

Democratic Party Systems in Europe: Dimensions, Change and Stability

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Introduction

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'the party systems of the 1960's reflect, with few but significant exceptions, the cleavage structures of the 1920's. This is a crucial characteristic of Western competitive politics in the age of 'high mass consumption': the party alternatives, and in remarkably many cases the party organizations, are older than the majorities of the national electorates' (Lipset & Rokkan 1967,50).

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'Whatever index of change is used – a measure of trends or any of several measures of fluctuations – the picture is the same: the electoral strength of most parties in Western nations since the war had changed very little from election to election, from decade to decade, or within the lifespan of a generation. The consistency of this finding increases confidences in the indicators used. In short, the first priority of social scientists concerned with the development of parties and party systems since 1945 is to explain the *absence* of change in a far from static period in political history' (Rose & Urwin 1970,295).

Our purpose is to challenge this widely accepted interpretation of party systems in Western Europe by means of a new analysis of data. The basic idea in our analysis is that when one sets out to solve a problem like

(P1) how much party system change has taken place in West-European party systems since the democratization of the political systems?

the notion of *party system change* becomes crucial. The concept of party system change consists of two concepts, *party system* and *change* or *instability* of party system, which require theoretical clarification. A party system like any system consists of parts and relationships between these parts:

'A system is a set of objects together with relationships between the objects and between their attributes.' (Hall and Fagen 1956,18)

The parts of a party system are, of course, political parties, but the specification of relationships is not as simple as the specification of the parts. Lipset and Rokkan as well as Rose and Urwin approach the problem of party system change as a matter concerning the development of the *parts* of party systems. However, we argue that the concept of party system change must be defined in relation to the concept of party system dimensions, which covers not only the parts of the system studied, but also *relationships* between the parts. It is, of course, a matter of research strategy which parts and which relationships are to be singled out as crucial in the analysis of party system change. It seems appropriate to base any judgment as to the occurrence of change and no change on an investigation of those dimensions of party systems in Western Europe that – according to a factor analysis – explain most of the variation. The concept of change or stability in relation to party systems stands for properties of the development over time in the party system dimensions. The development since 1920 of these party system dimensions may be described by means of regression equations in a time series analysis of the various national party systems; and important distinctions between developmental properties may be introduced and operationalized in relation

to the estimated values of these regression equations. Following Rose and Urwin, we argue that it is illuminating to distinguish between two different types of party system change or instability: *trend* and *fluctuation* (Rose & Urwin 1970,291).

Dimensions of Party Systems

It is generally agreed that a party system is an entity that is different from a political party or a simple set of political parties. A party system consists of a set of political parties operating within a nation in an organized pattern, described by a number of *party system properties*. This is where the agreement ends, as scholars do not identify the same set of properties. There is a number of relevant party system properties and little in terms of justification for the use of one or two of these to the exclusion of the others. The study of party systems faces a basic conceptual problem which has not been resolved, i.e.

(P2) what are the semantically relevant properties of party systems?

A semantically relevant property is a property that typically occurs in a set of phenomena and that characterizes part of the similarities and differences between phenomena in that set, which, makes it useful for definition purposes (Achinstien 1968).

Some scholars believe that (P2) may be solved by means of a *definition*, stating the necessary and sufficient conditions for the application of the word 'party system'. However, the proposals for a definition of the concept of party system are not quite satisfactory. Look at the following suggestions:

- (DF1) 'In the second place a comparison between the various parties makes it possible to distinguish new elements in the analysis that do not exist for each party community considered in isolation: numbers, respective sizes, alliances, geographical localization, political distribution, and so on. A party system is defined by a particular relationship amongst all these characteristics' (Duverger 1954,203).
- (DF2) 'The subject of "party systems" is concerned with the interaction patterns among significant and genuine electoral organizations in representative governments – governments in which such systems serve pre-eminently (whether well or badly) the functions of providing a basis for effective authority and for defining choices that can be resolved by electoral processes' (Eckstein 1968,438).
- (DF3) 'The network of competitive relationships between political parties is what I mean by the term *political party system*. The party system is not literally a collection of parties – men, institutions, activities. It is instead the *competition* be-

tween these parties within a single political regime, and it is this system of competition (the party system) which gives to democratic political parties their unique importance' (Rae 1971,47).

- (DF4) 'Parties make for a "system", then, only when they are parts (in the plural); and a party system is precisely the *system of interactions* resulting from inter-party competition. That is, the system in question bears on the relatedness of parties to each other, on how each party is a function (in the mathematical sense) of the other parties and reacts, competitively or otherwise, to the other parties' (Sartori 1976,44).

These definitions fall into two sets, displaying two deficiencies; the proposals of Eckstein, Rae, and Sartori are too general since they simply state that a party system is more than the sum of its parts; on the other hand, the suggestion by Duverger results in infinite enumeration of properties. However, we need neither vague definitions nor a host of properties, but a set of minimal properties by which to characterize a maximum amount of actual party system variation. It should be recognized that at the present stage of knowledge concerning political parties the search for a definition stating the necessary and sufficient properties is premature. The best strategy is to try to derive a tentative list of semantically relevant properties, even though such a list would need revision before a definition is arrived at.

Most typologies of party systems identify one or two dimensions along which various party systems are classified. Number of parts in a party system is a property that is almost always considered a basic dimension; Duverger is famous for his classification scheme of the single-party, the Anglo-Saxon two-party, and the multi-party system (Duverger 1954,203). In the same vein J. Blondel talks of two-party systems, two-and-a-half-party systems and multi-party systems with or without dominant parties (Blondel 1968,187). Sartori's model includes besides party fragmentation (number of parties) another property of the relationship between the party system parts: ideological distance (Sartori 1976,282-93). M. Pedersen states that polarization and fragmentation have, of tradition, been identified as the party system dimensions and adds a typology based on volatility to the growing literature on party systems (Pedersen 1979,3). The Lipset-Rokkan model focuses upon the cleavage lines that distinguish the various parts of a party system from each other (Lipset & Rokkan 1967,33-50). Thus, typologies of party systems identify either relationships between the constituent parts of the system or properties of the parts of the system. However, the basic conceptual problem is still unresolved: how many dimensions are to be included in party system models? A number of indicators are used to characterize party systems. What is the proper procedure for identifying the party system dimensions employed to describe party systems? We argue that those properties that explain most

of the variation in a set of party systems constitute the dimensions. The derivation of the concept of party system thus depends on which party systems are studied – at the present state of knowledge. As knowledge grows it might be possible to identify in a definition a set of properties appropriate for the analysis of all kinds of party systems. We confine ourselves to identification of the properties that explain much of the variation among the party systems we study, viz. the West-European ones. Thus the dimensions we focus upon are the semantically relevant properties of the concept of the West-European party system.

We approach (P2) as a factor analytic problem using factor analysis of the indicators on a number of party system properties in order to derive those dimensions that explain the variation among West-European party systems. We ask: what are the basic dimensions when relevant party system properties are operationalized by means of indicators measuring party system variation in Western Europe? It should be emphasized that the factor analysis only considers *systemic properties*, since the focus of analysis is the party system and not the political party. Moreover, the selection of party system indicators has been made by consideration of existing typologies; thus, we arrive at four sets of indicators corresponding to the one-or two-dimensional models referred to above: number of parties, ideological distance between parties, realignments between the parties, and cleavage lines in the party system.

Indicators¹

(i) A number of indicators are connected with *number of parties* and *strength of parties*. The indicators we have considered in this connection are

- * number of parties; i.e. the number of parties that have taken part in parliamentary elections and become represented in parliament, irrespective of how small they are – also certain non-represented parties like the minor Communist parties have been taken into account; an operational definition: parties included in Mackie, International almanach of electoral history.
- * number of relevant parties; Sartori (1976, 122–123) lays down certain rules for what parties are to be counted as relevant within a party system: on the one hand the parties must show continuity over time, on the other hand they should have a coalitional potential (applies to small parties in the political center) or a blackmail potential (applies to large extremist parties).
- * fractionalization index;² Rae is the one to whom the credit for this index is due which measures both the number of parties and their size. Much has been written about this index, but we agree with Pedersen who writes:
'It might be a good idea, therefore, if students of party systems would decide to stick to one measure – namely, F (i.e. Rae's). Instead of inventing new indices of

fragmentation, one could instead concentrate on the task of delimiting the contexts in which F can legitimately be used' (Pedersen 1980, 397).

- * aggregation index;³ an index with this designation has been constructed by Mayer (1980, 517) and it measures the share of the party in relation to the number of parties (we have modified Mayer's original formula).

(ii) A set of indicators expresses the *ideological distance* within a party system; as a rule the distance on a right-left scale is referred to. Even if one-dimensional measures of the type right-left scales have been severely criticized, we are of the opinion that they catch an essential dimension within the party systems. The starting-point is to classify parties on a right-left scale, a problem attended with great difficulties. We have used a scale of seven degrees: the extreme right is given the value -3, the political center is given the value 0, and the extreme left the value +3. As indicators we use:

- * right-left score: this value shows the point on the right-left scale a party system reaches at a certain election and this value is weighted on the basis of the electoral strength of the parties.⁴
- * polarization index: here we use the same index as Taylor & Herman (1971) and Sigelman & Yough (1978); a system is polarized maximally when 50% of the electorate is at the respective pole, whereas there is no polarization if all are in the political center.⁵
- * the share of Communist parties as well as the share of Communist parties, fascist parties, and discontent parties; Sartori (1976, 132-34, 317-18) regards the size of anti-system parties as a measure of ideological distance; we use these two indicators as measures of the size of anti-system parties.

(iii) There are indicators that somehow reveal the *dynamics of party systems*, i.e. they express changes within a party system. We take two indicators into account:

- * volatility;⁶ this measure shows net changes for all the parties within a party system between two elections; gross changes are possible to estimate only on the basis of survey data. Pedersen (1979, 4) has named this concept volatility, but it has been used by other scholars though under other designations (Przeworski 1975, 53; Dodd 1976, 88).
- * party changes; this is a measure analogous to volatility, but it refers to changes in the number of parties within a party system from one election to another (here we have avoided dividing the absolute value by two).

(iv) A large number of indicators may be devised that measure the occurrence of *social cleavages in the party system*. This was the focus of the famous Lipset-Rokkan analysis in their introduction to *Party Systems and Voter Alignments* (1967). According to Lipset-Rokkan, the modern party sy-

stems of Western Europe were the result of a process through which various kinds of cleavages in society were transformed into the various voter alignments of the party systems. They called this transformation process 'nation-building', distinguishing between four cleavage groups:

- (a) local and regional groups
- (b) national elites
- (c) specific interest groups
- (d) religious groups

The idea of some kind of relationship or correspondence between party system and social cleavages reoccurs among several scholars. Powell refers to the 'relationship between party systems and societal cleavage structures' (Powell 1980, 13), and H. Daalder states that 'European countries reveal considerable differences according to the character and the intensity of the cleavage lines that form the basis for political conflict and political organization' (Daalder 1966, 67).

We use the following indicators in order to cover as much as possible of the idea of the social orientation of party systems:⁷

- * ethnic and religious score, i.e. the shares of Ethnic and Religious parties
- * conservative and liberal score, i.e. the shares of Conservative and Liberal parties
- * bourgeois score, i.e. the shares of Conservative, Liberal and Agrarian parties
- * working-class score, i.e. the shares of Communist, Socialist and Left-Socialist parties
- * structural score, i.e. the shares of parties based on societal cleavages: Religious parties, Ethnic parties and Working-class parties.

Our final indicator is electoral participation. It has been added mainly because we wish to maximize the number of indicators that we employ in the factor analysis and because it is an indicator that is clearly relevant for the analysis of party systems, but one may only guess about its relations to other indicators.

Factor Analysis

A factor analysis has been made comprising all the indicators for the purpose of deriving the basic dimensions of the party systems of Western Europe. Apriori it is difficult to hypothesize about how many factors the analysis will arrive at and which will be interpretable theoretically. Since the dominant mode of analysis concerning party systems is the one- or two-dimensional model, it would be an interesting finding simply to arrive at more than two

interpretable factors. However, the exact number of factors and their interpretation as well as their combined explanatory power cannot be derived from the present state of knowledge.

Table 1 contains the results of the factor analysis of all the indicators specified in the account above.

Table 1. Factor Analysis of Party System Indicators (Varimax Rotation)

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Number of parties	.061	.855	.084	.072	.193
Number of relevant parties	.147	.893	-.052	.098	-.156
Fractionalization index	-.078	.886	-.034	.190	.030
Aggregation index	.077	-.902	-.213	-.090	-.101
Right-left score	.286	.165	.787	.086	-.175
Polarization index	-.301	.022	.301	.752	.091
Communist party share	.096	.154	.043	.903	-.003
Anti-system score	.096	.275	.027	.915	.082
Volatility	-.141	.017	-.328	.200	.316
Party change	.093	.112	.020	-.029	.920
Ethnic and religious score	.937	.038	-.170	-.203	.020
Conservative and liberal score	-.786	-.165	-.502	.028	.071
Bourgeois score	-.912	-.050	-.306	-.036	-.026
Working class score	.099	-.049	.943	.245	-.069
Structural score	.622	.134	.706	-.010	-.062
Electoral participation	.671	-.187	.229	.165	-.017
Eigenvalue	4.841	3.639	2.261	1.751	1.105
Percent explained variation	30.3	22.7	14.1	10.9	6.9

We arrive at five factors and these factors may be interpreted as dimensions of Western European party systems. Factor 1 deals with the extent of the *functional orientation* of the party system: the higher the ethnic and religious score, the less the functional orientation of the party system; the higher the score for conservative, liberal and agrarian parties, the more functionally oriented is the party system. The second factor is the amount of *fractionalization of party systems*; both the Rae fractionalization index and number of parties load significantly on this factor. Factor 3 consists of the *extent of the radical orientation* of a party system as measured by on the one hand the working-class score and on the other hand the right-left score. The *polarization of a party system* comes out as the fourth factor. Both the polarization index and the Communist party share load on this factor. The last and fifth factor is the *volatility of a party system*.

A typical theme in the study of party systems is the use of one- or two-dimensional models. The factor analysis indicates that any such model

would be inappropriate for the study of party system variation in Western Europe. The employment of such models could only be defended if it could be shown that one or two dimensions dominate in the factor analysis, i.e. they explain much of the variation in the data. In order to show that our five dimensions are of equal importance for the understanding of the party systems of Western Europe we conducted a test of the hypothesis that enough factors have been included to do full justice to the complexity in the data.⁸ The result of the testing of the *dominance hypothesis*, which occurs in the party system literature as either a one-dimensional model or a two-dimensional model, is straightforward: the five-dimensional model arrived at in the factor analysis is disconfirmed in the test with chi-square = 1244.95 (D.F. = 50) and probability = 0, i.e. there is a high probability that more than five factors must be identified in order to uncover all party system complexity!

There is no factor that has a significantly higher eigenvalue than the other factors (Table 1). Moreover, the ranking-order of the factors is not stable as we move from an orthogonal solution to an oblique solution, though the factors are the same. Thus, there are no one- or two-party system dimensions that may be singled out as more important than any other. It should be noticed that our indicator electoral participation – about which we made no theoretical assumption – belongs to factor 1: the higher the electoral participation, the higher the share of the ethnic and religious parties and the lower the share of the bourgeois parties. This fact seems to be in accordance with theories about participation.

West European party systems are composed of five separate dimensions:

- (i) functional orientation
- (ii) fractionalization
- (iii) radical orientation
- (iv) polarization
- (v) volatility

These five dimensions explain 85% of the variation in the data and all dimensions have an eigenvalue greater than one. We regard functional orientation, fractionalization, radical orientation, polarization, and volatility as the semantically relevant properties of the concept of party system; these properties may be employed to measure the variation between the various party systems in Western Europe cross-sectionally and longitudinally. The selection of the indicators on these five dimensions is based on the factor analysis choosing one indicator for each dimension among those that show high factor loadings:

- (a) functional orientation = bourgeois score
- (b) fractionalization = fractionalization index
- (c) radical orientation = working-class score
- (d) polarization = polarization index
- (e) volatility = volatility.

Party System Variation

Analytically, we distinguished between two kinds of variation in our five dimensions of European party systems. On the one hand there are the differences between the various nations at specific periods of time and on the other we have the variation in all West-European party systems over time. We combine these two modes of analysis, the cross-sectional one and the longitudinal one, in order to analyze two problems. Firstly, we inquire into the general development of European party systems over time in order to pinpoint some seminal trends characteristic of the general set of European party systems. We aggregate the scores for the various national party systems on the five dimensions for various intervals of time since 1920 (longitudinal analyses of aggregated cross-sectional data). Secondly, we look into the variation between the various countries before the Second World War and after the Second World War (cross-sectional analysis of aggregated longitudinal data). Thus we look at

- (P3) what is the amount of variation in party system dimensions over time for all the West-European nations?
- (P4) what is the amount of variation in party system dimensions in space at different periods of time?

General Development of West European Party Systems

The longitudinal analysis of aggregated cross-sectional data is based on Table 2. It covers eleven five-year periods and three different methods of calculating the variation in party system dimensions have been employed.

(i) *Functional orientation*

It used to be case that European party systems as a whole were characterized to a significant extent by a functional orientation, as the aggregated share of the votes for the Conservative, the Liberal and the Agrarian party amounted to almost 50% of the total vote. Since the Second World War, however, there has been a sharp downward trend as the share of the Ethnic and Religious parties has increased at the expense of the traditional Bourgeois parties.

Table 2. General Development of the Set of West-European Party Systems (Mean Values)

Time period	Functional orientation			Fractionalization			Radical orientation			Polarization			Volatility		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
1920-24	52.1	48.3	49.9	.759	.766	.765	32.9	31.5	29.9	2.568	2.368	2.299	11.7	12.8	8.8
1925-29	46.4	48.4	47.2	.756	.752	.757	30.4	32.4	33.5	2.139	2.322	2.283	9.1	10.1	8.3
1930-34	47.3	47.9	46.9	.745	.740	.739	30.2	31.9	33.1	2.725	2.546	2.256	12.2	11.5	10.2
1935-39	45.8	45.8	42.9	.732	.735	.743	31.5	33.3	35.9	2.483	2.550	2.530	13.2	12.8	9.3
1945-49	31.9	36.9	38.2	.735	.729	.743	40.8	41.2	41.4	2.469	2.361	2.438	18.5	20.0	13.4
1950-54	44.2	37.9	40.4	.719	.723	.728	35.8	37.8	40.0	2.493	2.489	2.479	11.5	10.4	7.4
1955-59	39.3	37.7	40.8	.700	.702	.722	37.1	37.3	38.8	2.602	2.510	2.491	6.8	6.7	6.6
1960-64	43.7	37.0	40.2	.701	.711	.735	37.0	38.2	39.1	2.569	2.538	2.571	7.3	7.0	6.3
1965-69	35.4	34.1	42.1	.711	.714	.735	39.3	40.3	39.1	2.581	2.572	2.595	8.0	7.7	7.6
1970-74	35.5	35.5	40.1	.734	.734	.776	39.3	38.1	37.0	2.699	2.711	2.692	10.1	10.6	10.0
1975-80	42.3	34.3	40.5	.736	.725	.751	31.3	40.4	37.4	2.551	2.653	2.608	8.3	8.3	8.4

Notes: (1) = Values based on all elections (N = 252)

(2) = Values based on mean values for all party systems (N = 16)

(3) = Values based on mean values for the party systems having elections over the whole period of time (N = 10)

(ii) *Fractionalization*

A typical feature of West-European party systems before and after the Second World War is the variety of political parties. The fractionalization index displays high values for all intervals of time since 1920. The extent of fractionalization was highest in the early 1920's, decreasing during the 1930's and reaching its lowest values in the 1950's. Since 1960 the amount of fractionalization has been increasing, though there are signs indicating that it culminated in the early 1970's.

(iii) *Radical orientation*

For the set of European party systems it holds generally that there has taken place a steady and continuous growth in left wing parties. When the European political systems were democratized in the early decades of the century, the Left-wing parties secured hardly $\frac{1}{3}$ of the total vote; it seems as if the Second World War had a significant impact on the attractiveness of Left-wing parties, since during the post-war time intervals they received roughly 40% of the total vote.

(iv) *Polarization*

Polarization or the distribution of the electorate along the classical right-left scale is a clear property of European party systems during all the time periods. However, the amount of polarization cannot be described as exceptionally high, because theoretically it is conceivable that party systems reach as high a degree of polarization as 9.0. Generally speaking, there seems to have occurred an increase in polarization since the 1960's. Of course, we find a high degree of polarization during the 1930's.

(v) *Volatility*

The maximum and minimum values of volatility are theoretically 100 and 0, respectively. During all the intervals of time we observe the occurrence of net changes in voter support for political parties, but European party systems can hardly be characterized as extremely volatile, as the index ranges from roughly 6 to roughly 18. However, there is an interesting variation over time. The Second World War broke normal ways of party functioning, which had the result that the electorate immediately after the war faced some difficult choices as to how to realign itself towards old and new parties; consequently the period 1945-49 is the period with the highest degree of volatility. The 1950's give the impression of firm voter alignments, whereas we observe a clear increase in volatility between 1965-1974. The data indicate that the increase in volatility has come to an end and that actually there has been a reduction in volatility since 1975.

The Party System Variation between Various Nations

The data presented hitherto neglect what to some scholars is most interesting concerning the party systems of Western Europe: the variation between various nations. We turn now to the analysis of the various ways in which national party systems vary in terms of the five dimensions derived.

Table 3. Cross-Sectional Variation in Party System Dimensions pre-1945 and post-1945 (Mean Values)

Party systems	Functional orientation		Fractionalization		Radical orientation		Polarization		Volatility	
	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945
Austria	13.1	7.2	.648	.585	40.5	48.3	2.362	2.232	10.9	5.8
Belgium	15.8	15.0	.720	.717	37.7	35.5	2.369	1.993	7.8	8.1
Denmark	59.9	48.8	.728	.771	38.1	45.7	2.378	2.653	5.4	11.7
FR Germany	27.6	11.8	.827	.639	38.5	38.6	4.018	2.203	18.1	15.5
Finland	46.5	43.2	.781	.815	39.0	46.1	2.624	3.462	7.8	8.2
France	69.4	43.9	.821	.792	29.3	42.2	3.073	4.267	14.5	15.0
Greece	81.0	83.2	.722	.667	5.1	17.3	2.147	2.937	31.6	23.1
Ireland	45.4	50.5	.705	.676	11.5	12.6	.784	.836	13.2	8.5
Italy	(43.4)	9.5	(.822)	.746	(32.1)	43.1	(2.573)	2.821	(37.0)	11.1
Netherlands	14.9	12.9	.830	.802	24.5	35.3	1.653	1.999	7.4	9.3
Norway	60.8	38.5	.761	.733	37.1	50.5	2.961	2.784	8.9	8.8
Portugal	-	(24.1)	-	(.720)	-	(50.6)	-	(2.368)	-	(8.7)
Spain	-	(42.2)	-	(.770)	-	(43.4)	-	(2.054)	-	(8.8)
Sweden	51.0	58.4	.727	.704	48.4	50.5	2.892	2.320	9.3	5.5
Switzerland	48.0	44.6	.796	.813	27.8	28.6	1.499	1.646	6.1	4.5
United Kingdom	64.8	53.4	.667	.603	32.3	44.0	3.044	3.525	11.5	6.8

(i) *Functional orientation*

The functional orientation index captures a variation between two kinds of alignments: either the voters support traditional bourgeois parties like Conservative parties or Liberal parties or Agrarian parties, or they support non-functionally oriented parties like Ethnic or Religious parties. The index reveals significant and striking variations in the way the non-leftist vote is distributed between these two blocks. In some nations the traditional bourgeois parties are strong: Greece, France, UK, and the Nordic countries; some national party systems are very much dominated by the existence of Ethnic or Religious parties like Austria, Belgium, Italy, FR Germany, and the Netherlands.

(ii) *Fractionalization*

The degree of fractionalization is not as diversified as the extent of functional orientation, because the European party systems are typical multiparty-

systems. There is a set of national party systems that is very much fractionalized comprising Finland, the Netherlands, and Switzerland as well as France and Germany before the Second World War. Inversely, the set of nations that score low – relatively speaking – consists of Austria, the United Kingdom, Ireland, and FR Germany after the Second World War.

(iii) *Radical orientation*

A party system may be characterized by the numerical strength of left-wing parties. Actually, the extent of variation in the electorate concerning the orientation towards Socialist and Communist parties (including Left-Socialist parties) is great. Radical orientation has never been a striking feature of Greece, Ireland, and Switzerland, whereas the contrary is true of the Nordic countries as well as Austria, France (after 1945), Italy (after 1945), and UK (after 1945).

(iv) *Polarization*

The variation in polarization is striking as a few nations are twice as polarized as some others. Polarization is a typical feature of France, Finland, UK as well as Germany before the War. On the other hand, polarization has assumed no great importance in Ireland, Switzerland, the Netherlands, and Belgium.

(v) *Volatility*

It is necessary to make a distinction between volatility before and after the Second World War, because the inter-nation variation is not the same. Volatility pre-1945 is a property that distinguishes Greece, France, Germany, Ireland, and the United Kingdom. We find a low degree of volatility among nations like Denmark, Switzerland, Belgium, Finland, and the Netherlands. After 1945, volatility has been high in the following set of nations: Greece, FR Germany, France, Denmark, and Italy; the set of nations with a low degree of volatility includes Austria, Sweden, Switzerland, and the United Kingdom.

Party System Change and Stability

The fundamental problem in the study of West-European party systems deals with the extent to which the party systems are characterized by change or stability. It has been argued that the various national party systems are moving towards a higher degree of instability, or it is argued that this is a basic fact characterizing some of these systems (Pedersen 1979, 24; Borre 1980, 162-63).

We will present data on the extent of party system change and instability in European democracies for two periods of time covering 1920 to 1980. Before we interpret these data we deal with:

(P5) what is party system change and party system stability?

(P6) how is party system change or party system stability to be measured?

A solution to these problems is, of course, a necessary step towards an empirical analysis. Actually, the concept of party system change or stability presents tricky problems of both a conceptual and an operational nature.

Concepts and Measures

There are no standard definitions of the concepts of party system change and party system stability; it may even be argued that these terms are ambiguous. Moreover, in the literature on party systems it is not clear how the concepts of party system change and party system stability are interrelated or how they are to be operationalized. Our suggestion is that these concepts should be clarified by substituting the more precise concepts of trend and fluctuation, concepts which may be operationalized by identifying them with specific properties of a time series regression equation. Any judgment as to the occurrence of a party system trend or fluctuation should be based on an investigation of those dimensions of party systems in Western Europe that – according to our factor analysis – explain most of the variation. These concepts refer to properties of the development over time of the systemic properties: fractionalization, polarization, volatility, functional orientation and radical orientation. It remains to be stated how these concepts of trend and fluctuation in relation to these party system dimensions are to be measured. The concepts of *trend* and *fluctuation* may be introduced in relation to the equation $PSD_{it} =$ party system dimension i at election t .

The estimation of this regression equation on a time series results in values which identify the occurrence of a trend or of a fluctuation. The concept of trend may be identified with a definite range of values of the significance level of the time series equations describing the development in each country: a trend exists when the significance level is lower than .01. For each equation that fulfills this criterion on a trend, we look at the beta weights in order to get more information about the nature of the trend. The value of the beta weight reveals the direction of the trend, whether it is positive or negative.

The concept of fluctuation may be identified with the values for the standardized coefficient of variability, which the estimation of the same regression equation provides. We select the standardized CV-measure because the usual CV-measure is sensitive to a variation in the number of cases, i.e.,

number of elections in different countries. The standardized CV-measure is arrived at by dividing the CV-value with the maximum value of CV. The SCV vary between 0 and 100%, and we may select a range of SCV-values that can be identified as the indicator on the occurrence of a fluctuation: a SCV-value below or around 3–4% indicates no fluctuation while SCV-values over this range show fluctuations.

The concept of party system change as well as the concept of party system stability are by no means precise ones. Therefore, we suggest that they be replaced by the concept of party system trend and the concept of party system fluctuation which can be operationalized in an unambiguous manner; thus we arrive at the following 2 × 2 table:

		FLUCTUATION	
		Fluctuation	No fluctuation
TREND	Trend	Significance High SCV-values	Significance Low SCV-values
	No trend	No significance High SCV-values	No significance Low SCV-values

The Occurrence of Trends

The occurrence of trends and the nature of a trend in party system properties depend upon the period of time selected. It is quite possible that a trend that occurs during one period of time may be followed by an opposite trend during the next period of time, which means that in the end little or no trend has occurred over the two periods of time. We believe that it is interesting to pay attention to such effects, and therefore we investigate the amount and nature of trends in the party system dimensions for three periods of time:

- (a) Pre-1945
- (b) Post-1945
- (c) 1920–1980

The division of the time period is, of course, based on the assumption that the Second World War may have had consequences for the structure of the party systems in Western Europe. Table 4 has the data for the pre-1945 time period as well as the post-1945 time interval.

Pre-1945 Trends

The national party systems vary both in terms of the existence of trends and in the nature of trends. Change has occurred in 7 out of the 13 party systems

Table 4. Party System Change pre-1945 and post-1945 (Significance Levels and Beta-Weights)

Party systems	Functional orientation		Fractionalization		Radical orientation		Polarization		Volatility	
	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945
Austria	.200	.699	.734	.077	.230	.113	.123	.032	.572	.013
Belgium	.284	.058	.070	.001	.830	.000	.031	.000	.075	.042
				(.812)		(-.917)		(-.921)		
Denmark	.000	.001	.071	.006	.000	.993	.001	.753	.458	.333
	(-.952)	(-.756)		(.674)	(.914)		(.867)			
FR Germany	.010	.010	.808	.004	.177	.002	.002	.717	.228	.032
	(-.835)	(-.798)		(-.843)		(.867)	(.913)			
Finland	.086	.094	.143	.001	.982	.022	.561	.003	.182	.429
				(.831)				(.809)		
France	.031	.003	.792	.705	.062	.268	.718	.001	.019	.238
		(.806)						(.869)		
Greece	.646	.007	.319	.571	.147	.003	.426	.034	.490	.291
		(-.754)				(.802)				
Ireland	.000	.036	.150	.001	.597	.205	.181	.135	.681	.012
	(.910)			(-.888)						
Italy	-	.015	-	.495	-	.001	-	.007	-	.005
						(.891)		(.816)		(-.840)
Netherlands	.006	.000	.802	.442	.412	.827	.014	.637	.539	.612
	(-.937)	(.951)								
Norway	.031	.584	.031	.475	.059	.004	.038	.067	.879	.627
						(-.841)				
Sweden	.001	.967	.028	.062	.001	.128	.022	.694	.505	.955
	(-.930)				(.930)					
Switzerland	.052	.013	.124	.062	.063	.138	.023	.108	.010	.884
								(.876)		
United Kingdom	.036	.005	.015	.036	.009	.001	.005	.016	.575	.973
		(.778)			(.879)	(-.856)	(.909)			

that can be described by means of the party system dimensions. The set of party systems that experienced trends during this period of time comprises: Denmark, the UK, Germany, Sweden, Switzerland, the Netherlands and Ireland. The magnitude of trends differs between these countries. The Danish party system experienced trends in three dimensions: functional orientation, polarization and radical orientation. The increase in radical orientation is inversely related to the decline in functional orientation, because the steady growth of the Danish Social Democratic Party took place at the expense of traditional bourgeois parties. Along with the increase in the electoral support for leftist parties came a sharp rise in polarization. In the UK, Denmark, Sweden and Germany we find sharp beta-weights for two party system di-

mensions indicating considerable change in the national party system. The UK displays significant trends in terms of polarization and radical orientation; this reflects, of course, the decline of the Liberal Party and the development of a two-party system characterized by the competition between right and left. The sharp rise in electoral support for the Social Democratic Party in Sweden comes out nicely on the measures of trend in radical orientation and functional orientation, the beta-weight for radical orientation being positive and the beta-weight for functional orientation being negative. The changes in the scores on functional orientation and polarization in the German party system is, of course, a function of the coming to power of the Nazi party; it expanded at the expense of the bourgeois parties and its rise heightened the level of polarization. In Ireland and in the Netherlands two opposite trends occurred, increasing the amount of functional orientation in one country and decreasing the extent of functional orientation in the other. In Ireland the expansion of the Fianna Fail at the expense of the Fine Gael is noticed in the positive trend, whereas the decline of the traditional bourgeois parties and the rising electoral support for the religious parties explains the negative trend in the Netherlands. The party system of Switzerland is characterized by a change in volatility, reflecting the creation of new parties as well as the rising electoral support for the Socialists. One typical feature of the development of the West-European party systems during the interwar period is hardly the lack of trends; on the contrary we find two trends that spelled out change: the increase in electoral support for leftist parties and the decline in support for traditional bourgeois parties. These trends are neither the only signs of change nor do they occur everywhere, but they should be noticed in a debate concerning the amount of change in the party systems of European democracies.

Post-1945 Trends

Regarding the question of the occurrence of trends it may be asserted that most national party systems have experienced trends in one or two of their party system dimensions during the period after the Second World War. Actually only Austria, Sweden and Switzerland display no party system trends. In Belgium, Germany and Italy the party systems show trends in no less than three dimensions, whereas we find two instances of party system trends in Denmark, France, Finland, Greece and the UK. Even a short glimpse at the significance levels and the beta-weights of the regression equations summarizing the post-war development hardly gives the impression of no change.

The party system of Belgium has experienced a profound reorganization since 1945; the fractionalization has increased while the radical orientation

and the polarization has decreased, indicating the rise of ethnic alignments as a dominant characteristic in the party system. In FR Germany, the extent of radical orientation has increased, whereas the amount of functional orientation has diminished, at the same time as the general level of fractionalization has declined. Of course, the movement of the German party system towards a large Socialist party and a large Religious party besides a small Liberal party means a very different kind of party system compared with the remnants of the party systems of the Weimar Republic and the Third Reich still operating in the late forties. The change in the Italian case stems largely from the expansion in the electoral support for the Communist Party, as the scores on both radical orientation and polarization display a positive trend. At the same time the level of volatility has declined; it seems as if the electorate has become more firmly organized along the left-right dimension. In Denmark we find two significant trends; on the one hand the degree of functional orientation has decreased, on the other hand the extent of fractionalization has increased. It is not difficult to interpret these change scores, as the Glistrup phenomenon has attracted traditionally bourgeois voters at the same time as other new parties have been founded. Concerning the data on the French system, the difference between the Fourth and the Fifth Republic comes out nicely; the amount of functional orientation has risen, indicating the coming of the Gaullist phenomenon, and the level of polarization has consequently increased, because of the tendency of the left-wing parties to align themselves against the Gaullists. Party system change in Finland is a function of the increased fractionalization and polarization of the party system which result from the increased electoral support for a number of discontent parties (Vennamo's SMP) belonging to the right-wing. In Greece, the party system has experienced a trend in the amount of functional orientation because the Center union has declined after the fall of the Dictatorship, while the amount of radical orientation has increased due to the rise of the PASOK. There are actually two different types of party systems in Greece during this period of time: before the Dictatorship the central gravity focused upon the competition between two functional parties, the Conservatives and the Liberals, and after the Dictatorship the center of gravity is the left-right dimension. Our measures of party system change capture the re-entrance of the Liberal Party into the British party system; the extent of functional orientation is up, whereas the degree of radical orientation has declined due to reduction in the electoral support for the Labour Party. We note a few other trends on the European scene. In the Netherlands, the trend after 1945 is opposite to the one that took place before 1945; the Liberal Party is increasing at the expense of the Religious parties. The degree of fractio-

nalization has diminished in Ireland, and this measure captures the tendency towards a three-party system in Ireland.

The direction of trends is different in the post-war period from that typical of the pre-war period. We now find two different patterns of change; a tendency towards a decline in electoral support for leftist parties as well as for traditionally bourgeois parties, and an opposite tendency towards increased polarization. There is little evidence of any major changes as far as volatility is concerned. The opposite is true of fractionalization, increasing in some systems while decreasing in others. We now turn to data covering the whole period of time.

Party System Trends 1920-1980

We have hitherto looked at the existence, direction and magnitude of trends for two periods of time, the pre-1945 and the post-1945 periods, because it is an appropriate assumption that the Second World War functioned as a watershed in European politics, breaking up the normal modes of operation of political parties. We now inquire into the existence, direction and magnitude of party system trends from roughly 1920 until 1980.

Using the same measure – the occurrence of trends as measured by significance levels and beta-weights in time series analyses – we find that all party systems have experienced change in one or more dimensions. In three countries, Denmark, Finland and Italy, trends have occurred in no less than four dimensions out of five; several party systems display trends in two party system dimensions: Austria, FR Germany, Greece, the Netherlands, Norway, Switzerland and the United Kingdom. Typically, trends occur in the extent of radical orientation of the party systems, as no less than 9 out of 14 party systems have experienced that kind of trend: in eight countries – Austria, Denmark, Finland, Greece, Italy, the Netherlands, Norway and the UK – there has been a positive change with an increase over time in the electoral strength of leftist parties. Belgium is the negative case where the Socialist Party has declined significantly. The second most important change dimension is the degree of functional orientation, which is characterized by the general decline in the electoral support for the traditional bourgeois parties – the Conservatives, the Liberals and the Agrarians – in the following nations: Denmark, Germany, Finland, Italy, Norway, Switzerland and the UK. Trends also characterize fractionalization and polarization, the first kind of trend occurring in six nations and the second kind of trend taking place in five nations. In some countries (Denmark, Finland and Switzerland) fractionalization is up, whereas in some (Austria, Germany and Italy) it is down; most nations that have experienced trends in the extent of polarization dis-

Table 5. Party System Change 1920–1980 (Significance Levels and Beta-Weights)

Party system	Functional orientation	Fractionalization	Radical orientation	Polarization	Volatility
Austria	.005 (-.664)	.001 (-.756)	.000 (.858)	.385	.016
Belgium	.738	.115	.009 (-.584)	.062	.577
Denmark	.000 (-.892)	.000 (.694)	.000 (.679)	.015	.006 (.531)
FR Germany	.000 (-.803)	.000 (-.931)	.385	.023	.187
Finland	.001 (-.663)	.001 (.662)	.008 (.574)	.000 (.882)	.600
France	.199	.166	.011	.000 (.884)	.395
Greece	.482	.162	.001 (.749)	.004 (.655)	.207
Ireland	.064	.016	.485	.638	.006 (-.620)
Italy	.000 (-.904)	.007 (-.755)	.000 (.944)	.074	.000 (-.904)
Netherlands	.745	.318	.000 (.816)	.004 (.671)	.256
Norway	.000 (-.876)	.152	.001 (.752)	.477	.760
Sweden	.043	.044	.107	.000 (-.800)	.014
Switzerland	.000 (-.833)	.003 (.669)	.441	.024	.996
United Kingdom	.001 (-.720)	.131	.009 (.595)	.049	.217

play an increase in that dimension, with the exception of Sweden. Volatility can hardly be described as a change dimension, because only three party systems show a trend in that party system property; the extent of volatility has increased in Denmark and decreased in Ireland and Italy.

Cross-Sectional and Longitudinal Fluctuations in Party Systems

By using the SCV index on the five derived dimensions of the various party systems of Western Europe, we arrive at an overview of how various party systems differ in terms of fluctuations as well as how each national system has developed over time (Table 6).

Table 6. Party System Fluctuations pre-1945, post 1945 and 1920-1980 (SCV-values)

Party systems	Functional orientation		Fractionalization		Radical orientation		Polarization		Volatility						
	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945	Pre-1945	Post-1945					
Austria	14.1	9.7	10.8	3.0	1.4	1.2	2.1	1.7	1.3	5.9	1.0	2.7	22.8	25.6	18.5
Belgium	4.7	6.0	4.7	1.5	1.4	1.5	2.5	1.9	2.5	6.0	1.5	4.2	18.1	16.6	15.0
Denmark	1.4	2.6	2.0	.5	.9	.7	2.3	2.2	2.2	2.2	2.4	2.1	15.2	16.5	12.3
FR Germany	9.0	8.1	9.1	1.9	2.1	1.4	3.2	2.5	2.9	5.4	2.7	9.0	18.2	32.3	21.9
Finland	2.2	1.3	1.2	.9	.3	.6	1.5	1.6	1.9	3.3	2.5	2.0	21.9	25.7	17.2
France	.9	6.0	7.9	1.9	1.5	1.1	3.9	3.4	4.1	6.0	2.3	2.4	4.5	22.9	17.1
Greece	7.7	3.0	3.7	5.2	4.3	3.2	17.6	14.6	14.8	13.9	6.8	6.1	26.6	20.9	15.3
Ireland	2.8	2.4	3.4	2.6	1.0	1.5	12.5	6.0	6.8	7.4	3.9	4.6	13.4	11.3	8.9
Italy	-	7.1	12.1	-	1.1	1.1	-	1.3	1.4	-	2.9	4.2	-	14.1	9.7
Netherlands	3.9	4.4	9.2	.3	1.5	1.0	2.5	2.4	2.8	2.6	2.7	2.5	12.7	16.6	11.3
Norway	3.1	1.5	3.4	.7	1.4	1.0	4.0	.9	3.0	3.3	2.4	2.9	19.3	26.7	16.6
Sweden	2.1	1.2	2.2	1.3	.5	.8	2.1	1.0	2.2	2.0	2.4	2.0	10.8	15.6	9.0
Switzerland	1.2	1.1	.8	.7	.4	.4	2.3	1.8	1.7	4.4	4.9	3.7	15.1	22.2	17.9
United Kingdom	1.3	1.1	1.9	1.9	2.1	2.2	3.7	1.6	3.8	2.0	1.8	2.5	29.1	20.0	16.4

(i) *Functional orientation*

When the post-war period is compared with the pre-war period we may establish that the fluctuation in functional orientation from election to election has decreased in several countries including Finland, Greece, Ireland, Norway and Sweden. The opposite tendency is to be found in Belgium, Denmark and France. A few countries have fluctuated much in functional orientation, viz. Italy, Germany, the Netherlands, Austria and France. In Switzerland, Finland and the UK the combined strength of traditional bourgeois parties has been stable.

(ii) *Fractionalization*

It is not true that party systems have generally become more unstable in terms of fractionalization. In some countries this is true: Norway, Denmark, the Netherlands and the UK. We also find party systems which have become more stable: Austria, Ireland and Sweden. National party systems do vary in terms of the extent of fluctuation in fractionalization over time; in Greece the number and strength of parties keep changing whereas in Finland and Switzerland the opposite holds good.

(iii) *Radical orientation*

The share of the vote for leftist parties varies extensively in Greece and Ireland, whereas there is a little fluctuation in radical orientation in countries like Austria, Finland, Switzerland and Italy. It appears that the amount of fluctuation in radical orientation has decreased when the period post-1945 is compared with the period-1945. Actually, the overall impression is one of stability, though a few nations diverge from this impression.

(iv) *Polarization*

The extent of polarization varies little from election to election in all party systems with the exception of Germany, Greece, Ireland, Italy and Belgium. The data indicate clearly that the extent of fluctuation in polarization has decreased since the Second World War in most nations. There are four cases of an increase in variation from election to election: Denmark, the Netherlands, Sweden and Switzerland.

(v) *Volatility*

Volatility is a highly fluctuating dimension of party systems. There is a set of nations in which volatility is anything but stable: Germany, Austria and Switzerland. Though the general impression is one of a high level of variation in volatility in all the nations there is a set characterized by somewhat

less fluctuation: Italy, Ireland and Sweden. A comparison of the pre-war figures with the post-war figures reveals that the amount of volatility is more fluctuating in the post-war period. Only four countries display a decrease in fluctuations in the level of volatility: the UK, Belgium, Ireland and Greece.

The overall impression which these data convey is that of stability in the sense of a lack of fluctuations. In most countries most of the party system dimensions vary little from one election to another. There is one significant exception: volatility. The level of volatility in all systems is anything but stable; the extent of net electoral changes in the electoral strength of the political parties hovers considerably over time. The fact that most systems are characterized by little variation over time in all dimensions but volatility should not suppress the extent to which party systems vary in fluctuations.

Party System Fluctuations: Overall Measure

We now proceed to an overall measure of party system stability on the basis of the results from the analysis of the extent of fluctuation in the five party system dimensions. Table 7 presents the summing up of the SCV-measures for each country for three periods of time.

Table 7. Party System Fluctuations: Overall Measures (expressed as T-scores)

Party System	Pre-1945	Post-1945	1920-1980
Austria	58.1	52.3	52.3
Belgium	49.9	47.5	50.4
Denmark	43.4	45.5	43.1
FR Germany	52.6	57.7	61.1
Finland	46.7	46.4	44.6
France	45.0	51.8	51.1
Greece	70.7	67.1	63.8
Ireland	54.2	47.9	49.5
Italy	-	48.3	49.9
Netherlands	43.9	48.5	47.9
Norway	47.1	48.6	48.1
Sweden	43.4	42.8	41.7
Switzerland	44.9	48.6	45.8
United Kingdom	50.0	50.6	46.9

There are significant variations in the occurrence of fluctuations in the national party systems in Western Europe; look at the difference between the maximum and the minimum values, Greece with 63.8 and Sweden with 41.7. We arrive at the following order in which the various party systems have been ranked according to the total extent of fluctuations.

Table 8. Ranking of Party Systems according to the Extent of Fluctuations 1920-1980

1. Greece	8. Norway
2. Germany	9. the Netherlands
3. Austria	10. the United Kingdom
4. France	11. Switzerland
5. Belgium	12. Finland
6. Italy	13. Denmark
7. Ireland	14. Sweden

We may also derive some interesting observations about the changes in the extent of fluctuations in various countries after the Second World War; we construct a ranking order of the national party systems according to the extent of increasing fluctuations in this period.

Table 9. Ranking of party Systems according to Extent of Increasing Fluctuations post 1945

1. France	8. Finland
2. FR Germany	9. Sweden
3. the Netherlands	10. Belgium
4. Switzerland	11. Greece
5. Denmark	12. Austria
6. Norway	13. Ireland
7. the United Kingdom	

It should be pointed out that these aggregations of the measures of the extent of fluctuations in party system dimensions for three periods of time have two serious shortcomings whatever their intrinsic value may be. Firstly, they may fail to recognize changes in party system fluctuation for small periods of time like five-year periods. Secondly, they may present too simplistic a view of fluctuation, because some national party systems may show differing amounts of fluctuation in different party system dimensions, which differences the overall measure fails to catch. Therefore we now introduce another measure which may improve the analysis of party system fluctuation.

Party System Fluctuation as a Function of Volatility

Party system fluctuation as measured by the overall measure summarizing the occurrence of fluctuations of the various party system dimensions is a function of volatility. The level of volatility explains party systems fluctuation; look at the correlations in Table 10.

We may use this functional relationship between volatility and party system fluctuation in order to derive a scale that measures party system fluctuation.

Table 10. Overall Measure of Fluctuation as a Function of Volatility

	Overall measure before 1945	Overall measure after 1945	Overall measure 1920-1980
Level of volatility before 1945	.85		
Level of volatility after 1945		.81	
Level of volatility 1920-1980			.84

ation, the mean value of volatility for each five-year period. Table 11 covers the cross-sectional variation as well as the longitudinal variation in party system volatility.

Table 11. Cross-Sectional Variation in Volatility (Mean Values)

Party system	Time period										
	1920- 1924	1925- 1929	1930- 1934	1935- 1939	1945- 1949	1950- 1954	1955- 1959	1960- 1964	1965- 1969	1970- 1974	1975- 1980
Austria	10.8	7.4	14.8	-	17.0	3.5	4.1	1.5	5.9	4.2	0.9
Belgium	2.7	5.9	5.4	13.3	15.1	8.2	5.3	4.5	11.0	5.4	3.9
Denmark	5.4	3.7	4.9	6.0	17.3	6.0	3.7	6.9	10.6	19.3	15.3
FR Germany	22.2	12.2	15.9	-	64.2	18.4	9.1	13.8	10.3	5.7	4.0
Finland	11.4	5.7	10.0	3.4	15.8	3.2	6.0	5.5	8.0	9.2	6.9
France	22.0	15.3	12.1	8.8	16.0	21.4	22.2	20.1	8.4	9.1	5.4
Greece	-	29.0	16.9	47.7	41.3	36.4	7.3	11.5	-	33.2	21.1
Ireland	10.2	18.1	12.1	20.3	14.0	10.7	11.1	8.1	6.1	3.3	6.7
Italy	37.0	-	-	-	23.9	12.4	6.8	8.0	7.7	4.6	6.4
Netherlands	8.1	5.8	7.1	10.1	11.7	6.2	5.8	4.8	10.2	12.4	12.3
Norway	5.9	11.0	10.8	5.7	12.5	4.6	2.2	3.2	5.8	18.3	14.7
Portugal	-	-	-	-	-	-	-	-	-	-	8.7
Spain	-	-	-	-	-	-	-	-	-	-	8.8
Sweden	10.8	6.5	13.1	6.3	9.5	3.8	5.2	3.0	5.7	8.0	4.5
Switzerland	3.0	2.4	1.9	10.8	8.8	3.9	1.7	1.2	5.6	7.3	5.0
United Kingdom	8.8	8.9	24.8	8.8	13.3	6.4	2.8	5.9	4.3	7.8	8.9
Average (X)	12.2	10.1	11.5	12.8	20.0	10.4	6.7	7.0	7.7	10.6	8.3

It appears from the table that party system volatility in Western Europe varies with the period of time selected. The amount of volatility is high after the First World War and before and after the Second World War. It is evident that from 1950 and onwards there has been a general decrease in volatility compared with earlier periods of time. There is one interesting exception to this rule, viz. between 1970-1974 volatility increased in general. However, this tendency, which was noticed by several scholars, has been broken in the late 1970's.

Conclusion

The party systems of European democracies are different. In order to account for the set of differences, one needs a five-dimensional model covering:

- (i) functional orientation, i.e. the variation between on the one hand traditional bourgeois parties and on the other religious and ethnic parties
- (ii) fractionalization, i.e. the variation in the number and strength of the constituent parts of the party systems
- (iii) radical orientation, i.e. the variation in the strength of leftist parties
- (iv) polarization, i.e. the variation in the ideological distance between the political parties along the right-left scale
- (v) volatility, i.e. the variation in net mobility between political parties.

A party system is a system of elements with relationships. We have identified five party system properties that explain most of the variation among the set of party systems studied. Some of these properties refer to the elements of party systems (functional orientation and radical orientation), whereas the other properties refer to relationships (fractionalization, polarization and volatility).

The two basic problems in the study of West-European party systems concern *change* and *stability*. Our findings are summarized in two 3×3 Tables 12 and 13.

Since it is not clear how the concepts of change and stability in relation to the concept of party system are to be defined or operationalized, we have substituted the concepts of party system trend and fluctuation for these ambiguous terms. Using these operationalizable concepts, we may establish that the widely accepted hypothesis that West-European party systems are characterized by no change or stability is not in accordance with the data. Actually, more than half of the party systems score high or medium on the trend scale when the time period since the democratization of the polities is consi-

Table 12. Party System Trends and Party System Fluctuations 1920-1980

		FLUCTUATIONS		
		Low	Medium	High
T R E N D S	Low	Sweden	Ireland	Belgium France
	Medium	Switzerland United Kingdom	Netherlands Norway	Austria Germany Greece
	High	Denmark Finland	Italy	

Table 13. Party System Trends and Party System Fluctuations post-1945

		FLUCTUATIONS		
		Low	Medium	High
T R E N D S	Low	Ireland Sweden	Netherlands Norway Switzerland	Austria
	Medium	Belgium Denmark Finland	Italy	FR Germany Greece France United Kingdom

dered. It is true that there are less trends occurring after the Second World War. Moreover, the various party systems differ in the amount of fluctuation in both time periods.

The variation in trends and the variation in fluctuations do not covary. There are countries like Belgium and France which have experienced little or no trends but are characterized by fluctuations. There are countries that display trends in several party system dimensions but are not characterized by fluctuations: Denmark and Finland. Regarding the period 1920–1980 and the period after the Second World War, it is evident that one may find seminal trends in West-European party systems and also that some of these party systems are characterized by fluctuations. There is, however, no discernable trend towards a change in the extent of fluctuation. Looking at both periods of time, data do not corroborate any final conclusions about increasing volatility in the democratic party systems of Europe.

NOTES

1. The indicators we give an account of are based on data from 252 elections in 16 West European party systems at the most for the period 1920–1980; the latest included elections are the elections in October 1980 in FRG and Portugal.

Our most importance source has been Mackie & Rose, *The International Almanac of Electoral History*, London, 1974 and its yearly updatings in *European Journal of Political Research*. Moreover we have used Rokkan & Meyriat, *International Guide to Electoral Statistics*, Paris, 1969 (Greece: 1926–1964, Italy: 1919–1921, France: 1919–1936). Among other sources may be mentioned, Greece: Voigt, *Ergebnisse der Wahlen und Volksabstimmungen*, 1980 (1974, 1977); Spain: Linz, *Il sistema politico spagnolo*, 1978, 372, Cases Mendez, *Elecciones legislativas de 1 de marzo de 1979: resultados electorales*, 1979; Portugal: *Eleicoes 1980 assemblea da Republica*, Lisboa, 1980.

For the election results in France after 1960, checks have also been made against Borella (1977), Steed (1979), various numbers of *Cahiers du communisme* (Elections legislatives).

As far as possible, occurring joint-lists have been broken down on the respective parent party; the estimates made in this connection are based on comparisons of the shares of the parties at the regional level. This procedure has been followed for Belgium, Norway and Sweden.

2. The formula for the fractionalization index: $F = 1 - \sum_{i=1}^n p_i^2$

3. We have calculated the aggregation index according to: $\frac{\text{the share of the largest party}}{\text{the number of parties}}$

4. We have tested our measures in various ways by comparing them with other measures stated in the literature:

- (i) The classification of political parties: we have tested our classification of parties on a right-left scale against the one employed by Janda, 1980 (BV 514/15): $r = .92$ ($N = 35$); we find a similar correlation when comparing with De Swaan's classification from 1973: $r = -.90$ ($N = 60$). De Swaan makes some pertinent comments on difficulties of classifying parties in this way (De Swaan 1973, 132-143).
- (ii) The distance between certain couples of parties. We have tested the distance between different couples of parties on the right-left scale, as it has been estimated on the basis of survey data described in Inglehart & Klingemann 1976, 255 and in Sani & Sartori 1980, 10; the correlation between our values and their values is $r = .77$ ($N = 9$) and $r = .95$ ($N = 21$) respectively.
- (iii) The values for the right-left score of the party systems. We have tested our values against the values stated by Sigelman & Yough 1978, 377; $r = .91$ ($N = 12$).

5. Our formula for the polarization index is: $P = \sum_{i=1}^n f_i(x_i - \bar{x})^2$,

where n is the number of parties, f_i is the share of vote of the respective party, x_i is the right-left score of the respective party and \bar{x} is the right-left score of the party system.

We have tested our values for the polarization index against other values stated in literature; the testing gives the following connections: compared to Sigelman & Yough 1978, 377, $r = .87$ ($N = 12$), compared to Sani & Sartori 1980, 11, $r = .74$ ($N = 10$) for the respective period, i.e. the 1960's and the 1970's.

6. The formula for volatility is given by Pedersen, 1979:4 and is: $V_t = 1/2 \times \sum_{i=1}^n |\Delta p_{i,t}|$,

where n is the number of parties participating in elections at the time t and/or $t-1$, and Δp_i stands for the change in the share of the vote of the party p_i over the two elections.

As far as we can judge there is acceptable agreement between our values and those given by Pedersen and the same applies to the values given by Borre 1980:164-167. However, we cannot make any comparison with other material for the values we give for the period from 1945 and backward in time.

7. All these indicators are based on a classification of nearly all political parties in ten groups, viz.

- Communist parties
- Socialist parties
- Left-Socialist parties
- Ethnic parties
- Religious parties
- Agrarian parties
- Liberal parties
- Conservative parties
- Discontent parties
- Extreme Rightist parties

Obviously there are tricky problems when classifying some of the parties.

8. The test has been made using the Jfactor procedure available in the SPSS.

REFERENCES

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REFERENCES

Achinstein, P. 1968. *Concepts of Science. A Philosophical Analysis*. Baltimore & London: John Hopkins Press.

- Borella, F. 1977. *Les partis politiques dans la France d'aujourd'hui*. Paris.
- Borre, O. 1980. 'Electoral instability in four Nordic countries, 1950-1977'. *Comparative Political Studies* 13, 141-171.
- Blondel, J. 1968. 'Party systems and patterns of government in Western democracies'. *Canadian Journal of Political Science* 1, 180-203.
- Cases Mendez, J. I. 1979. 'Elecciones legislativas de 1 de marzo de 1979: resultados electorales'. *Revista de estudios políticos*, 167-199.
- Daalder, H. 1966. 'Parties, elites, and political developments in Western Europe', in *Political Parties and Political Development*, J. LaPalombara and M. Weiner (ed.), Princeton, 43-77.
- De Swaan, A. 1973. *Coalition Theories and Cabinet Formations: a Study of Coalition Formation Applied to Nine European Parliaments after 1918*. Amsterdam.
- Dodd, L. C. 1976. *Coalitions in Parliamentary Government*. Princeton.
- Duverger, M. 1954. *Political Parties*. London.
- Eckstein, H. 1968. 'Party systems', in *International Encyclopedia of the Social Sciences*, David L. Sills (ed), New York.
- Hall, A. D. & Fagen, R. E. 1956. 'Definition of system'. *General systems* 1, 18-28.
- Inglehart, R. & Klingemann, H. D. 1976. 'Party identification, ideological preference and the left-right dimension among Western mass publics', in *Party Identification and Beyond*, I. Budge et al (ed), London, 243-273.
- Janda, K. 1980. *Political Parties: a Cross-National Survey*. New York.
- Linz, J. J. 1976. 'Il sistema partitico spagnolo'. *Rivista Italiana di Scienza Politica* 8, 363-414.
- Lipset, S. M. & Rokkan, S. 1967. 'Cleavage structures, party systems, and voter alignment: an introduction', in *Party Systems and Voter Alignments*, S. M. Lipset & S. Rokkan (ed), New York, 1-64.
- Mackie, T. T. & Rose, R. 1976. *The International Almanac of Electoral History*, London.
- Mayer, L. 1980. 'A note on the aggregation of party systems', in *Western European Party Systems*, Peter H. Merkl (ed), New York, 515-520.
- Pedersen, M. 1979. 'The dynamics of European party systems: changing patterns of electoral volatility'. *European Journal of Political Research* 7, 1-26.
- Pedersen, M. 1980. 'On measuring party system change: a methodological critique and a suggestion'. *Comparative Political Studies* 12, 387-403.
- Powell, G. B. 1980. 'Voting turnout in thirty democracies: partisan, legal, and socio-economic influences', in *Electoral Participation: a Comparative Analysis*, R. Rose (ed), London, 5-34.
- Przeworski, A. 1975. 'Institutionalization of voting patterns, or is mobilization the source of decay?', *American Political Science Review* 69, 49-67.
- Rae, D. W. 1971. *The Political Consequences of Electoral Laws*. New Haven.
- Rokkan, S. & Meyriat, J. (eds) 1969. *International Guide to Electoral Statistics*, Paris.
- Rose, R. & Urwin, D. W. 1970. 'Persistence and change in Western party systems since 1945'. *Political Studies* 18, 287-319.
- Sani, G. & Sartori, G. 1980. Polarization, fragmentation and competition in Western democracies (mimeo).
- Sartori, G. 1966. 'European political parties: the case of polarized pluralism', in *Political Parties and Political Development*, 137-176.
- Sartori, G. 1976. *Parties and Party Systems: a Framework for Analysis*. Volume 1, Cambridge.
- Sigelman, L. & Yough, S. N. 1978. 'Left-right polarization in national party systems: a cross-national analysis'. *Comparative Political Studies* 11, 355-379.
- Steed, M. 1979. 'France', in *Political Parties in the European Community*, S. Henig (ed), London, 51-89.
- Taylor, M. & Herman, V. M. 1971. 'Party systems and government stability'. *American Political Science Review* 65, 28-37.
- Voigt, W. 1960. 'Ergebnisse der Wahlen und Volksabstimmungen', in *Südosteuropa-Handbuch: Griechenland*, Göttingen, 663-677.