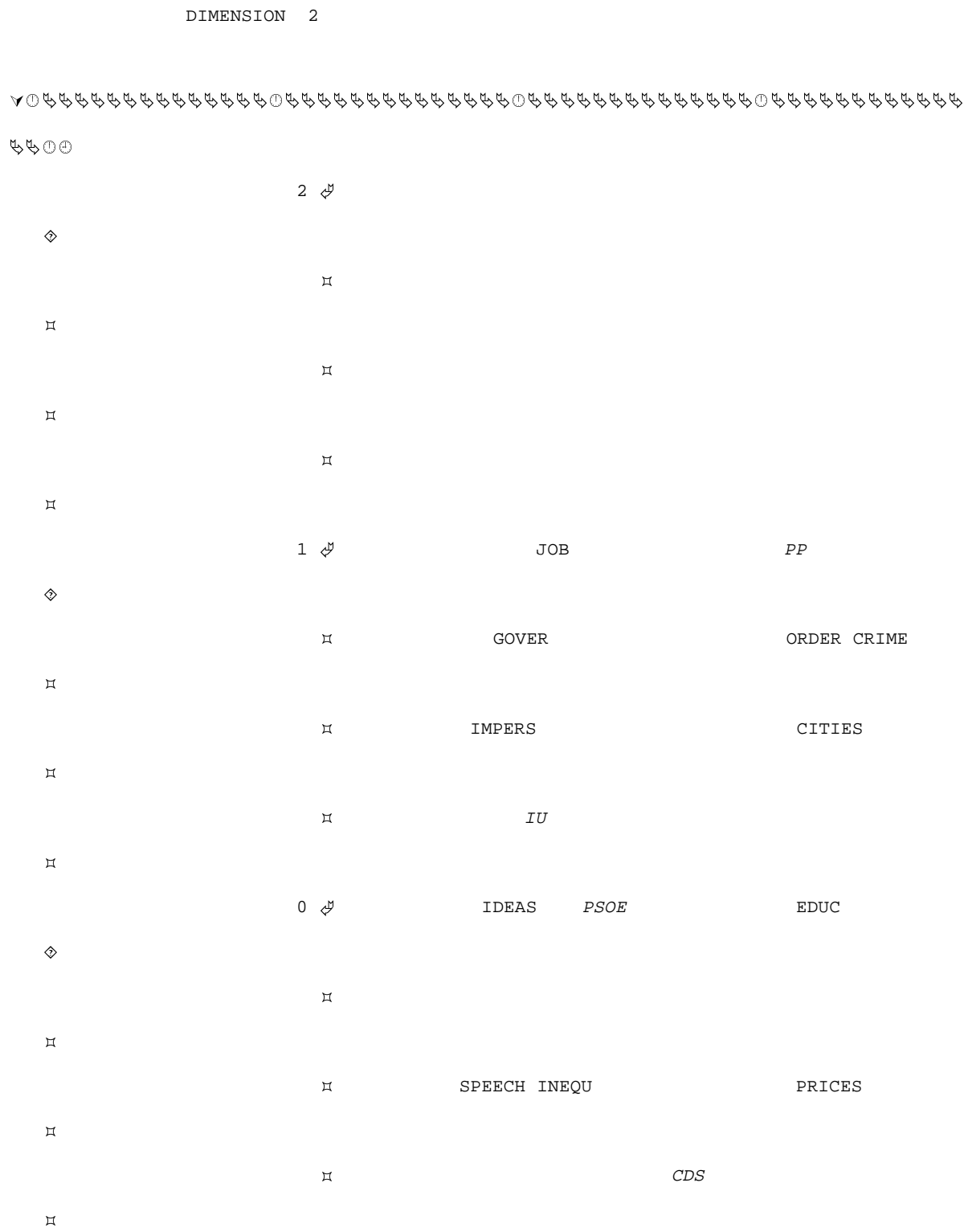
The Effects On The Party System

Does value change redefine the boundaries of political competition among the parties in Spain? Does it affect the electoral behavior of Spaniards? How does it influence political parties? Finally, how does this process of value change affect the party system as a whole?

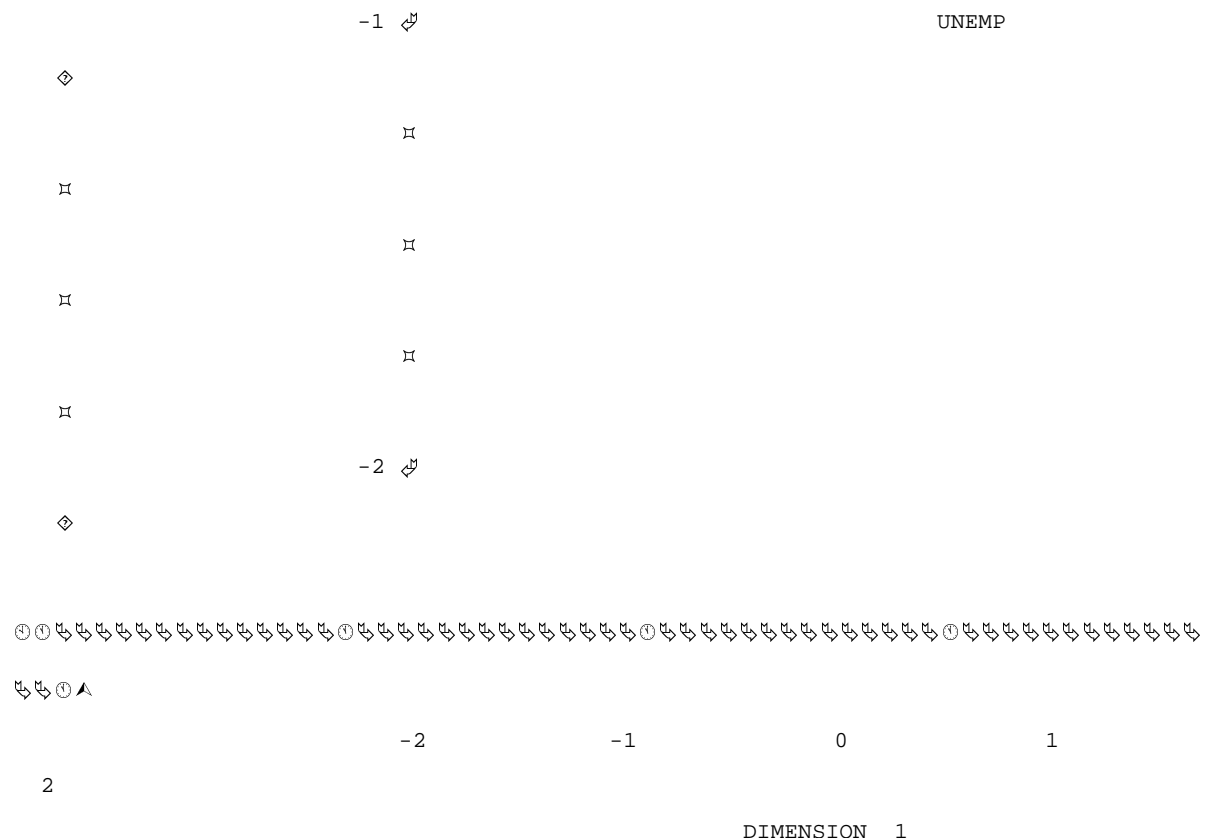
The Spanish party system has remained very stable since the electoral realignment which took place in 1982. Since this election, the party system has been characterized by the dominant presence of the Socialist party (Partido Socialista Obrero Español --PSOE), displaying remarkable levels of stability despite the relative increase in the electoral support of the second (the conservative Partido Popular --PP) and third national parties (Izquierda Unida, or United Left --IU, a leftist coalition dominated by the Communist party). We might conclude, therefore, that the aforementioned value change and its implications on the spatial definitions of political conflicts has not had any conspicuous effect on the Spanish party system.

Nevertheless, value change seems to be defining new spaces of party competition as well as redefining the old ones. Non-metric multidimensional analysis with parties and value change items were used to map this new spatial party competition. In 1988, the materialist side of the dimension appears to be dominated by the conservative party PP (Figure 9). This party is the closest one to the authoritarian items. It is also important to notice that the PP and the small Center-liberal party (Centro Democrático y Social--CDS) are the most distant from each other. They appear to compete for a distinct electoral space even though they are supposed to be closer ideologically. We argue again that this is due to the significant presence of the authoritarian/libertarian value conflict. As is clear from Figure 9, even though supporters of these two parties are prone to choose materialist values, PP voters tend to be more concerned with authoritarian ones.

Figure 9. Monotonic Multidimensional Scaling with 12 Materialist/Postmaterialist Items and National Political Parties, 1988 (Kruskal stress --form 1-- in 2 dimensions)



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STRESS OF FINAL CONFIGURATION IS .20125
PROPORTION OF VARIANCE (RSQ) IS .74866

LABELS OF ITEMS

PP. Partido Popular (Conservative party).	
IU. Izquierda Unida (Leftist coalition including the Communist party).	
CDS. Centro Democrático y Social (Center-liberal party).	
PSOE. Partido Socialista Obrero Español (Socialist party).	
CRIME. Fight crime.	IMPERS. Less impersonal society.
CITIES. More beautiful cities.	SPEECH. Freedom of speech.
ORDER. Maintain order.	INEQU. Fight social inequalities.
UNEMP. Fight unemployment.	JOB. More say at work
EDUC. Improve education and public health.	GOVER. More say in government.
PRICES. Fight rising prices.	IDEAS. Ideas count.

On the other extreme, IU seems to be the political organization closest to the postmaterialist/libertarian items. The Socialist party appears to be more distant, especially from the most libertarian items. This finding confirms that, as has been found in many other countries, old Communist and Socialist parties are adopting strategies to address left-libertarian and ecological issues in their programs, and in some cases capturing the electoral support of those citizens concerned with them. In their competition with Green parties and

other libertarian parties, the success of these traditional parties in attracting "new citizens" explains the basic continuity of their aggregate electoral support (Kitschelt 1989 and 1990).

As we have seen in Figure 9, the coalition IU (dominated by the Communist party, but also comprising the Spanish version of some of the new social movements) is the closest to postmaterialist items. The logistic regressions in Table 9 confirm that the vote for IU is influenced by the materialist/postmaterialist dimension. We found that this dimension is important to predict the vote for this coalition, together with religiosity and sympathy for the Communist workers union --Comisiones Obreras (CC.OO.). The regression coefficients for all of these variables were statistically significant, with the exception of subjective class position. It seems, therefore, that this "old party" was very successful in capturing the electoral support of postmaterialists in 1988. And this success can explain the lack of conspicuous effects of value change on the Spanish party system as a whole. At first glance, the emergence of any "new political party" did not appear to challenge this strategy of IU. We contend, along with many other scholars (Kitschelt 1990; Müller-Rommel 1990), that the emergence of "new parties" (Green and Left-libertarian parties), their different electoral strength and their different effect on the party system depend primarily on the political strategies adopted by the existing "old parties" to address the new issues.

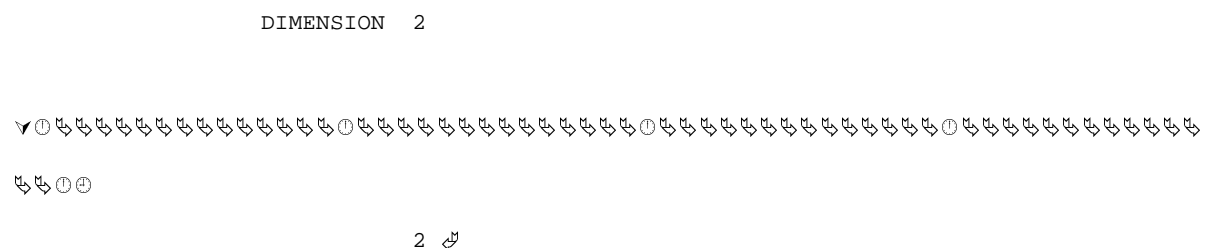
Table 9. Political Cleavages and Vote for United Left in Spain, 1988
(Logistic Regression)

Variables	Regression Coefficients
Class Self-Consciousness	.3733
Postmaterialist Index	-.6726*
Religiosity	-.8519*
Sympathy for Communist Union	.3239*
Intercept	-3.003*
(N)	(1,337)
Chi-Squared of Model Log Likelihood Improvement	168.78*

* Statistically significant at 0.01

However, IU's success in obtaining electoral support from the "new citizens" has varied more recently. We argue that the modest yet increasing presence of Green parties in Spain, although not quantitatively remarkable, is changing the ability of the IU coalition to capitalize the votes of "new citizens."³⁷ In Figure 10, the non-metric multidimensional analysis with the 1992 data confirms it.³⁸ This figure shows that the growing Green parties are closer to the postmaterialist items, and are therefore competing for the support of those same "new citizens."³⁹ However, it is also important to note the different spatial position occupied by Izquierda Unida and the Green parties. Both are almost equally distant from the item "Protect the environment." However the important and still dominant social concerns of IU supporters lead the coalition to be closer to the item "Fight social inequalities" located above it and to "Economic growth"

Figure 10. Monotonic Multidimensional Scaling with 12 Materialist/Postmaterialist Items and National Political Parties, 1992 (Kruskal stress --form 1-- in 2 dimensions)

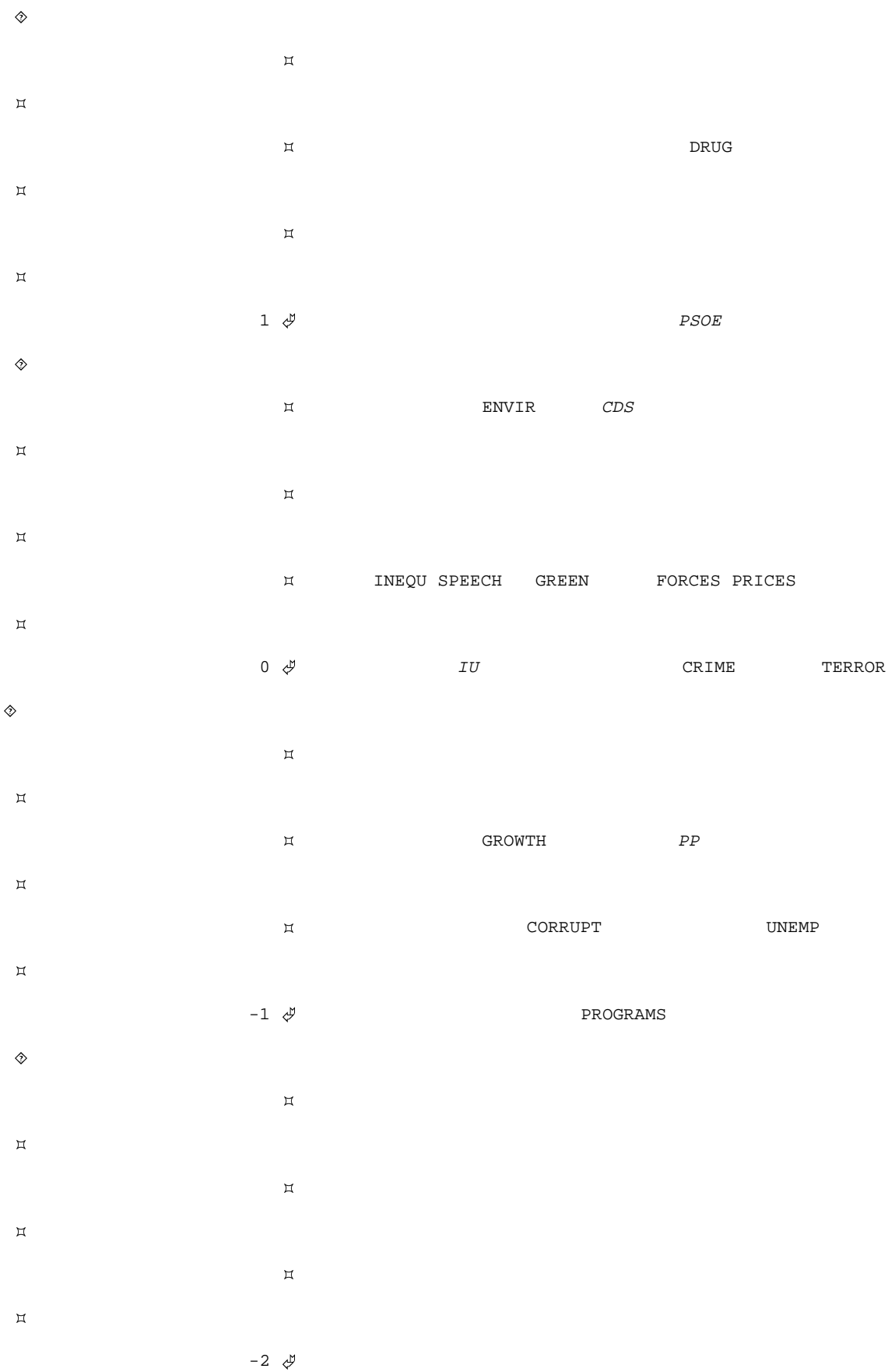


³⁷ "New parties," especially Green parties, have increased their electoral support in the last years. These parties together received 1,500 votes (0.02 percent) in the 1983 local elections, and 350,000 votes (1.79 percent) in the 1989 national elections (the fifth best national result after the centrist party, CDS), maintaining this electoral strength even in the last polarized and competitive 1993 election with 270,123 votes (1.14 percent). These parties, however, face organizational and ideological problems because of their fragmentation and division, reproducing the general tendency observed in other Western European countries. Green parties in Spain also illustrate the hypothesis that forces other than a pure logic of electoral competition shape the dynamics of political parties and determine their internal structure and external strategy (Kitschelt 1989 and 1990).

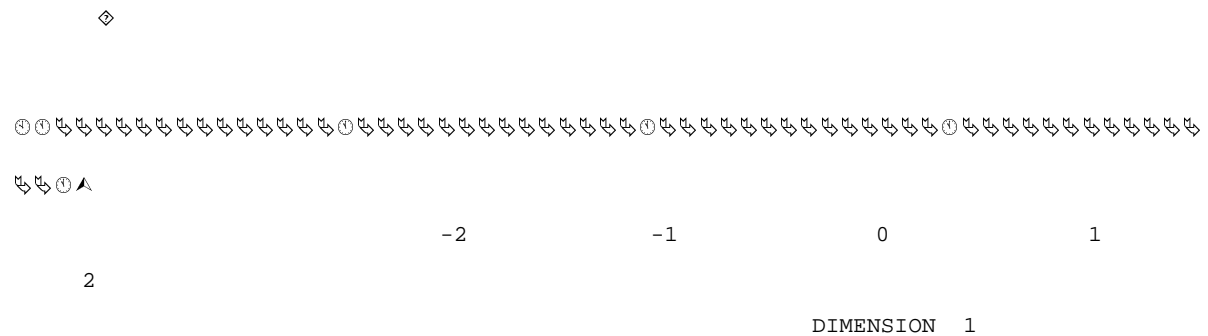
³⁸ The 1993 survey, performed just after the national elections, reflects some short-term effects of the electoral campaign. We have decided to use the 1992 survey in this part of the paper instead.

³⁹ In 1988 Green parties were not included in the questionnaire.

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STRESS OF FINAL CONFIGURATION IS .24644
PROPORTION OF VARIANCE (RSQ) IS .60757

LABELS OF ITEMS

PP. Partido Popular (Conservative party).	
CDS. Centro Democrático y Social (Center-liberal party).	
IU. Izquierda Unida (Leftist coalition including the Communist party).	
PSOE. Partido Socialista Obrero Español (Socialist party).	
GREEN. Green Parties.	
UNEMP. Fight unemployment.	RIGHTS. Protect civil rights.
CRIME. Fight crime.	INEQU. Fight social inequalities.
PRICES. Fight rising prices.	ENVIR. Protect environment.
FORCES. Strong armed forces.	CORRUPT. Fight corruption.
GROWTH. Economic growth.	DRUG. Fight drug trafficking.
TERROR. Fight terrorism.	PROGRAMS. Increase social programs.

placed below it. These social concerns do not seem as relevant as environmental ones to Green parties supporters.

To test this finding, we decided to repeat the logistic regression with the IU and the Green parties as the dependent variable alternately. The results show that two main cleavages -religiosity and materialism/postmaterialism- have statistical influence on the decision to vote for IU, and only one --materialism/postmaterialism-- for the Green parties (Table 10). We contend therefore that the different definition of the spatial competition between these two electoral groups is related to value change and generational replacement. The repetition of the logistic regression with the same variables but controlled by cohorts clearly reinforces the distinct nature of their respective supporters (Table 11). Postmaterialism is only statistically relevant among the younger cohorts of IU, whereas class conflict becomes salient among the older ones. Intergenerational value conflict seems to create in IU an important potential for the fragmentation of its electoral support and intra-party conflict. The same analysis with the Green parties does not produce any statistically significant coefficient, demonstrating that the materialist/postmaterialist conflict is the only one important for predicting the vote for these

parties regardless of the cohort their supporters belong to.

Table 10. Political Cleavages and Vote for United Left and Green Parties in Spain, 1992
(Logistic Regression)

Variables	United Left (IU)	Green Parties
Class Self-Consciousness	.1722	-.5419
Postmaterialist Index	.4209*	.3327**
Religiosity	-.5849*	-.2907
Intercept	-2.110	-1.6698
Chi-Squared of Model Log Likelihood Improvement	52.66**	8.32**
Model Degrees of Freedom	3	3
(N)	(1,124)	(1,124)

* Statistically significant at 0.01

** Statistically significant at 0.05

*** Statistically significant at 0.10

We thus contend that value change produced by generational replacement has had two effects in Spanish party politics. It had resulted in an increase in electoral support for Green parties and/or United Left. However, as well as increasing its electoral support, value change can also lead to the fragmentation of IU's electorate and serious intra-party conflict. It seems that IU is increasing the potential for intra-party conflict between their traditional blue-collar and lower-middle-class electorate and their younger upper-middle-class postmaterialists. This internal conflict was first manifested during the intra-party conflicts of the early 1980's (Gunther 1986), confirming similar patterns observed in other countries (Kitschelt 1989 and 1990). Thus, cultural change in Spain is producing changes in a party more than changes in the party system as a whole; that is, value change is producing *party change* more than *party system change*.⁴⁰

⁴⁰ Whereas *party change* alludes to the change that is occurring in one or various parties of the system, *party system change* refers to the change developing in the party system itself (Mair 1989 and 1990; Bartolini and Mair 1990).

Table 11. Political Cleavages, Generational Replacement and Vote for United Left and Green Parties in Spain, 1992 (Logistic Regression)

Variables	United Left (IU)	Green Parties
Class Self-Consciousness by Cohort1(a)	.0450 .4206*	.1330 -1.8431
Class Self-Consciousness by Cohort3(b)		
Postmaterialist Index by Cohort1(a)	.5003*	.2524
Postmaterialist Index by Cohort3(b)	-.1066	-.0591
Religiosity by Cohort1(a)	-.5192*	-.1576
Religiosity by Cohort3(b)	-.5362*	-.5438
Intercept	-2.7596*	-4.496*
Chi-Squared of Model Log Likelihood Improvement	75.80*	24.95*
Model Degrees of Freedom	6	6
(N)	(1,124)	(1,124)

* Statistically significant at 0.01.

- (a) These variables represent the original variables multiplied by a variable that groups the two youngest cohorts of Figure 6.
- (b) These variables represent the original variables multiplied by a variable that groups the two oldest cohorts of Figure 6.

The two dimensions defining value change in Spain (materialist/postmaterialist and authoritarian/libertarian) are, thus, redefining to a certain degree the old spatial competition among parties. The position of the Socialist party in Figure 10 is a clear example of this. They are also delimiting the new boundaries of electoral and ideological competition between old and new parties. The most obvious effect of these new boundaries of party competition is observable in party change, not in party system change. This process, however, will depend on how the major parties address the new issues emerging from value change whilst at the same time dealing with the demands of their traditional electorates. In particular, it will depend on how successful IU will be at processing at the same time the demands of both its still larger traditional blue-collar and lower-middle-class electorate and of its upper-middle-class postmaterialists. It will be also depend on how Spanish Green parties will overcome in the near future their "natural tendency" (Kitschelt 1989 and 1990) to be divided and fragmented. We can therefore say that the distinct effects of value change in party politics are

conditioned, as in many other Western European party systems, by several political and institutional factors, as well as by the different party strategies adopted by political leaders.⁴¹ The effects of value change combined with these intervening factors could lead to either *party change* or *party system change*. In Spain, value change is producing mainly a process of party change rather than one of party system change.

Conclusion

In this paper we have shown that the consideration of recent economic, social and political events contributes to a better understanding of the nature of Spanish value change. The economic growth and the social and political modernization of Spanish society in the last decades has been enormous. This rapid economic growth has resulted in comparable levels of wealth to most Western societies, but not in comparable levels of general economic security. The persistence of some important social inequalities with a still inadequate welfare state has created distinct levels of economic security among Spaniards. This has led to the coexistence ensued a relatively large numbers of postmaterialists with a majority of materialists. It has also produced postmaterialists more *sociotropically* concerned with social inequality and the implementation of social programs. Finally, it has produced, together with the authoritarian heritage of Francoism, the more conspicuous presence of an authoritarian/libertarian value conflict within the materialist/postmaterialist dimension. Spanish society seems highly divided about authoritarian/libertarian issues.

Cohort effects or generational replacement seem also to be the main driving force of cultural change in Spain. Younger "new citizens" are replacing slowly but steadily older materialist generations. Postmaterialism, therefore, is relatively important among younger cohorts, and these citizens are precisely those who are the source of changes in the structure of political cleavages and conflicts. They are also the potential source of change of both the party system and the ideological definitions of parties embracing new values.

⁴¹ For a more detailed discussion of the sources of change and constraint in party politics, see Rohrneider (1993), Müller-Rommel (1989 and 1990), and Kitschelt (1989 and 1990).

In Spain, however, value change and generational replacement are particularly important for Izquierda Unida, a leftist coalition which over the last few years has been adopting strategies to capture the electoral support of "new citizens". This process is generating intra-party conflict between younger and older generations as well as certain degree of programmatic and strategic paralysis. The supporters of Green parties, on the other hand, are only driven by the materialist/postmaterialist conflict regardless of the cohort they belong to. However, their electoral growth is conditioned by the strategies adopted by major parties -- including Izquierda Unida--, as well as the strategies adopted by their fragmented and divided elites.

Appendix A. Pearson Correlation Matrices 1988, 1991, 1992, and 1993

1. Pearson Correlation Matrix 1988

	1	2	3	4	5	6	7
1	1.00000						
2	-.53102	1.00000					
3	-.26869	-.41143	1.00000				
4	-.42404	-.02933*	-.29202	1.00000			
5	-.05162	.08101	-.08136	.07028	1.00000		
6	-.07865	.18099	-.09110	-.01148*	-.37434	1.00000	
7	.06921	-.18610	.14747	-.03892	-.55860	-.39654	1.00000
8	.11004	-.13938	.06101	-.05262	-.43576	-.20021	.08922
9	-.10216	.17000	-.12420	.07387	.17614	.01412*	-.18055
10	.02112*	-.07127	.12241	-.08419	-.02152*	-.01112*	.06684
11	-.13421	.12198	-.04997	.09649	-.02714*	.13919	-.06863
12	.21916	-.23953	.06365	-.08093	-.18123	-.12065	.21569
	8	9	10	11	12		
8	1.00000						
9	-.07257	1.00000					
10	-.04135	-.65257	1.00000				
11	-.05764	-.10361	-.27591	1.00000			
12	.18676	-.48123	-.05800	-.36803	1.00000		

* Not statistically significant at 0.05

NUMBER OF OBSERVATIONS: 2,626

LABELS OF ITEMS

- | | |
|-------------------------------|---|
| 1. Maintain order. | 7. Improve education and public health. |
| 2. More say in government. | 8. More beautiful cities. |
| 3. Fight rising prices. | 9. Less impersonal society. |
| 4. Freedom of speech. | 10. Fight unemployment. |
| 5. Fight social inequalities. | 11. Ideas count. |
| 6. More say at work. | 12. Fight crime. |

Appendix A. (Contd.)

2. Pearson Correlation Matrix 1991

	1	2	3	4	5		
1	1.000						
2	-0.183	1.000					
3	-0.097	0.045	1.000				
4	-0.063	0.024*	-0.035*	1.000			
5	-0.337	-0.059	-0.131	-0.048	1.000		
6	0.076	-0.103	-0.079	0.023*	-0.201		
7	-0.049	-0.168	-0.088	-0.001*	-0.146		
8	-0.016*	-0.075	0.014*	-0.022*	-0.163		
9	-0.271	-0.020*	-0.071	-0.012*	0.012*		
10	-0.132	-0.093	-0.020*	-0.100	-0.171		
11	-0.025*	-0.071	-0.058	-0.037	-0.204		
12	-0.034*	-0.016*	0.027*	0.018*	-0.227		
	6	7	8	9	10	11	12
6	1.000						
7	0.008*	1.000					
8	-0.002*	-0.054	1.000				
9	-0.165	-0.205	-0.155	1.000			
10	-0.144	-0.175	-0.071	-0.160	1.000		
11	0.040*	0.042*	0.080	-0.153	-0.146	1.000	
12	-0.040*	-0.097	-0.043*	-0.172	-0.036*	-0.070	1.000

* Not statistically significant at 0.05

NUMBER OF OBSERVATIONS: 1,145

LABELS OF ITEMS

- | | |
|-------------------------------|----------------------------------|
| 1. Fight social inequalities. | 7. Protect the environment. |
| 2. Fight crime. | 8. Economic growth. |
| 3. Fight rising prices. | 9. Less impersonal society. |
| 4. Strong military defense. | 10. Fight unemployment. |
| 5. Fight drug trafficking. | 11. Fight corruption in society. |
| 6. Freedom of speech. | 12. Increase social programs. |

Appendix A. (Contd.)

3. Pearson Correlation Matrix 1992

	1	2	3	4	5		
1	1.000						
2	-0.143	1.000					
3	-0.104	0.116	1.000				
4	-0.048	0.038*	0.027*	1.000			
5	-0.272	-0.099	-0.104	-0.075	1.000		
6	0.078	-0.084	-0.076	-0.032	-0.112		
7	-0.065	-0.110	-0.103	-0.011	-0.129		
8	-0.020*	-0.071	-0.063	-0.038	-0.170		
9	-0.255	-0.047	-0.133	-0.024*	-0.105		
10	-0.219	-0.145	-0.044*	-0.027*	-0.161		
11	-0.082	-0.026*	-0.081	-0.030	-0.224		
12	-0.075	-0.041*	0.007*	0.025	-0.165		
	6	7	8	9	10	11	12
6	1.000						
7	0.029*	1.000					
8	0.053	0.014*	1.000				
9	-0.153	-0.209	-0.149	1.000			
10	-0.164	-0.192	-0.120	0.007*	1.000		
11	0.020*	-0.028*	0.055	-0.101	-0.107	1.000	
12	-0.054	-0.078	-0.081	-0.155	-0.134	-0.004*	1.000

* Not statistically significant at 0.05

NUMBER OF OBSERVATIONS: 1,181

LABELS OF ITEMS

- | | |
|-------------------------------|----------------------------------|
| 1. Fight social inequalities. | 7. Protect the environment. |
| 2. Fight crime. | 8. Economic growth. |
| 3. Fight rising prices. | 9. Fight terrorism. |
| 4. Strong military defense. | 10. Fight unemployment. |
| 5. Fight drug trafficking. | 11. Fight corruption in society. |
| 6. Freedom of speech. | 12. Increase social programs. |

Appendix A. (Contd.)

4. Pearson Correlation Matrix 1993

	1	2	3	4	5						
1	1.000										
2	-0.151	1.000									
3	-0.158	-0.033*	1.000								
4	-0.049	-0.033*	0.072	1.000							
5	-0.286	-0.023*	-0.101	-0.035*	1.000						
6	0.017*	-0.073	-0.060	-0.008*	-0.142						
7	0.006*	-0.131	-0.067	-0.047	-0.064						
8	-0.041*	-0.064	-0.005*	0.035*	-0.178						
9	-0.221	-0.050	-0.083	-0.078	0.038*						
10	-0.212	-0.084	-0.045	-0.069	-0.264						
11	-0.063	-0.027*	-0.038*	-0.034*	-0.250						
12	-0.085	0.019*	-0.034*	-0.005*	-0.199						
	6	7	8	9	10	11	12				
6	1.000										
7	-0.027*	1.000									
8	0.068	-0.101	1.000								
9	-0.119	-0.148	-0.192	1.000							
10	-0.144	-0.242	-0.135	-0.049	1.000						
11	-0.006*	-0.047	-0.027*	-0.167	-0.081	1.000					
12	-0.033*	-0.122	-0.018*	-0.144	-0.064	-0.003*	1.000				

* Not statistically significant at 0.05

NUMBER OF OBSERVATIONS: 1,187

LABELS OF ITEMS

- | | |
|-------------------------------|----------------------------------|
| 1. Fight social inequalities. | 7. Protect the environment. |
| 2. Fight crime. | 8. Economic growth. |
| 3. Fight rising price. | 9. Fight terrorism. |
| 4. Strong military defense. | 10. Fight unemployment. |
| 5. Fight drug trafficking. | 11. Fight corruption in society. |
| 6. Freedom of speech. | 12. Increase social programs. |

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