Maurice Duverger's *Political Parties*, written more than three decades ago, remains the most prominent source of hypotheses on parties and party systems. Although many years have passed since its publication, no one has formalized Duverger's main hypotheses on political parties and subjected them to empirical test. This article identifies Duverger's key concepts on party structure, links the concepts in 19 formal bivariate propositions, operationalizes the concepts using data from a worldwide sample of 147 parties in 53 countries, and tests all 19 propositions. Twelve are supported by the cross-national empirical test. Interrelationships among these 12 bivariate propositions are shown in a causal diagram, and suggestions are made for moving beyond Duverger's bivariate thinking to more powerful multivariate theorizing about the causes and consequences of party structure.

FORMALIZING AND TESTING DUVERGER'S THEORIES ON POLITICAL PARTIES

KENNETH JANDA Northwestern University

DESMOND S. KING University of Edinburgh

aurice Duverger's Les Partis Politiques (1951),¹ emerged as one of the most influential books in the political parties literature soon after he wrote it three decades ago. Widely recognized as a "classic" study (Lawson, 1976: 235), a "pathbreaking work" (Maisel and Cooper, 1978: 8), and a "landmark" piece in the comparative study of political parties (Mayer, 1972: 216), Political Parties has also been described as the "most ambitious" attempt at creating party theory (Schlesinger, 1968: 4). Despite the time that has elapsed since its publication, no work in party theory has replaced Duverger's classic, which still dominates the ill-formed field of party theory (Sartori, 1976: x).²

COMPARATIVE POLITICAL STUDIES, Vol. 18 No. 2, July 1985 139-169 © 1985 Sage Publications, Inc.

Duverger's thinking underlies much contemporary theory of political parties, especially that explaining the relationship between the nature of the electoral system and the number of parties in the party system. Riker (1982) recently recounted the modern studies inspired by Duverger's "law" (that the simple-majority single-ballot voting rule favors the two-party system) and its accompanying "hypothesis" (that simple-majority with a second ballot and proportional representation both favor multipartism). Despite great attention given to clarifying and verifying some of Duverger's theories, there has as yet been no comprehensive attempt to formalize and test the bulk of his propositions. These are the objectives of this article. We will first formalize Duverger's major propositions and state them as bivariate hypotheses stating relationships among party traits. These hypotheses will then be tested with data from the International Comparative Political Parties (ICPP) Project (see Janda, 1979a, 1980).

These data are appropriate to our purposes, for they were originally collected in part to validate Duverger's theories while conducting the first comprehensive, empirically-based survey of political parties across the world. The full data set pertains to 158 parties representing 53 countries selected at random from all major cultural-geographical areas. Parties were broadly defined as "organizations that pursue a goal of placing their avowed representatives in government positions" (Janda, 1980: 5). This definition includes both "competitive" and "noncompetitive" parties, matching Duverger's concern with all types of parties. His theories embraced not only competitive parties in democratic countries but also "totalitarian" parties and those in single-party systems and in developing countries.

All parties in the ICPP study operated from 1950 to 1962, during which the first and second editions of Duverger's book were published. The full data set deposited in the Inter-University Consortium for Political and Social Research (ICPSR) includes 111 variables.⁴ Only a few of the variables—those directly inspired by Duverger's conceptualizations—will be used here. Although the parties were scored separately on most variables for 1950-1956 and 1957-1962, we will mainly rely on data for 147 parties in the later period, when Duverger published his revised English edition of *Political Parties*. These parties are listed by region in the Appendix.

We wish to emphasize the relevance of this data set for testing Duverger's theories. His analysis and examples are couched in the same decade as the ICPP data, making for a more fitting test of his propositions than comparable (but nonexistent) data on contemporary political parties. Although data for 1957-1962 may not accurately reflect relationships existing among parties today, that is a separate issue. Our analysis should stimulate hypotheses about contemporary parties for testing when adequate data become available. Because Duverger's book is still central to party theory, testing its propositions on their own terms is important.

FORMALIZING DUVERGER'S THEORIES

Political Parties begins with an important introduction followed by more than 400 pages of text divided about equally into two books—one on party structure and the other on party systems. Duverger's theorizing about the effects of the electoral system on the number of parties occurs in Book II on party systems. Due to our interest in explaining interrelationships among traits of individual parties, we focus on Book I.

Attempts at "propositionalizing" the literature are notoriously difficult (see Alker and Bock, 1972: 385-388). Although Duverger uses more explicit theoretical statements than many party scholars, his writing is often vague about causal connections, inviting more than one interpretation of his meaning. There is also the problem of separating "important" from "unimportant" generalizations. The exacting reader could find at least a hundred propositions in Book I alone. We have instead sought to identify propositions at the core of Duverger's analysis, opting for theoretical coherence rather than exhaustion. Other scholars seeking to inventory Duverger's propositions will no doubt identify a somewhat different set, but we trust that there will be substantial overlap among the major propositions in our set and those in any other.

Our inventory of Duverger's theories assumes a familiarity with his concepts in *Political Parties*, and the less knowledgeable reader must refer to the book for adequate understanding of Duverger's thinking. His concepts will be operationalized using selected "basic variables" contained in the ICPP data set (Janda, 1979a) and described at length elsewhere (Janda, 1980: Part I). Our discussion will parallel headings in Duverger's table of contents.

INTRODUCTION: THE ORIGIN OF PARTIES

Duverger's introduction discusses party age, conditions of origin, and ideological orientation—three major concepts in his framework.

Year of Origin

Duverger notes that although parties came into being only over the last hundred years they already "function in most civilized nations" (p.xxiii). Table 1 reports the ICPP data on year of origin for a representative sample of parties in the 1950s and early 1960s. Over half the parties were formed after 1936. Party age, according to Duverger, is linked to conditions of origin and ideology.

Outside Origin

Contending that parties are "profoundly influenced by their origins" (p. xxiii), Duverger distinguishes those that have electoral or parliamentary origins from those formed by organizations or persons that lie "outside" the electoral and parliamentary framework (p. xxx). Duverger notes difficulties in treating this dichotomy rigorously. His discussion inspired the finer distinctions of the ICPP variable, outside origin. The higher the score on this ordinal variable, the more "outside" the conditions of origin. The distribution of all parties on their outside origin is shown in Table 2.

We can estimate the proportion of parties that were formed according to Duverger's crude distinction between inside and outside origins by dividing the scale in Table 2 between codes 4 and 5. Almost two-thirds of the world's parties in the 1950s were formed outside rather than inside the government.

Duverger (p. xxxvi) sees a link between the conditions of origin and the year of origin:

Electoral and parliamentary creation seems to correspond to an old type and extra-parliamentary creation to a modern type.

This produces our first hypothesis:

H1: Early Origin → Inside Origin

TABLE 1
Distribution of 158 Parties by Year of Origina

Year of Origin	Frequency	Percent
Prior to 1833	2	1
1833-1845	2	1
1846-1858	1	1
1859-1871	3	2
1872-1884	5	3
1885-1897	8	5
1898-1910	12	8
1911-1923	16	10
1924-1936	22	14
1937-1949	46	29
1950-1962	41	26

Total number of parties	158	100%

a. Basic variable 1.01 in the ICPP data set.

The ICPP data permit a direct test of this proposition, but we will refrain from testing it, or any other proposition, until we cover all of Duverger's major concepts on party traits and complete our propositional inventory.

- Cutside Origin 10, 100 : artics in 10 Cutay				
Percent	Code	Description of Coding Category		
6×	1	Formed by the incumbent chief executive to legitimate his leadership or consolidate his support.		
3	2	Formed by indigenous leaders for independence who emerged in control of the government at the end of foreign control without having wreatled control through revolution		
4	3	Formed by the chief executive to promote limited party competitition.		
21	4	Formed by groups of legislators currently holding office.		
6	5	Formed by other current government officials.		
11	6	Formed by prominent, respected private citizens.		
5	7	Formed by former governmental officials.		
24	8	Formed by leaders of major legal social organizations.		
6	9	Formed by leaders of minor social organizations.		
6	10	Formed by private citizens, no organizational roots.		
8	11	Formed by leaders of outlawed organizations.		

Formed by nationals of another country.

TABLE 2
Outside Origina for 156 Parties in ICPP Studyb

12

Ideology

2

Although Duverger does not expand on the concept of party ideology in his introduction, he does link origins with party types (Communist, Socialist, Labour, liberal, conservative, and rightist) in its concluding pages (pp. xxiv-xxxvii). We will credit this section for introducing ideology as a theoretical concept. The ICPP data offer thirteen indicators of party issue positions and several summary measures of party ideology. We will use the simplest summary measure, the four-point rating by the U.S. State Department, which classified parties as conservative to rightist, centrist, non-Communist Left, and Communist. ICPP parties in 1950-1962 distributed across these categories of party ideology as shown in Table 3.

a. ICPP basic variable 2.07.

b. Data were lacking for 2 parties.

Percent	Code	Description of Coding Category
		•
31%	1	Conservative to Right
26	2	Center
25	3	Non-Communist Left
19	4	Communist

TABLE 3
Ideological Classification^a for 101 Parties^b

Duverger (p. xxxvi) links leftist ideology to conditions of origin:

We find very few extra-parliamentary interventions before the birth of Socialist parties at the beginning of the century.

This yields the second hypothesis:

H2: Leftism → Outside Origin

Again, we can test this proposition directly with ICPP data but will postpone the test to the end of the article. These three concepts and two propositions are Duverger's major theoretical contributions in his introduction. We now move to his three major chapters in Book I, "Party Structure."

PARTY ORGANIZATION

Duverger distinguishes among parties of broad sociological "types"—"middle-class" parties of the nineteenth century (surviving

a. ICPP basic variable 5.14.

b. Data were missing for 46 parties in 1957-1962.

Percent	Code	Description of Coding Categories
0%	1	Membership is entirely indirect
6	2	Mainly indirect, but there are some direct members
4	3	About evenly divided between direct and indirect membership
3	4	Mainly direct, but there are some indirect members
69	5	Membership is entirely direct
18	6	There are no formal membership requirements

TABLE 4
Sources of Members^a for 117 Parties^b

as Conservative and Liberal parties); Socialist parties of continental Europe; and Communist and Facist parties (pp. 1-2). This typology is based on the narrower and more original concepts that he proposes in the subsections of this chapter.

Direct and Indirect Structure

In "direct" parties, party membership is a voluntary act of affiliation, whereas in "indirect" parties, membership comes with belonging to another organization—for example, labor unions or churches (pp. 5-6). Duverger makes much of this structural distinction, although he contends, "Direct parties are the rule, indirect parties the exception: that is to say the former are far more widespread than the latter" (p. 13). As shown in Table 4, the ICPP data confirmed his contention. Only about one party in ten had any arrangement for indirect sources of members.

Duverger attempts to explain why some parties choose the rare indirect form of organization. His analysis concentrated on organizational differences between Socialist parties and again saw a relationship to the year of origin:

When the Trade Unions or Co-operatives developed before the Socialist party the natural tendency of the latter was to become

a. ICPP basic variable 7.02.

b. Data were missing on 30 parties for 1957-1962.

organized within their framework, on the basis of indirect participation: on the contrary, if the party developed before the Trade Unions it followed the classical method of direct participation [p. 16].

Hence the following hypothesis:

H3: Early Origin → Indirect Membership

By now our pattern of presentation should be clear: Each passage in Duverger that implies a proposition will be followed by a numbered hypothesis formalizing the proposition. Henceforth we will dispense with transitional comments introducing the formal hypothesis.

The Basic Elements

Duverger uses "basic elements" for the "component units of the party organization" (p. 17), which he classified as the rather small and ill-defined "caucus," the broader and more clearly defined "branch," the small but tightly defined "cell," and the "militia"—a cell-like unit with a military character (pp. 17-36). His cell and militia elements tend to overlap, however, eroding the structural distinction (pp. 38-39). In practice, Duverger tended to lump them together in theory construction. Because these basic elements can be conceived as points on a scale of party organization, we labeled this concept intensiveness of organization. The parties distributed as shown in Table 5.

Duverger sees strong connections between a party's ideology and its basic elements:

The middle class represented by . . . parties of the Right does not like the organization and collective action which accompany branches and cells. . . . It is therefore natural that it should always find its political expression within the framework of the caucus [p. 21]. . . . Branches were a Socialist invention: cells are a Communist invention [p. 31]. . . . The militia is a Fascist creation [p. 38] [but] . . . parties based principally on the militia are also very interested in cells and try to give them considerable importance in their organization [p. 39].

H4: Leftism → Intensiveness of Organization

21

Percent	Code	Description of Code
2%	1	National caucus: No institutionalized party organs exist below the national level.
0	2	Regional caucus: No organs exist below the regional level.
9	3	Constituency basis: No organs exist below the constituency, municipality, commune, or county level.
40.5	4	Branch basis: These are usually electoral subdivisions of the category above.
28	5	Precinct basis: Usually a subdivision of the above involving 1,000 voters or less; includes small villages.

Cell basis: Usually not defined geographically and

involves less than 100 members.

TABLE 5
Intensiveness of Organization^a for 121 Parties^b

General Articulation

Duverger is vague in his discussion of "articulation"—how the basic elements are linked together (p. 40). He draws several distinctions under this heading. The first is between "weak" and "strong" articulation. A party that does not specify the structure of and relationships between its affiliated units is weakly articulated (p. 41). We will call this property structural articulation. The evidence on structural articulation among the world's parties is given in Table 6.

Duverger (p. 46) believes that the year of origin and party ideology both left their mark on organizational articulation:

In the nineteenth century parties were based upon the caucus and weak articulation; today most Conservative, Moderate, and "Liberal" parties in Europe still display these two essential characteristics; the American parties are in like case.

H5: Early Origin → Structural Articulation (negative)

a. ICPP basic variable 8.02.

b. There were missing data for 26 parties.

	TABLE 6			
Structural	Articulation ⁸	for	135	Parties ^b

Percent	Code	Description of Coding Category
1×	o	Organization is vague, diffuse, or changeable, and no institu- titionalized organa can be identified
1	1	Identifiable organs exist only at the local level.
8	2	There is only one national organ with indeterminate procedures for selecting its members.
1	3	There is one national organ with prescribed procedures for selecting its members.
17	4	There are two or three major national organs with indeterminate procedures for selecting its members.
4	5	There are two or three major national organs with indeterminate selection procedures, but the functional responsibilities of the organs are relatively clearly specified.
8	6	There are two or three major national organs with prescribed selection procedures but indeterminate responsibilities.
10	7	There are two or three major national organs with prescribed selection procedures and specified responsibilities.
3	8	There are four or more major national organs with indeterminate selection procedures and specified responsibilities.
9	9	There are four or more major national organs with indetermi- nate selection procedures but specified responsibilities
15	10	There are four or more major national organs with prescribed selection procedures but indeterminate responsibilities.
24	11	There are four or more major national organs with prescribed selection procedures and specified responsibilities.

a. ICPP basic variable 8.01.

Socialist parties everywhere are more strongly articulated than Conservative parties, whatever the electoral system [p. 45].

H6: Leftism → Structural Articulation

Another aspect of articulation is "vertical" versus "horizontal" linkage (p. 47). The vertical link is "that which joins two bodies subordinate the one to the other" (i.e., local branches to municipal

b. Data were missing on 12 parties in 1957-1962.

units to state bodies to national organs), whereas the horizontal link is "that which joins two bodies on the same level" (p. 48). A rigid system of vertical linkage will not allow horizontal linkages, thus producing rigid compartmentalization within the party. Duverger says,

There is frequent confusion between vertical linkage and centralization, and between horizontal linkage and decentralization. . . . Vertical links and horizontal links define ways of co-ordinating the basic elements of which the party is made up; centralization and decentralization define the way in which power is distributed amongst the different levels of leadership [p. 52].

Duverger cites four types of decentralization: local, ideological, social, and federal. Local decentralization corresponds to the generally accepted notion that "the local leaders of the party come from the bottom; they enjoy wide powers; the centre has little control over them; the fundamental decisions are taken by them" (p. 53). *Ideologi*cal decentralization grants autonomy to ideological "wings" or "tendencies" in the party by recognizing separate organizations (pp. 53-54). Social decentralization grants special status to social or economic groups within the party (p. 54). Federal decentralization recognizes the federal structure of the state in the organizational structure of the party (p. 55). After elaborating this typology of decentralization. Duverger makes little use of it in his theories, which tend to refer to centralization in general. We have combined his ideas of vertical linkage and local and federal decentralization into a more general concept of nationalization of structure. Evidence for this measure of party centralization appears in Table 7.

Only about one-quarter of the parties demonstrated the hierarchical organization that Duverger required of a centralized party. Duverger (p. xxxiv) sees party centralization as a consequence of outside origin and leftism:

Parties which have come into being outside parliament offer a marked contrast with parties arising within the electoral and parliamentary cycle. To begin with they are generally more centralized than the latter.

H7: Outside Origin → National Centralization

TABLE 7 Nationalization of Structure ^a for 120 Parties				
Description of Code Category				

Percent	Code	Description of Code Category
1*	0	Local organizations are the only discernible structural elements.
1	2	There are regional organs that exercise authority over local ones, but there are no formal national organs
17.5	3	There are national party organs that provide for formal formal representation of regional organs, but they are not effectively superior to the regional ones.
11	4	The national organs are more powerful than regional or local ones, but the national organs themselves constitute competing power centers.
46	5	The party hierarchy runs from a single national organ through regional ones down to local organizations.
24	6	The top national organs act directly on local ones without interposing regional organizations.

a. ICPP basic variable 9.01.

Labour parties are less centralized than Communist parties; parties created by capitalist groups are less centralized than Labour parties, and so on [p. xxxiv].

H8: Leftism → National Centralization

PARTY MEMBERSHIP

The Concept of Membership

For Duverger, the concept of membership goes beyond the simple notion of "supporter" and is linked with the evolution of parties from "cadre"—a loose grouping of notables formed to contest elections—to the "mass" organization of enrolled dues-paying members (pp. 63-64). He sees continued evolution toward a new conception, the "devotee" party, "more open than cadre parties, but more closed than

b. Data were missing for 27 parties for 1957-1962.

Percent	Code	Description of Coding Categories
16%	0	No membership requirements.
6	1	Merely register as a member.
13	2	Only pay dues to the party.
51	3	Register and pay dues.
2	5	Register and go through probationary period.
12	7	Register, pay dues, and go through probationary period.

TABLE 8
Membership Requirements^a for 112 Parties^b

mass parties" (p. 70). This broad party typology, once again, rests on some narrower concepts, particularly membership criteria. "Only in mass parties is there any formal machinery of enrolment, comprising the signing of a definitive undertaking and the payment of an annual subscription" (p. 71).

Whereas mass and even cadre parties tend to be "open" to new members, devotee parties tend to be "restricted," insisting on sponsorship, decision for admission, and even a probationary period (p. 72). We interpreted the underlying variable as severity of membership requirements. The distribution of parties on this variable is given in Table 8.

Nearly two-thirds of the parties for which we have data required that their members register and pay dues. Of these, 12% also required a probationary period. Duverger relates party membership and the severity of membership requirements to leftist ideology:

The distinction between cadre and mass parties also corresponds approximately with the distinction between Right and Left, Middle-class and Workers' parties [p. 67]. . . . This form of enrolment, with a decision of the party and with sponsors, is the usual procedure laid

a. ICPP basic variable 11.01.

b. We lacked data for 35 of 147 parties in 1957-1962.

Percent	Code	Description of Coding Category	
30%	0	Nominal: most members belong in name only; also used for perties without formal members.	
10	1	Members are about equally nominal or marginal.	
19	2	Marginal: most members have performed some minimal activity for the party.	
10	3	Members are about equally marginal and participant.	
11	4	Participants: most members occasionally perform activities for the party.	
8	5	Members are about equally participants and militants.	
12	6	Militants: most members constitute a ready source of manpower for party activities.	

TABLE 9
Membership Participation^a for 91 Parties^b

down in the constitutions of Socialist and Communist parties [p. 72]. . . . It is a paradox that the parties based upon the poorest classes should have adopted the highest [dues] subscriptions [p. 73].

H9: Leftism → Membership Requirements

He also sees a general interrelationship between membership requirements and other organizational concepts:

Cadre parties correspond to the caucus parties, decentralized and weakly knit; mass parties to parties based on branches, more centralized and more firmly knit. . . . As for parties based on cells or upon militia, they too are mass parties, but less definitely so [p. 67].

- H10: Membership Requirements → National Centralization
- H11: Membership Requirements → Intensiveness of Organization
 - H12: Membership Requirements → Structural Articulation

a. ICPP basic variable 11.02.

b. Data were missing for 56 parties in 1957-1962.

Degrees of Participation

Party "electors" merely vote for party candidates in elections. "Supporters" vote for the party and aid it financially or otherwise. "Militants" direct its organization and activities (p. 90). "Members" (in parties that have members) as a group participate more than supporters but less than militants. Because Duverger says that "fruitful comparisons can be made between members on the one hand and each of the other three groups on the other" (p. 91), we view this concept as membership participation, the proportion of members that participate as "militants." The data in Table 9 show that the majority of members in most parties are not militants. Duverger again saw the influence of the past on membership participation:

The old parties based on caucuses with their weak, decentralized organizations which retain the characteristics of the early *ad hoc* parties and in which members are neither very numerous nor very enthusiastic [p. 62].

H13: Early Origin → Membership Participation (negative)

Nature of Participation

Duverger shifts from the degree of participation to its "kind," conceived in terms of the party's penetration of the member's private life. Again, Duverger establishes broad typologies of "totalitarian" versus "restricted" parties (pp. 116-117) and also applies the sociological categories of "community," "association," and "order" (pp. 124-126). These typologies do not mesh well for Duverger, and he recognizes "certain difficulties" in his analysis of the nature of participation (p. 116). In modern terminology, we would say that he was dealing with different motivational incentives for participation. The ICPP study scored parties on three motivational incentives—purposive, material, and personalist—but for this analysis, the most appropriate variable is party doctrinism, which assesses how "religiously" members rely on established principles of values, belief, and action. Reliance on doctrinism is reported in Table 10.

Duverger attributes the creation of doctrinal parties to the rise of Marxist thought:

TABLE 10			
Reliance on	Doctrinism ^a for	139 Partiesb	

Percent	Code	Description of Coding Categories
51	0	There is no discernible written literature to which party members refer to justify party activities.
27	1	There is a body of literature that embodies party doctrine, and references to it are common but not continual.
12	2	There is a body of literature that embodies party doctrine and party members refer to it continually.
10	3	There is a body of literature embodying party doctrine, party members refer to it continually, and the party has a special role for the authoritative interpretation of doctrine.

a. ICPP basic variable 11.05.

By replacing the Liberal idea of party as founded on ideology or interests by the concept of the party as the political expression of a social class, Marxism has substituted a Community theory of party for the earlier Association theory" [p. 129].

H14: Leftism → Doctrinism

At all events a regular correlation is to be observed between the totalitarianism of parties and the structure based on cells and militia with vertical links and strongly centralized articulation: the Communist and Fascist parties provide a striking example of this concomitance [p. 124].

H15: Doctrinism → National Centralization

PARTY LEADERSHIP

The last chapter of Book I on party structure advances several major concepts dealing with party leadership.

b. Data were missing on 8 parties for 1957-1962.

Percent	Code	Description of Coding Categories	
2*	0	No national leader can be identified	
0	1	Leader is selected by vote of party identifiers or supporters	
1	2	Selected by vote of party members (smaller group than above)	
25	3	Selected by national convention or congress of delegates from regional or local party organizations	
8	4	Selected by parliamentary delegation of the party	
6	5	Selected by a national convention of delegates appointed by the national party organization	
6	6	Selected by national executive committee or party council subject to ratification by lower levels of party	
25	7	Selected by national executive committee without party review	

TABLE 11
Centralization in Leadership Selection^a for 126 Parties^b

27

The Selection of Party Leaders

Duverger (p. 135) analyzes methods for selecting leaders as follows:

Selected by his predecessor, includes also parties that have not established methods for transferring leadership

Officially the party leaders are almost always elected by the members and given a fairly short period of office, in accordance with democratic rules. . . . In practice the democratic system of election is replaced by autocratic methods of recruitment: co-option, appointment by the central body, nomination, and so on.

Duverger's thoughts are captured in the ICPP variable, centralization in leadership selection, as shown in Table 11.

Data on parties across the world tend to uphold Duverger's contention that party leaders emerge from autocratic methods of selection. Duverger (p. 135) links undisguised autocracy in leadership selection with rightist doctrine:

a. ICPP basic variable 9.02.

b. Data were missing for 21 parties in 1957-1962.

Percent	Code	Code Description of Coding Categories	
31	1	Two-thirds or more of the party's leaders come from a single institutional sector of society: labor, farming, education, business, nobility, religion, military, etc.	
38	2	Two-thirds or more of the leaders come from two sectors.	
13	3	About half of the leaders come from one sector.	
5	4	About half of the leaders come from two sectors.	
13	5	At least two-thirds of the leaders come from two sectors.	

TABLE 12
Diverse Sources of Leaders^a for 125 Parties^b

In Fascist or pseudo-Fascist parties . . . the *fuhrer prinzip* replaces election as the ground of legitimacy.

H16: Leftism → Centralized Leader Selection (negative)

Oligarchy in Leadership

"The leadership of parties tends naturally to assume oligarchic form," says Duverger (p. 151). "A veritable 'ruling class' comes into being that is more or less closed; it is an 'inner circle' into which it is difficult to penetrate." Here Duverger is not speaking of the top party leadership but of the leadership corps, which he often equates with parliamentary candidates and conference delegates. The ICPP variable that corresponds most closely to his conceptualization is sources of leaders, which looks to the social representation of parliamentary candidates. The data and codes are given in Table 12.

Duverger advances an unusual hypothesis about the cause of social diversity in party leadership:

It is not at all certain that the social make-up of a group of elected leaders is more akin to the mass of members than is the social makeup of an oligarchy of leaders recruited by autocratic methods: on the

a. ICPP basic variable 7.03.

b. Data were missing on 22 parties in 1958-1962.

Percent	Code	Description of Coding Categories
4×	1	Leadership is clearly decentralized in more than five leaders who are not authoritatively binding apokesmen.
10	2	Leadership is decentralized in from 1 to 5 leaders who are not authoritatively binding spokesmen.
26	3	Leadership is collectively centralized in a group of more than 5 leaders who make authoritative decisions.
13	4	Leadership is collectively centralized in a group of 3 to 5 leaders who make authoritative decisions.
7	5	Leadership is shared by 2 individuals who make decisions.
39	6	Leadership is exercised by 1 individual who can personally

commit the party to binding courses of action.

TABLE 13
Leadership Concentration^a for 135 Parties

contrary, there is every reason to suppose that the opposite is true. Country folk do not choose country folk as their parliamentary representatives, but seem to prefer lawyers, because they consider them to be more capable of defending their interests in parliament [p. 158]. . . . The result is that promotion [circulation] of the elite is possible only in parties with a considerable degree of centralization, in which the leaders can "impose" the young upon the party, or else in very weakly organized parties . . . in some exceptional circumstances [p. 168].

H17: National Centralization → Leadership Diversity

The Authority of the Leaders

Duverger sees two essential facts dominating the evolution of parties: "the increase in the authority of the leaders and the tendency towards personal forms of authority" (p. 168). His concerns about the powers of leadership and the size of the group that exercises those powers can be summarized in the ICPP concept of leadership concentration, as shown in Table 13.

a. ICPP basic variable 9.08.

b. Data were missing on 12 parties for 1957-1962.

Duverger's observations about the increase in personal authority of party leaders seems to be supported by the ICPP data. Table 13 shows that nearly 40% of the world's parties in 1957-1962 were controlled by individual leaders. This compares to data for 1950-1956 (not shown), when only 35% of the parties were dominated by a single leader. Duverger attributes the growth of personalized leadership to the emergence of modern organizational forms:

On the whole the advent of authoritarian parties coincides with the advent of mass parties [p. 169]. . . . The parties of the masses had a natural tendency to be disciplined parties [p. 171].

H18: Membership Requirements → Leadership Concentration

Party Leaders and Parliamentary Representatives

Contrary to democratic theory, "in many parties there can be seen a tendency of party leaders to give orders to the parliamentary representatives in the name of the militant members" (p. 182). Duverger discusses various techniques for ensuring conformity to party policy, which we will incorporate into a broader concept of administering discipline. Parties' tendencies toward administering discipline can be seen in Table 14.

Slightly more than half of the world's parties grant disciplinary power to the national organs outside of parliament. Duverger hypothesizes that variations in the relationship between party leaders and representatives can be explained by party ideology. He contends that the representatives' domination of the organization

applies especially to parties of the old type, founded on caucuses, which are at the same time parties of the "middle-class" type, that is to say conservative and center parties [p. 185]. [In Socialist parties] there exists a state of tension, if not equilibrium, between the internal leaders and the parliamentary representatives [p. 190]. . . . With the Communist and Fascist parties we reach the last stage of the development: the parliamentary representatives here do not control the party, the party controls the representatives [p. 197].

H19: Leftism → Administering Discipline

Percent	Code	Description of Coding Categories
29.5%	0	Either there are no discernible techniques of discipline or responsibility is diffused throughout the party
0	1	Local organizations have disciplinary responsibilities
9	2	Regional organizations have disciplinary responsibilities
10	3	The parliamentary party organization administers discipline
52	4	The national executive, party council, or party leader administers the major disciplinary techniques

TABLE 14
Administering Discipline^a Within 112 Parties^b

Our analysis of *Political Parties* has linked fourteen of Duverger's concepts to empirical data collected on a worldwide sample of political parties. With the exception of party ideology, all of these concepts were explicitly introduced by Duverger in the table of contents, and they both match and exhaust his ten subheadings for the three chapters in Book I, "Party Structure." Although it is always problematic to prepare a reliable inventory of another scholar's propositions, this effort has been helped substantially by Duverger's own desire for order and explicitness. Other researchers might produce a somewhat different set of Duverger's hypotheses, but it is not likely to vary much from ours.

TESTING DUVERGER'S THEORIES

Duverger offered extensive evidence in support of his theories, but it consisted largely of examples carefully selected to illustrate his points. Although numerous scholars, most notably Rae (1971), have tested his theories relating the number of parties in a system to its electoral framework, no one has previously conducted a comprehensive test of his theories of party traits. Such a test was precluded by the absence of suitable data on a wide variety of political parties.

a. ICPP basic variable 9.07.

b. Data were missing for 35 parties in 1957-1962.

Duverger's theoretical scope extended across time, space, and politics. His theories could not adequately be tested solely with data on competitive parties in contemporary Western democracies but required observations on subversive and ruling parties in underdeveloped countries and Communist societies. The ICPP data provide the needed coverage.

We will limit our testing to the 14 major party-level concepts in Tables 1 to 14. Our approach will be the straightforward one of computing simple product-moment correlations⁶ between Duverger's concepts as represented by the ICPP variables and as linked in our numbered propositions. The results of our tests are summarized in Table 15.

The empirical tests of Duverger's hypotheses are, in the main, strongly supportive of his stated objective "to formulate hypotheses capable of guiding the future research which will one day permit the formulation of authentic sociological laws" (p. xiv). Of the 19 bivariate generalizations we identify and test, 12 are confirmed at the .05 level of significance.

This substantial confirmation of Duverger's propositions certainly adds to the weight of his work: He conceptualized many important traits of political parties and accurately sketched the contours of their interrelationships. In particular, his emphasis on the importance of party ideology as a determinant of other organizational characteristics is well validated. Leftist ideology correlates as hypothesized with outside origin (H2), intensity of organization (H4), structural articulation (H6), national centralization (H8), membership requirements (H9), doctrinism (H14), and the administration of intraparty discipline (H18). The central influence of party ideology on organizational characteristics can be seen in the theoretical diagram in Figure 1.

The theoretical diagram depicts the linkages among the hypotheses that achieved significance in Table 15. Each link is labeled with the number of the corresponding proposition. Note that this diagram is not properly a "causal model" of Duverger's theories, for it does not include any environmental factors that Duverger discussed in Book II:

Party systems are the product of many complex factors, some peculiar to individual countries, others general. Amongst the first may be cited tradition and history, social and economic structure, religious beliefs, racial composition, national rivalries, and so on [p. 203].

TABLE 15
Summary of Emirical Tests of Duverger's Hypotheses^a

	Number of Parties	Corre- lation	Support for Hypothesis at .05 sig.
H1 Early Origin → Inside Origin	156	02	по
H2 Leftism Outside Origin	101	.57	yes
H3 Early Origin → Indirect Membership	20b	.24	no
H4 Leftism → Intensive Organization	88	.53	yes
H5 Early Origin → Structural Articulation (-)	135	35	уев
N6 Leftism → Structural Articulation	98	.18	yes
H7 Outside Origin \longrightarrow National Centralization	119	01	по
H8 Leftism → National Centralization	86	.24	yes
H9 Leftism Membership Requirements	79	.54	yes
H10 Membership Requirements> Nat. Centrlztn.	106	.32	yes
H11 Membership Req. \longrightarrow Intensive Organization	105	.51	yes
H12 Membership Req. → Structural Articulation	110	.32	уев
H13 Early Origin> Membership Participation	(-) 91	.08	no
H14 Leftism → Doctrinism	100	.64	yes
H15 Doctrinism National Centralization	117	.28	yes
H16 Leftism → Centralized Leader Select. (-)	86	.38	no
H17 Nat. Centralization Leadership Diversit	y 104	.00	no
H18 Mem. Requits. → Leadership Concentration	106	.05	по
H19 Leftism → Administering Discipline	82	.40	yes

a. All tests are one-tailed.

Supporting Duverger, Harmel and Janda (1982) have shown that country environment accounts for large amounts of variance in party traits: 68% of party centralization, 58% of legislative cohesion, and 57% of organizational complexity. Therefore, the theoretical diagram

b. Proposition limited to Socialist parties only.

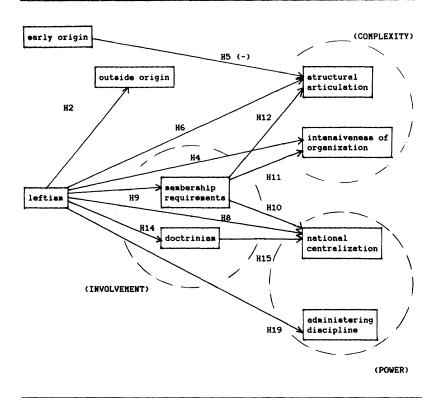


Figure 1: Causal Diagram of Supported Hypotheses

in Figure 1 should be regarded as a heuristic portrayal of the interrelationships among party traits rather than a formal causal model.

Figure 1 is as significant for what it excludes as well as what it includes. In his introduction, Duverger stressed the interrelationship of early origin and subsequent organizational features. Here, Duverger appears to have misplaced his emphasis. Of the seven bivariate propositions lacking statistical significance, three (H1, H3, H15) are concerned with the impact of early origins. However, Duverger's fourth proposition about early origins (H5) is supported; the earlier the party's origin, the weaker the linkage among the party's national organs. One possible reason for the weak explanatory power

of year of origin is the relatively small number of parties classified as forming "early" (see Table 1).

Duverger's other distinction in party origin—between being formed inside or outside of parliament—has been heavily used by later theorists. Bespite its appeal, this distinction produced mixed results. The proposition that relates leftism to outside origin (H2) is strongly upheld. However, the ones that relate outside origin to centralization (H7) and to year of origin (H1) are not.

Collectively then, four of Duverger's principal propositions involving both concepts of party origin fail to be supported empirically. Despite Duverger's concern with the early conditions of party origin, it appears that party structure either is not determined by conditions of origin or is able to adjust to changing environmental factors in the years afterward. Finally, none of Duverger's three propositions relating to leadership (H16, H17, H18) are supported by the data. A tendency toward greater centralization does not result in increased diversity of leadership, and leadership concentration does not appear to be a consequence of membership in mass parties. Although party ideology is significantly related to centralization in methods of leader selection, the direction is counter to Duverger's hypothesis. Centralized selection is a feature of leftist, not rightist, parties.

MOVING BEYOND DUVERGER'S BIVARIATE THEORIES

As befits an early attempt at building party theory, Duverger worked at a relatively low level of abstraction in conceptualizing party characteristics. His concepts of party "membership," "degree of participation," and "nature of participation," for example, were proposed as *distinct* facets of party organization although he recognized some commonality among the concepts. One promising strategy for moving beyond Duverger's theoretical framework involves rising in the "ladder of abstraction" (Sartori, 1970: 1040), moving from low-level "observable" empirical concepts to higher-level abstract concepts. In this approach, the observable variables are viewed as multiple but indirect indicators of more fundamental dimensions of party properties. This reduces the detail in the organizational landscape and encourages the theorist to construct more encompassing and, therefore, more powerful theory.

This broader approach to conceptualizing political parties can be illustrated with reference to Duverger's notions of party membership and participation and their treatment in the ICPP Project. Duverger's concepts were operationalized by the three "low-level" variables: membership requirements, membership participation, and doctrinism. To this point, these variables have been linked closely to Duverger's original conceptualization. In truth, they are viewed in the ICPP Project as three of five indirect indicators of the more abstract concept of members' *involvement* in party activities. Together with the other two indicators, material incentives and purposive incentives, these variables constitute a five-item scale of involvement with reliability of .78, as measured by Cronbach's alpha (Janda, 1980: 154-155).

Such a conceptual hierarchy—abstract concepts embracing observable indicators—was employed throughout the ICPP study, in which most of Duverger's variables function as multiple indicators of more fundamental party properties. Thus, structural articulation and intensiveness of organization, drawn from Duverger's discussion of party articulation, serve as two of six items in a scale of "organizational complexity" with reliability of .82 (Janda, 1980: 152). Similarly, national centralization, centralization in leadership selection, leadership concentration, and administering discipline are four of eight items in a "centralization of power" scale with reliability of .83 (Janda, 1980: 153-154).

The dashed circular lines in Figure 1 encompass Duverger's concepts according to their places in the ICPP conceptual framework as indirect indicators of involvement, organizational complexity, and centralization of power. This is not the place to expand on the theoretical utility of this more abstract conceptualization of party characteristics, which has guided several theoretical studies (Harmel, 1981; Harmel and Janda, 1982; and Janda and Gillies, 1983). Given our decision to formalize Duverger's theories on party *structure* rather than his more prominent theories on party *systems*, it is more relevant to defend the theoretical importance of organizational factors in studying party politics.

We lack space to discuss properly the importance of organizational theory to the study of parties, which is examined at length elsewhere (Janda, 1983). Only two studies using the ICPP organizational concepts will be cited here. One investigation (Janda, 1979b) into the relationship between party structure and party performance found

that about 30% of the variance in parties' "electoral success" could be attributed to their organizational complexity, centralization, and involvement. The same three concepts explained from 33% to 40% of the variance in their "breadth of activities" (e.g., propagandizing and providing for members' welfare), and about half of the variance in parties' voting cohesion in effective legislatures could be explained by the same concepts plus a "factionalism" scale.

The other study (Janda and Gillies, 1983) found that parties in different regions of the world differed substantially in organizational characteristics. Moreover, 90% of the parties could be correctly classified into the Western, Eastern, or Third "worlds" according to two discriminant functions based primarily on organizational concepts. The evidence for studying party structure clearly seems to justify the attention it was given by Duverger.

SUMMARY AND CONCLUSION

As stated at the beginning of this article, we undertook this study primarily because of the central role that Duverger's book has assumed in the study of political parties. He was quite explicit about his main objective for *Political Parties*:

The aim of this book is to break out of the circle and to sketch a preliminary general theory of parties, vague, conjectural, and of necessity approximate, which may yet serve as a basis and guide for detailed studies [p. xiii].

To date, Duverger's outline of a "general theory" has remained unsurpassed and, more surprisingly, untested. This article addresses the testing of his theories dealing with party traits using data collected for the purpose. On balance, we substantiated most of Duverger's bivariate propositions about party traits, supporting the attention that his work has been given in the parties literature.

Future research on party theory might undertake the task of inventorying and testing other propositions by Duverger about party systems in Book II. But this work should not sidetrack the more important job of moving *beyond* his low-level bivariate theorizing to

construct more general and integrated theory of parties that incorporates both party level and system level factors in explaining the causes and consequences of party structure. Surely this is what Duverger intended in writing *Political Parties*.

APPENDIX

147 Parties in Study Listed by Regions

ANGLO-AHERICAN (16 parties)	U.S. DEMOCRATIC U.S. REPUBLICAN BRITISH LABOUR BRITISH CONSERVATIVE AUSTRALIAN LABOR AUSTRALIAN LABERA AUSTRALIAN LABERA AUSTRALIAN LABERA AUSTRALIAN COUNTRY NEW ZEALAND NATIONAL NEW ZEALAND NATIONAL NEW ZEALAND ANTIONAL NEW ZEALAND ANTIONAL GANADIAN LIBERAL GANADIAN LIBERAL GANADIAN LIBERAL GANADIAN LOPENDO CANADIAN SOCIALIST AUSTRIAN SOCIALIST AUSTRIAN PEOPLES AUSTRIAN VOU-FPO FRENCH GRENCH MRP FRENCH GANICAL SOC. FRENCH GROUNDIST FRENCH GROUNDIST FRENCH GROUNDIST FRENCH GROUNDIST FRENCH GROUNDIST W. GERMAN DDD W. GERMAN DDD W. GERMAN DDD GREK LIBERAL GREEK EDE GREEK EDE GREEK EDE GREEK EDE GREEK EDE GREEK EDE GREEK EDA DORT. NATIONAL UNION	CENTRAL AMERICA (12 parties)	CUBAN PSP-COMMUNIST DOMINICAN PARTY SALVADOREAN PRUD SALVADOREAN PAR GUATEHALAN HAN GUATEHALAN HAN GUATEHALAN PRON GUATEHALAN PRON GUATEHALAN PRON GUATEHALAN LABOR MICARAGUAN PCN
WESTERN EUROPE (16 perties)		(16 parties)	BURNESE STABLE AFPFL BURNESE CLEAN SPPFL BURNESE BUPP, NUF CAMBODIAN SAÑGKUM INDIAN CONGRESS INDIAN COMHUNIST INDONESIAN PNI INDONESIAN PNI INDONESIAN KI INDONESIAN KI INDONESIAN WAL IND
		FASTERN FIRODE	
SCANDINAVIA-BENELUX (22 parties)		(10 parties)	ALBANIAN LABOR BULGARIAN COMHUNIST BULGARIAN MAT UNION E. GERMAN SED E. GERMAN CDU E. GERMAN DED E. GERMAN DED E. GER DEN DESANTS HUNGARIAN SOCIALIST
		N. AFRICA-MID. EAST (14 perties)	USSR CPSU SUDANESE NUP SUDANESE UMMA SUDANESE UMMA SUDANESE PROG SOCIAL LEBAMESE PROG SOCIAL LEBAMESE COMSTITUST LEBAMESE CASTATA-EB LEBAMESE MATIONAL IRANIAN PEOPLES IRANIAN MATIONAL IRANIAN TUDEH IRANIAN MUF TURKISH REPUBLICAN TURKISH DEMOCRATIC
SOUTH AMERICA (18 parties)	RICA ECUADORIAN VELASQUIS LICA) ECUADORIAN COMSERVA ECUADORIAN RAD LIBER ECUADORIAN SOCIALIST ECUADORIAN SOCIALIST ECUADORIAN COLORADOS PARAGUAYAN FEBRERIST	WEST AFRICA (9 parties)	DAHOMEAN PRD-PMD DAHOMEAN WED DAHOMEAN RDD GHAMAIAN RDP GHAMAIAN UNITED GUIMEAN DEMOCRATIC VOLTAZUE DER. UNION TOGGLESE CUT TOGGLESE CHT. UNION
	PARROUNIAM LIBERAL PERUVIAM UND PERUVIAM GRIST DEM PERUVIAM GRIST DEM PERUVIAM GRIST PERUVIAM GR	CENTRAL + EAST AFR. (14 perties)	C.A.R. MESAN CHADIAN PROGRESSIVE CHADIAN SOCIAL ACT. CONGO-BRAZZ UDDIA CONGO-BRAZZ USA KENYA AF. NAT. UNION KENYA AF. NET. UNION KENYA AF. DEH. UNION KENYA AF. DEM. UNION KENYA MENANI UGANDA DEMOCRATIC UGANDA KABAKA YEKKA

NOTES

- 1. (Paris: Armand Colin, 1951.) The first English edition of *Political Parties* was published in 1954. References below will be to the second edition, published in 1963 by John Wiley. Excerpts from Maurice Duverger's *Political Parties* are reprinted by permission of Methuen and Co.
- 2. For a dissenting view of the present value of Duverger's work, see Daalder (1983: 10-12).
- 3. See Janda (1980, chaps. 1 and 2) for more on the definition of "party," sampling criteria, geographical regions, and method of data collection.
- 4. Unfortunately, the table of contents for the ICPSR codebook (Janda, 1979a) is confusing. Write Janda for a clearer guide to the variables in the data set.
- 5. A similar rating done by experts in the Soviet Union correlates .86 with the U.S. ratings; see Janda (1982).
- 6. See Hensler and Stipak (1979) and Henry (1982) on using this coefficient with ordinal data. We agree with Bohrnstedt and Knoke (1982) that it is suitable "for data where there is clearly an underlying continuous variable, even if it is measured only at the discrete level" (1982: 304).
- 7. But the test of H3 is weakened by using "year of origin" in place of the sequence in which trade unions and labor parties were formed in each country. This would have required different data than readily available.
- 8. See, for example, LaPalombara and Weiner (1966), especially chapter 1, where Duverger's conceptualization of party origins lies at the core of their analysis. The index also lists 20 citations to Duverger.
- 9. See Harmel and Janda (1982) for a general framework for analyzing environmental effects on party structure.

REFERENCES

- ALKER, H. R., Jr. and P. G. BOCK (1972) "Propositions about international relations," in J. A. Robinson (ed.) Political Science Annual, Volume 3, 1972. Indianapolis: Bobbs-Merrill.
- BORHNSTEDT, G. W. and D. KNOKE (1982) Statistics for Social Data Analysis. Itasca, IL: Peacock.
- DAALDER, H. (1983) "The comparative study of European parties and party systems: an overview," in H. Daalder and P. Mair (eds.) Western European Party Systems. Beverly Hills, CA: Sage.
- DUVERGER, M. (1963) Political Parties. New York: John Wiley. (originally published 1951)
- HARMEL, R. (1981) "Environment and party decentralization: a cross-national analysis." Comparative Pol. Studies 14: 75-99.
- HARMEL, R. and K. JANDA (1982) Parties and Their Environments: Limits to Reform? New York: Longman.
- HENRY, F. (1982) "Multivariate analysis and ordinal data." Amer. Soc. Rev. 47: 299-307.

- HENSLER, C. and B. STIPAK (1979) "Estimating interval scale values for survey item response categories." Amer. J. of Pol. Sci. 23: 627-649.
- JANDA, K. (1983) "Cross-National measures of party organization and organizational theory." European J. of Pol. Research 11: 319-332.
- ———(1982) "Managing qualitative and quantitative information in the study of political parties." Social Sci. Information Studies 3: 113-129.
- ———(1980) Political Parties: A Cross-National Survey. New York: Free Press.
- ———(1979a) Comparative Political Parties Data, 1950-1962 (ICPSR study 7534).

 Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- ——and GILLIES, R. (1983) "How well does 'region' explain political party characteristics?" Pol. Geography Q. 2: 179-203.
- LaPALOMBARA, J. and M. WEINER. [eds.] (1966) Political Parties and Political Development. Princeton, NJ: Princeton University Press.
- LAWSON, K. (1976) The Comparative Study of Political Parties. New York: St. Martin's.
- MAISEL, L. and J. COOPER [eds.] (1978) Political Parties: Development and Decay. Beverly Hills, CA: Sage.
- MAYER, L. C. (1972) Comparative Political Inquiry. Homewood, IL: Dorsey.
- RAE, D. (1971) The Political Consequences of Electoral Laws. New Haven, CT: Yale University Press.
- RIKER, W. A. (1982) "The two-party system and Duverger's law: an essay on the history of political science." Amer. Pol. Sci. Rev. 76: 753-766.
- SARTORI, G. (1976) Parties and Party Systems. Cambridge: Cambridge University Press.
- ———(1970) "Concept misformation in comparative politics." Amer. Pol. Sci. Rev. 64: 1033-1053.
- SCHLESINGER, J. A. (1968) "Party units," in International Encyclopedia of the Social Sciences, Vol. 11. New York: Macmillan.

Kenneth Janda is Professor of Political Science at Northwestern University, where he has taught since receiving his Ph.D. from Indiana University in 1961. Most of his writings have been on computer applications in political research and comparative political parties. His most recent book is Parties and Their Environments: Limits to Reform? (1982, with Robert Harmel).

Desmond S. King is a Lecturer in Politics at the University of Edinburgh. He has a B. A. Moderatorship in Political Science from Trinity College Dublin (1979) and a Ph.D. from Northwestern University (1984) for which he completed a dissertation entitled "State Autonomy Under Advanced Capitalism: A Statist Analysis of Central State Penetration of Municipalities." His articles have appeared in Irish Studies in International Affairs and Global Perspectives.