

JUAN DIEZ NICOLAS

---

## **Social position, information and postmaterialism**

---

# SOCIAL POSITION, INFORMATION AND POSTMATERIALISM

Juan Díez Nicolás

Universidad Complutense de Madrid

---

## ABSTRACT

The main hypothesis in this paper is that «postmaterialistic values», emerge as a collective response to objective changes in the social environment which have resulted from the expansion of industrialization processes in almost all countries, increasing the material welfare of societies but also creating serious threats of possibly irreversible environmental deterioration. Thus, changes in the environment influence changes in the value systems, following a diffusion pattern from «center» to «periphery», both between and within societies. The evidence seems to support the hypothesis, through multivariate and path analysis, that social position is highly correlated with postmaterialism and explains a larger proportion of the variance in postmaterialistic values than do other explanatory variables.

## INTRODUCTION

It has been some time since sociologists abandoned the idea of elaborating an all-comprehensive theory that explains the entire social system (the «Grand Theory»), and as an alternative, they set themselves to work out more modest «medium range» theories (Merton 1957). If these partial theories are indeed, «explanatory», it should be possible to find certain coherent and compatible relationships between them, even though it may be difficult to integrate them completely into a theory with a higher level of generality and abstraction (Edel, 1959).

---

**Reis**

ENGLISH EDITION/96 pp 153-165

On various occasions I have used the theoretical framework of the social ecosystem (Hawley, 1966 and 1991; Diez Nicolás, 1980 and 1983), the center-periphery theory for the explanation of the formation and change of attitudes (Galtung, 1964; Diez Nicolás, 1966 and 1968) and more recently the theory of postmaterialism (Inglehart, 1977 and 1990; Diez Nicolás, 1991). As I confronted Inglehart's theory of postmaterialism and tried to verify it in Spain, I decided to explore the theoretical and empirical relationships between his theory and Galtungs with regard to the emergence and change of attitudes and social values, as well as Hawley and Duncan's theory of the social ecosystem. This is reflected in my prologue to the translation of Inglehart's most recent work (Diez Nicolás, 1991).

Therefore, the main objective of this research is to investigate the relationships between these three theoretical approaches, which, in Merton's terminology could be considered «medium-range» theories.

## THEORETICAL FRAMEWORK

Since the above mentioned bibliography provides detailed descriptions of the three theoretical perspectives, it seems unnecessary to repeat them here. It is necessary, however, to explain the logical-theoretical reasoning that guides this article.

According to the theory of social ecosystems, the four elements that constitute this system are: population, environment, social organization and technology. These elements are in constant and multiple interaction with each other, so that changes (substantial changes) in any one of them will tend to have repercussions on the other three. Since, according to this theoretical approach, the ecosystem is in a continuous state of «unstable» equilibrium, perfect adaptation cannot be achieved (nor should it be). This explains the assumption that conflict and change are as inherent to the system as the three equilibrium assumptions (demographic, spatial and functional). At the same time, the various forms of social organization and technology constitute instrumental responses (cultural responses) to the adaptation problem of any population that has to survive with the resources provided by its environment. The ideational and value systems form part, as non-material elements of culture, of the so called «social organization».

We are (especially since World War II), witnessing world wide demographic growth without precedence in the history of Mankind. This growth has continued at a rate of between 1.5 and 2 percent annually from 1950 to the present. World population growth has been characterized by major regional differences that increase the imbalance between developed countries and those with a lower level of development, and by such a growing concentration of population in urban areas that, in a few years, half of the world population will be urban, also for the first time in history.

---

This accelerated demographic growth rate implies a growing pressure on the existing resources of the Earth, a pressure that is even greater due to the fact that the *per capita* consumption of these resources is also growing, which in turn is due to the overall industrialization process throughout the world, and the growing demand for consumer goods in all societies. The growing use of environmental resources throughout the planet causes problems, not only with respect to non-renewable resources, but also with respect to those that are renewable (because the rate of use is superior to the capacity for renewal). This has occurred to such an extent that there is now a growing danger of global environmental imbalances of a physical nature that could become a serious threat to survival conditions and possibilities for Mankind. At present, this is already causing a certain level of deterioration in the quality of life, and an increase in social and economic imbalances, both within countries and among them.

Consequently, advanced industrialized societies have on the one hand achieved a high level of material welfare due to the application of increasingly complex technology and social and economic organization. On the other hand, the application of increasingly complex technologies and social and economic organization, as well as its dissemination to lesser developed countries is creating serious environmental problems.

According to the theory of social ecosystems, these major changes in population and environment, especially with regard to the situation created by very real threats to the environment, could have repercussions on the other elements of the social ecosystem. More specifically, its repercussions would be felt in the value system (since technological changes are so rapid and visible that they do not need any further explanation at this point).

Among these value changes, it seems logical to expect a growing concern for the environment and other aspects of quality of life (instead of interest for economic growth). This is consistent with Inglehart's theory of postmaterialism, which predicts that when the majority of the population of more developed societies has been able to achieve a high level of personal and economic security (material welfare), one can expect an increased interest in social relations, esthetics and solidarity. When Inglehart points out that this new system of values, which he calls *postmaterialism*, emerges first in the more developed societies, and within each society, in central social groups (precisely in those groups which have achieved a higher level of material welfare), he is simply restating in other terms Galtung's theory on the dissemination of attitudes and values from the social «centre» to the social «periphery». Hence, postmaterialism would develop first in the more «central» countries, and it would gradually spread from them to the «periphery», countries (lesser developed). Within each country, postmaterialism would develop first in the social «centre», and then spread slowly towards the «social periphery».

From the social ecosystem perspective, then, postmaterialism would not be an individual response to an increase of economic welfare and personal

---

security, but rather a collective response to the needs of adaptation, a collective awareness of the «centre» about the threats that loom over their environment, which will then be transmitted to the «periphery».

It is worth inquiring, however, whether the spread of these new values goes from the Centre to the Periphery, as Galtung predicts, or simply from groups with high socioeconomic status to groups with low socioeconomic status. One of the principal contributions made by Galtung is indeed the differentiation between «social position» and «socioeconomic *status*». Although the latter is a component of the former, both concepts cannot be made identical. Social position is not just a question of material welfare but also a matter of information, social participation, and proximity to «decision centres». Therefore, people with similar socioeconomic *status* can be found in social positions which are closer to, or further away from, the «socialcentre».

Inglehart (Inglehart, 1990) provides sufficient evidence that postmaterialism is directly related to the level of economic and social development in different countries, so that the higher the level of development of a country the higher the percentage of the population with postmaterialistic values. His data also show that within each country, postmaterialism is inversely related to age, and directly related to socioeconomic *status* and to other variables which could be grouped together under the heading of «non-traditional». Certain fragmentary data on Spain (Diez Nicolás, 1991) also appear to confirm these findings.

Galtung has also obtained sufficient evidence with comparative international data that supports his principal hypotheses. These findings apply also to Spain, especially with regard to the direct relationship between social position and exposure to information (Diez Nicolás, 1966 and 1968).

Hence, this research aims to test, through the use of statistical analysis techniques, some of the hypotheses that stem from the theoretical-conceptual principles discussed above. These hypotheses are the following:

1. Postmaterialism is directly related to social position in the sense that the proportion of people with postmaterialistic values will be greater the closer they are to the social «centre».

2. «Social position» is a better predictor of postmaterialism than is socioeconomic *status*, since it includes not only this latter variable as an indicator, but also age and other dimensions of «centrality» related to the internalization of new attitudes and social values.

3. Part of the effect of «social position» on «postmaterialism» is mediated by the degree of «exposure to information», since in modern day mass society, it is the communication media that best transmits new social values.

## RESEARCH DESIGN

The analysis has been carried out by aggregating monthly surveys conducted by ASEP in September, October, November and December of 1991 and January of 1992. Each monthly sample included 1,200 individuals representing the Spanish population 18 years of age and over. Hence, the total number of cases in this aggregated database was 6,046. The aggregation of the five samples is justified, since they can be considered samples from the same universe.

Table 1 presents frequency distributions for each of the variables. *Age* has been measured as a continuous variable, although in Table 1 it is presented in group form.

This distribution is adjusted to the true population 18 years and older, in accordance with the official statistics provided by the INE (National Institute of Statistics). *Ideology* is the ideological self-positioning of respondents, using a

TABLE 1

*Frequency distributions for the variables in the model (N=6,046)*

<i>Age</i>	<i>%</i>	<i>Ideology</i>	<i>%</i>	<i>Social Position</i>	<i>%</i>
1. 18 to 19 years .....	4.8	1. Extreme left .....	0.8	0. Very low .	4.3
2. 20 to 29 years .....	21.1	2. Left .....	26.6	1.....	14.5
3. 30 to 39 years .....	18.7	3. Centre left .....	12.4	2.....	20.5
4. 40 to 49 years .....	16.4	4. Centre .....	10.8	3.....	20.4
5. 50 to 59 years .....	14.2	5. Centre right .....	7.1	4.....	14.3
6. 60 to 69 years .....	15.1	6. Right .....	9.2	5.....	12.0
7. Over 70 years .....	9.7	7. Extreme right .....	0.3	6. ....	8.1
		No reply .....	32.8	7. ....	4.6
				8. Very High .....	1.3

<i>Socioeconomic family status</i>	<i>%</i>	<i>Exposure to information</i>	<i>%</i>	<i>Postmaterialism</i>	<i>%</i>
1. High, med. high .	16.9	0. Very low .....	23.4	0. Materialists .....	11.5
2. Medium .....	55.9	1.....	28.2	1.....	24.1
3. Med. low .....	23.2	2. ....	13.2	2. ....	32.0
4. Low .....	4.0	3. ....	18.5	3. ....	21.6
		4. ....	7.1	4.....	7.7
		5. ....	6.1	5. Postmaterialists ..	3.1
		6. ....	2.5		
		7. ....	0.8		
		8. Very high .....	0.2		

scale of 7 points. *Socialposition* is a synthetic index that combines eight different and dichotomized variables: sex, age, educational level, occupational *status*, monthly level of family income, economic activity sector, size of place of residence and geographic centrality\*. *Socioeconomic family status* is also a synthetic index that combines the occupational *status* of the head of family, the monthly family income, and the existence in the home of nine appliances. Based on these three elements, each individual is classified in one of the four socioeconomic strata. The *exposure to information* index is, a synthetic index that combines the reading of the previous day's newspaper, the reading of some magazine during the previous week, and the watching of a news bulletin on television the previous day. The *postmaterialism* index is also a synthetic one, combining the priorities expressed by respondents from two lists of objectives that Spain should aim to achieve in the upcoming years, and which have already been described recently (Díez Medrano and others, 1989). One list includes four objectives and the other one eight.

TABLE 2

*Correlation matrix between model variables\**

	<i>Social Position</i>	<i>Socioecon. Family Status</i>	<i>Age</i>	<i>Exposure to Information</i>	<i>Ideology (right)</i>	<i>Post- Materialism</i>
Social Position .....	—					
Socioeconomic family status.	.5261	—				
Age .....	-.2508	-.3657	—			
Exposure to information ....	.3168	.2118	-.0581	—		
Ideology (rightism) .....	-.0558	(-.0038)	.1392	.0375	—	
Postmaterialism .....	.1997	.1922	-.2701	.0982	-.1946	—

\*All correlation coefficients are significant at the .01 level, except SEFS with Ideology. The analysis is based on  $N=4,057$  valid cases (any case lacking valid information for any of the six variables was eliminated).

The matrix of correlations between the six variables shows strong relationships among all of them except between socioeconomic family status and ideology. This observation is somehow surprising, since for many years

\* According to the system designed by Galtung, and already used in Spain, a point was assigned for each characteristic that implies a greater social «reward». In other words: Male, 30 to 64 years, secondary education or higher, non-manual occupation, monthly family income higher than 150,000 pesetas, working in industry or services, residence in a municipality of 10,000 inhabitants or more, and residence in the provinces with positive net immigration between 1975 and 1985.

(under the Franco regime) there was a strong positive relationship between socioeconomic status (personal and/or family) and «rightism». It has been observed that the relationship became weaker as the political transition progressed, so that at present, it is more difficult to «predict» the ideology of an individual based on his socioeconomic status.

On the other hand, a strong positive relationship seems to be observed between socioeconomic status and social position, which seems logical according to the centre-periphery theory, and also since both indices share some of the indicator-components. Three other relations are outstanding, all of which were to be expected in accordance with the theories discussed above: the positive relation between exposure to information and social position; the negative relation between socioeconomic status and age (given the loss of status of the elder, especially those retired); and the negative relation between postmaterialism and age (amply verified by Inglehart).

In any case, it is evident that postmaterialism, which is the dependent variable in this analysis, is positively related with social position and with socioeconomic status (with a similar level of intensity), and to a lesser degree, but also positively and significantly related to exposure to information. However, the strongest relationship (although negative), as was to be expected, is with age and to a lesser degree (and also negative) with ideology (with «rightism»).

This first approximation, however, does not seem to indicate that social position and socioeconomic status have different predictive power with regard to postmaterialism, as was suggested by the second hypothesis.

TABLE 3

*Multiple lineal regression between social position, ideology (rightism), age, exposure to information, and socioeconomic status and postmaterialism as the dependent variable*

	<i>Standardized regression coefficients</i>
Social Position .....	.093422
Ideology (rightism) .....	-.163633
Age .....	-.199747
Exposure to information .....	.049308
Socioeconomic family status .....	.058454

R = .35 (significant at .05 level)

R<sup>2</sup> = .12

For this reason, a multivariate analysis was conducted, in which the dependent variable was postmaterialism and the other five were independent variables. This analysis explains 12 percent of the variance in postmaterialism, which is quite acceptable in the social sciences.

At the same time, the standardized regression coefficients show that age and ideology have a greater explanatory power than social position. This last variable has a slightly greater explanatory power with regard to postmaterialism than socioeconomic status, and, of course, than exposure to information.

The multivariate analysis eliminates the effect of the correlation of independent variables on each other, and so isolates the independent effect of each one of them on the dependent variable. However, part of the effect of the independent variables (social position, SEFS and age) might be mediated by «exposure to information». At the same time, ideological self-positioning can be more appropriately conceptualized as a dependent variable simply correlated to «postmaterialism».

Furthermore, the algorithm CHAID (Escobar, 1992) has been used to develop a segmentation of the population with respect to its degree of postmaterialism, using the five independent variables as the basis for the segmentation. The analysis shows that the first segmentation variable is age, and that this variable consists of five segments (ages 18 to 29, 30 to 39, 40 to 49, 50 to 59 and 60 years old and over) thus confirming that the percentage of postmaterialists (32 percent for the entire sample) is inversely related to age (diminishing from 46 percent for those 18 to 29 years of age to 18 percent for those 60 years of age and older).

However, at the second level of segmentation social position seems to be the most important variable for the three age groups from 30 to 59 years, which are the three most «central» age groups according to the theory of social position, and in which this index shows greater variation. At any rate, this analysis seems to confirm the findings of multivariable analysis in as much as it shows a greater explanatory power of age, as well as of social position, compared to that of socioeconomic status.

Consequently, and to reach a better interpretation of the results, it seemed convenient to recur to a causal explanatory model.

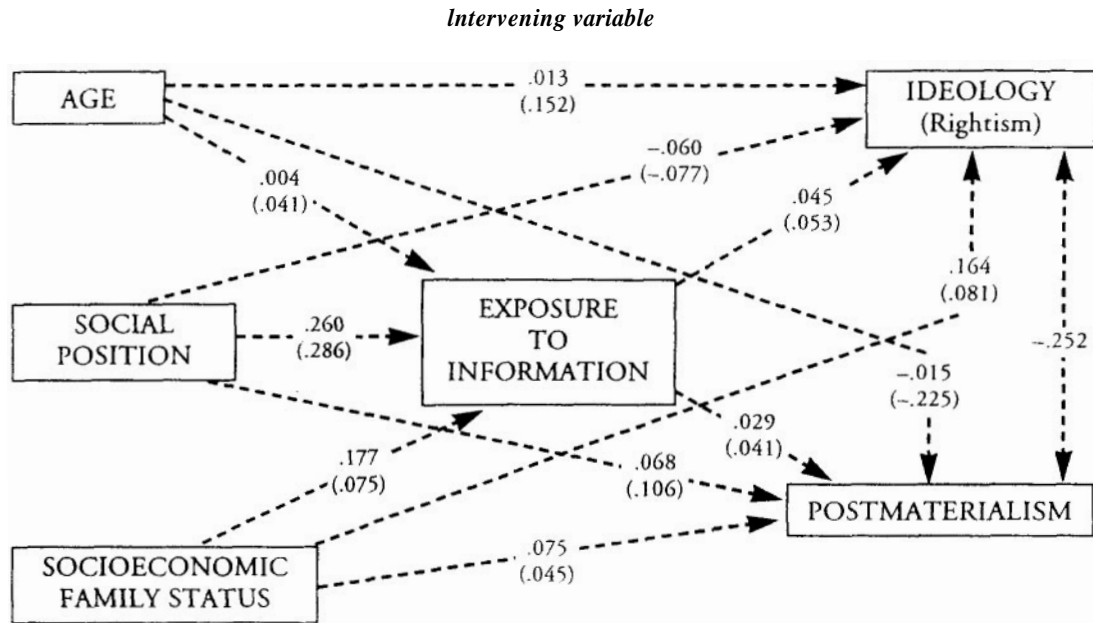
## THE CAUSAL EXPLANATORY MODEL

In the path analysis model that follows, age, social position and socioeconomic status have been treated as exogenous variables. Exposure to information has been treated as an intervening endogenous (or intermediary) variable, and consequently the dependent endogenous variables would be postmaterialism and ideology. In fact, the model could have been constructed without socioeconomic status and ideology, but both variables have been included for different reasons. With regard to socioeconomic status, we

---

FIGURE 1

*Explanatory model using Path Analysis*



\* All coefficients are significant at the .05 level. Standardized coefficients are indicated between parenthesis.

R<sup>2</sup> for model = 19.3%

R<sup>2</sup> for the endogenous variables = Ideology 2.7%  
 Postmaterialism 9.4%  
 Exposure to Information 10.4%

*Total Effect on:*

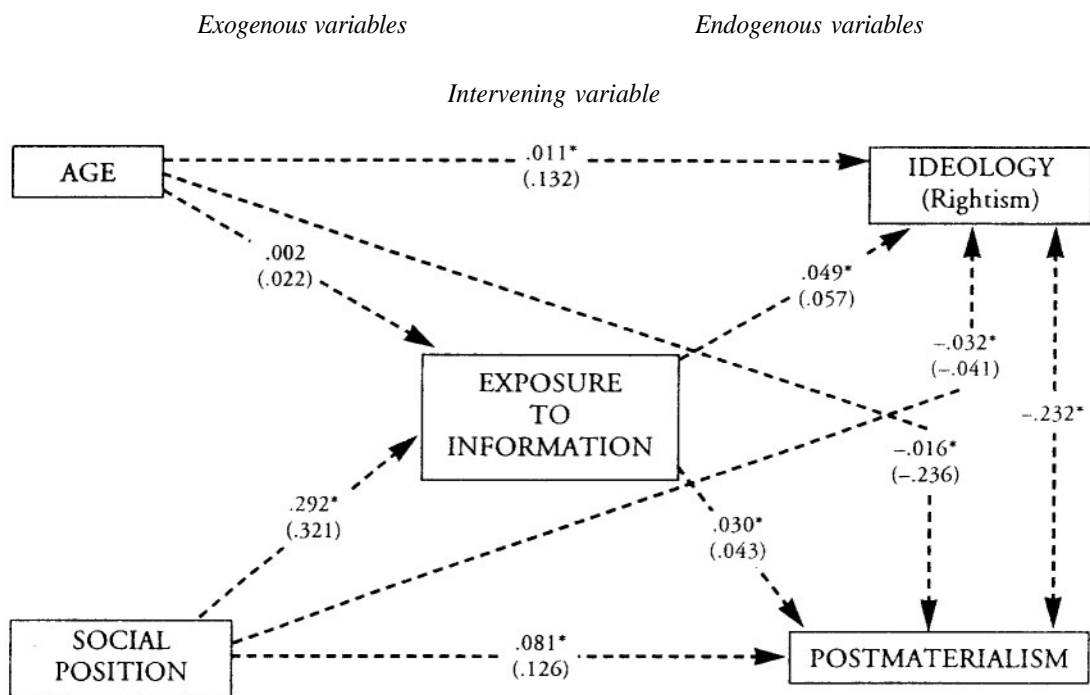
<i>From</i>	<i>Ideology (rightism)</i>		<i>Postmaterialism</i>	
Age .....	.013	(.155)	-.015	(-.223)
Social Position .....	-.048	(-.062)	.075	(.118)
SEFS .....	.172	(.085)	.080	(.048)

wanted to test whether its explanatory capacity was inferior to that of social position, in spite of the strong direct relation between these two variables. With regard to ideology, its strong negative relation with postmaterialism has prompted an examination to determine if these two «values» variables were equally explained by the model; in other words, if redundancy existed between them.

The model used explains 19 percent of the total variance. As can be seen, it also explains a very similar proportion of the variance for the two endogenous variables (exposure to information and postmaterialism) while explaining only 3 percent of the variance in ideology. *Therefore the model is much better in explaining postmaterialism than ideology.*

FIGURE 2

(Alternative) Explanatory model using Path Analysis



\* These coefficients are significant at the .05 level. Standardized coefficients are indicated between parenthesis.

R<sup>2</sup> for model = 18.4%

R<sup>2</sup> for the endogenous variables = Ideology 2.2%  
 Postmaterialism 9.3%  
 Exposure to Information 10.0%

Total Effect on:

	Ideology (rightism)		Postmaterialism	
From				
Age .....	.011	(.133)	-.016	(-.235)
Social Position .....	-.018	(-.023)	.090	(.133)

When one examines the total effect of the three exogenous variables on each one of the two endogenous variables, it becomes evident that age and social position have a greater effect on postmaterialism than on ideology. At the same time, socioeconomic status has a greater effect (double) on ideology than on postmaterialism.

The total (standardized) effect of age on ideology and on postmaterialism is greater than that of social position and SEFS. On the other hand, socioeconomic status has a greater total effect than social position (and of an opposite sign) on ideology, while social position has a much greater total effect on postmaterialism than SEFS, just as was proposed in the initial hypotheses.

*Also*, when the standardized partial coefficients are examined, one sees that social position has a greater explanatory power than SEFS on exposure to information and postmaterialism, although smaller than that of SEFS on ideology. In summary, it seems clear that social position is a better predictor of postmaterialism than socioeconomic status.

Consequently, path analysis has been used again, eliminating socioeconomic status as an exogenous variable. The general overall results for the model show hardly any changes, since the model explains 18 percent of the total variance (compared to the 19 percent previously reported) and the variance explained by each of the three endogenous variables is practically identical to that in the previous model.

However, it must be underlined that when using this model, the total (standardized) effect of age on postmaterialism only increases by 5 percent with respect to the previous model, while the total (standardized) effect of social position on postmaterialism increases by 12 percent. This is due to the accumulation of the small effect that SEFS had on postmaterialism.

## DISCUSSION

In conclusion, the evidence presented here supports the initial hypothesis, that social position is a significant explanatory variable of postmaterialism. This is true in the sense that those individuals who are closer to the «social centres, because of being the initiators of new social values, are the first to adopt postmaterialistic values, in as much as these values constitute a new collective adaptive response to a situation, such as the present one, characterized by an increase of material welfare, accompanied by growing threats of serious and possibly irreversible environmental deterioration.

The model used has demonstrated the importance of an intervening variable, such as exposure to information. It seems evident that postmaterialism will be greater as social position and exposure to information increase.

This assertion can be verified by examining the total effects through their direct and indirect components.

---

Thus, the total and partial effects (direct and indirect) of each of the three exogenous variables on postmaterialism are the following:

*Effects on postmaterialism*

	<i>Direct</i>	<i>Indirect</i>	<i>Total</i>
Age .....	(-.225)	(.002)	(-.223)
Social Position .....	(.106)	(.012)	(.118)
SEFS .....	(.045)	(.003)	(.048)

One can say that the mediating role of exposure to information (indirect effect) is larger with respect to social position (10 percent) than with respect to SEFS (6 percent) and with respect to age (1 percent). Hence, the direct effect of social position on postmaterialism, which is greater than that of SEFS, is accentuated when taking into account the intervening role of exposure to media. For this same reason, the difference between the effects of age and social position on postmaterialism is reduced when taking into account exposure to information as an intervening variable.

On the other hand, evidence has been presented that suggests that in spite of a strong relation between ideology and postmaterialism (Diez Medrano and others, 1989), postmaterialism constitutes a value orientation slightly more complex than the right-left dimension.

With regard to age, the data fully confirms Inglehart's findings regarding its strong (negative) relation with postmaterialism. He suggests that a generation effect exists as well, from which objective socioeconomic conditions stem, and which affect all age groups in a specific historical situation.

**BIBLIOGRAPHY**

DIEZ MEDRANO, J.; GARCIA-MON, B., and DÍEZ NICOLAS, J. (1989): «El significado de ser de izquierdas en la España actual» (The Significance of being leftist in present day Spain), *REVISTA ESPAÑOLA DE INVESTIGACIONES SOCIOLOGICAS*, 24, January-March.

DÍEZ NICOLÁS, J. (1969): «Posición Social y opinión pública. (Social Position and Public Opinion), *Anales de Sociología*, 2, Barcelona.

— (1968): «Social Position and Attitudes towards Domestic Issues in Spain», *POLLS*, vol. III, 2 Amsterdam.

— (1980): «La España previsible» (Spain: a forecast), *REVISTA ESPAÑOLA DE INVESTIGACIONES SOCIOLOGICAS*, 12, October-December.

— (1983): «Ecología humana y ecosistema social,» (Human Ecology and Social Ecosystem) in CEOTMA, *Sociología y medio ambiente*, MOPU, Madrid.

— (1991): «Prologue» to Ronald INGLEHART, *Cultural Change*, Centro de Investigaciones Sociológicas, Madrid.

- DUNCAN, O. D. (1969): «Contingencies in Constructing Causal Models», in E.F. Borgatta (publ.), *Sociological Methodology*, Jossey-Bass, San Francisco (Cal.).
- EDEL, A. (1959): «The Concept of Levels in Social Theory», in L.I. Gross (publ.), *Symposium on Sociological Theory*, Row Peterson and Co., New York.
- ESCOBAR, M. (1992): «El análisis de segmentación: concepto y aplicaciones», (Segmentation analysis: concept and application), *Studies/Working Papers*, Centro de Estudios Avanzados en Ciencias Sociales, Instituto Juan March de Estudios e Investigaciones, Madrid.
- GALTUNG, J. (1964): «Foreign Policy Opinion as a Function of Social Position», *Journal of Peace Research*, 3-4 Oslo.
- HAWLEY, A. H. (1966): *La Estructura de los Sistemas Sociales (The Structure of Social Systems)*, Tecnos, Madrid (translation by J. Diez Nicolás).
- (1991): *Teoría de la Ecología Humana (Theory of Human Ecology)*, Tecnos, Madrid (translation by J. Jiménez Blanco and A. de Esteban).
- INGLEHART, R. (1977): *The Silent Revolution*, Princeton University Press, New Jersey.
- (1990): *Culture Shift*, Princeton university Press, New Jersey (Spanish translation, *El cambio cultural*, CIS, op. cit., 1991).
- LAND, K. C. (1969): «Principles of Path Analysis», in E.F. Borgatta (publ.), *Sociological Methodology* Jossey-Bass, San Francisco (Cal.).
- MERTON, R. K. (1957): *Social Theory and Social Structure*, The Free Press of Glencoe, Ill.