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IN THE CROSS-NATIONAL ANALYSIS OF
POLITICAL PARTIES

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CONCEPTUAL EQUIVALENCE AND MULTIPLE INDICATORS IN THE
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by

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Introduction

This paper is divided into two parts. Part I inquires into the cross-cultural applicability of the concept of political party as a unit of analysis in comparative research. Part II investigates the conceptual equivalence of different variables that are advanced as common indicators of basic properties of parties across cultures. Both parts rely heavily on recent literature about concept formation and concept measurement in comparative politics. The outcome of Part I is the formulation of a concept of party thought to be generally applicable to cross-cultural research. The outcome of Part II is the presentation of seven sets of indicators that have satisfactorily withstood the first stage of testing for conceptual equivalence in measuring seven major concepts in the comparative analysis of political parties.

For the purposes of the Workshop on Indicators of National Development, both parts should be relevant, but in different ways. Part I lays the conceptual basis for treating "parties" in different nations as equivalent units of analysis. It will be shown that this can easily be done but only at the cost of conceptualizing parties more abstractly. This means that certain definitional properties of parties as units of analysis must be dropped from the conceptualization of party and regarded instead as variable properties of parties across nations. The logical grounds for this argument will have little transference to the participants' focus on the nation as a unit of analysis, but it will have relevance for those who wish to regard the existence of parties itself as an indicator of national development.

The discussion in Part II shows that when the concept of party is abstract enough to provide for cross-cultural applicability, then attention must shift from the mere existence of political parties to the properties of parties for evidence of national development. Moreover, the approach to measuring party properties through multiple indicators and the technique used to assess the conceptual equivalence of different indicators for the same property should be directly transferable to research on indicators of national development.

PART I: THE POLITICAL PARTY AS A UNIT OF ANALYSIS

Conceptual Equivalence and the Applicability of "Party" to Comparative Research

The most thorough treatment of conceptual equivalence in political science is contained in Przeworski and Teune, *THE LOGIC OF COMPARATIVE SOCIAL INQUIRY* (1970), a work that will be cited often in the paper. The notion, however, has drawn considerable attention from other social scientists engaged in cross-cultural research (see Strauss, 1969; and the extensive bibliography in Przeworski and Teune). Briefly, the concern of conceptual equivalence is that observations made in one cultural context should mean the same thing as (i.e., be equivalent to) observations made in another, with "mean the same thing" interpreted in terms of the substitutability of the observations when testing social theory.

At first glance, it appears that much of the criticism directed toward the comparative analysis of political institutions in non-Western countries derives from the presumed absence of conceptual equivalence. The argument is too familiar to reconstruct at length, but it essentially boils down to the charge that many concepts of Western political institutions are simply inapplicable to the non-Western experience. Holt and Turner explain:

The development of new conceptual frameworks which adorn present-day literature in comparative politics stems from the explicit recognition that the old political science was concerned primarily with Western democratic systems--a parochialism that was reflected in the concepts employed. Such concepts--parliaments, political parties, interest groups, formal courts, and so on--proved to be inadequate for an understanding of the new despotisms that sprang up during the interwar period, and they were even less appropriate for studies of the new nations that appeared on the world scene after World War II had ended (1970, p. 14).

Accordingly, comparative politics experienced a shift in emphasis from the cross-cultural study of political institutions to research on processes or functions, sparked by Almond's work on functional analysis (Almond and Coleman, 1960; Almond and Powell, 1966). But even when dealing with more abstract concepts like pluralism, integration, participation, and mobilization, Western scholars have been accused of "conceptual stretching" by using these "Western" concepts cross-culturally (Sartori, 1970, p. 1050).

While granting the advantages for cross-cultural research of studying processes or functions rather than institutions or structures, some scholars warn against a preoccupation with functionalism that obscures all value of the comparative study of institutions (Braibanti, 1968, p.45; LaPalombara, 1970, p. 144). But returning to the cross-cultural study of institutions resurrects the nagging problem of conceptual equivalence. The comparative study of political parties--a political institution

diffused from the Western world to the non-Western--reflects this problem as well as any. On the one hand, the ubiquitousness of political parties is readily acknowledged by students of comparative politics:

The political party is a creature of modern and modernizing political systems. Whether one thinks of Anglo-American democracies or totalitarian systems such as the Soviet Union, Fascist Italy, and Nazi Germany; emergent African states in their earliest years of independent evolution or Latin American republics that have hobbled along for over a century; a mammoth ex-colonial area such as India groping toward democracy or an equally mammoth Communist power such as China seeking to mobilize a population through totalitarian methods, the political party in one form or another is omnipresent (LaPalombara and Weiner, 1966, p. 3).

On the other hand, scholars with expertise in non-Western areas continually point out the different nature of parties in their area, often denying that they are at all similar to the concept of parties as they exist in the Western world. Indeed, in the LaPalombara and Weiner volume on POLITICAL PARTIES AND POLITICAL DEVELOPMENT--which begins with the quotation above on the omnipresence of parties--Pye finds few genuine examples of political parties in Asia. He says that in some countries, parties "never existed except in the minds of the most charitable Westerners who have allowed their fears of ethnocentrism to overcome their good sense," and "for the fragile and bizarre groups" in other nations, "nothing is advanced by trying to stretch that all too elastic term 'party' to cover them" (1966, p. 371). Another selection by Scott on Latin America (1966) finds that parties there usually do not correspond to the Western model, and Wallerstein (1966) writes of the decline of party in Africa.

The asserted growth and presumed decline of the party as a political institution in Africa deserves closer attention for what it might tell us about party as a cross-cultural concept. Research on party politics in Africa was once quite in vogue, with Western scholars--French, British, and American--focusing attention on parties in both the pre- and early post-independence periods. In their prominent work, POLITICAL PARTIES AND NATIONAL INTEGRATION, Coleman and Rosberg content "that at this stage of Africa's development political parties not only illuminate most clearly the nature of African politics, but are also important determinants of the unfolding African political scene" (1964, p. 1). Concepts employed in the study of Western parties--many originated by Duverger (1954)--were applied uncritically in studying the African variety (see Hodgkin, 1961; Schachter, 1961). But the explanatory value of parties became questioned in the years after independence. Welfling (1971) finds that parties did not promote economic development, failed to organize and recruit large sections of the population in political participation, and often hindered national integration rather than furthering it.

Soon scholars began to question the theoretical utility of the concept of party if not its very applicability to the African scene (see Kaufman and Mapp, 1970; Zolberg, 1968, p. 72). Some scholars who had

utilized Duverger's concepts, which had been formed largely with reference to Western examples, also began to reassess the relevance of Duverger's insights for the African experience (cf. Zolberg, 1964 and Zolberg, 1966; Wallerstein, 1961 and Wallerstein, 1966).

We need not dwell further on the general suspicion about the conceptual equivalence of "party" in Western and non-Western politics. But we need to disentangle the belief that observations on "parties" do not "mean the same thing" in different cultures from the bold but vague assertions that the concept of party is inapplicable to non-Western politics. We perhaps pin too much blame on conceptual inapplicability in comparative politics without having a clear idea of what "conceptual inapplicability" involves.

Concept "Applicability" in Comparative Politics

It will help to distinguish initially between applicability and comparability. In everyday language, a concept is sometimes said to be inapplicable to some of the phenomena it embraces if one believes that the phenomena cannot be compared. Often, this belief is manifested in the statement, "You can't compare apples with oranges"---a statement occasionally made with reference to the cross-national study of political parties (Baum, 1967). But comparability, like beauty, is in the eyes of the beholder. Przeworski and Teune state the point more formally:

Social phenomena do not have a property of "being comparable" or "not comparable." "Comparability" depends upon the level of generality of the language that is applied to express observations. The response to the classical objection to comparing "apples and oranges" is simple: they are "fruits." (p. 10)

This rejoinder, like the objection that prompts it, assumes that the level of discourse is dealing with the units of analysis under investigation rather than properties of those units. In effect, it means not only that "parties" in Western countries can be compared with "parties" in non-Western countries but also that human beings can be compared with fish--provided the concept which embraces both is sufficiently abstract.

It is the level of abstraction of the conceptual definition which permits one to make comparisons among any units of analysis. Sartori (1970) envisions a "ladder of abstraction" that one climbs to make a concept more general by lessening the properties or attributes it embraces. When the units of analysis are ostensibly quite similar, one can remain near the bottom of the ladder, defining the units according to specific characteristics that they share in common. One climbs the ladder as he drops requirements from the definition, which results in broadening the "extension" of a concept (what it denotes) by diminishing its connotations. However, Sartori warns, "the extension of a concept should not be broadened beyond the point at which at least one relatively precise connotation (property or attribute) is retained" (p. 1042). To do so would result in a non-empirical universal, which indiscriminately

points to everything. An example of a non-empirical universal in social science is "group," which "equally applies to everything, that is, never and nowhere shall we encounter non-groups" (p. 1043).

The test for whether a universal conceptualization is "non-empirical" or "empirical" (i.e., whether it applies to every thing or just some things) lies in definition by negation, which means allowing for observations of units that do not demonstrate the property in the universal definition. If one observes entities that are otherwise candidates for "units of analysis" but they do not involve the property in the definition, the universal conceptualization is empirical rather than non-empirical. Whether the conceptualization is intellectually useful is an entirely separate matter. From the logical standpoint of concept construction, an empirically universal conceptualization is--by definition--everywhere applicable.

From the logical standpoint, the fact that some culture-areas of the world may not contain any instances of the universally defined unit of analysis merely demonstrates the operation of "definition by negation." For example, if a "political party" is defined as "a membership association that has as its formally stated purpose the nomination of public office holders whose selection is determined by electoral means" (Riggs, 1970, p. 93), the definition is--in a logical sense--empirically universal. Although most culture areas have "membership associations" (I will not pursue here the line of analysis suggested when "membership associations" are also absent), the fact that some have no association with "its formally stated purpose the nomination of public office holders whose selection is determined by electoral means" does not affect the universal applicability of the concept. Judged by strict canons, this conceptualization is cross-culturally applicable to the study of political parties.

Clearly, something is wrong here. The requirements of logical analysis do not seem to fit the phenomena normally called political parties in different cultures. Surely, this "universal definition" is "inapplicable" for many parts of the world, and it is--not because of logical shortcomings but because of an intellectual insistence that "words mean the same thing." A scholar who claims to be studying "parties" in Africa will, with justification, regard the above definition as inapplicable to his pursuit because it does not embrace many of the phenomena he is studying. Because he likely defines his own units of analysis according to properties that are not mentioned in the above definition, his phenomena only serve to validate (through negation) its universal character. He is obviously studying phenomena that are somewhat different; he is studying oranges rather than apples. And the way to compare units that are ostensibly dissimilar is to rise on the ladder of abstraction--to generalize the concept so that it embraces more instances of the phenomena that share a common term in the scholarly literature. This can be called the "inclusiveness" standard for judging concept applicability. It is certainly more useful intellectually than the strict logical standard; whether it is more useful theoretically depends on variable properties of the units of analysis made equivalent by a more abstract conceptualization.

Let us return to the conceptual status of parties research in Africa to see if the charge of concept inapplicability might have roots in an excessively exclusive definition of party. It is clear that the study of parties did not suffer from use of a definition which--while "empirically universal"--excluded many African candidates because they did not engage in nominations and elections. Instead, the concept of party was generously inclusive rather than exclusive. Hodgkin set the pace for the study of African parties by considering "as 'parties' all political organizations which regard themselves as parties and which are generally so regarded" (1961, p. 16). Emerson accepted this position with the explanation, "The loss suffered through looseness of terminology is more than compensated for by the gain in inclusiveness of coverage of African political phenomena" (1966, p. 269). So it appears that the concept of party was not inapplicable to African politics in this sense of embracing the units of analysis.

This shifts our attention to the applicability of the concepts used in measuring the dimensions of variation in party properties. Many of Duverger's concepts were applied directly to the study of African parties--e.g., his distinction between "mass" and "elite" parties, the "basic element" of organization, the origins of parties, and so on. It seems unlikely that these property concepts were inapplicable in some sense of "interpretability"--e.g., that one could not interpret party origin in the African experience and assign a meaningful score to the variable. Although there is some suspicion that considerable measurement error--or bias, if you wish--was introduced in analysis by giving parties ratings on organizational properties that they did not "deserve," that is a different matter from concept applicability.

What is likely is that the claims of concept inapplicability can be traced mainly to doubts about the conceptual equivalence of the properties of parties rather than the applicability of the unit of analysis itself. That is, observing a given party property in Africa may not mean the same thing as the same observation in Europe. Different relationships among party concepts may hold within Western and non-Western settings. For example, Duverger explained that the Western cadre party (a combination of influential persons, experts, and financiers) tended to re-organize along mass lines to meet the threat of mass parties from the left. Extending Duverger's theory, it might be expected that African patron parties (the counterparts of Duverger's cadre parties) would also develop a grass-roots organization to counter that of the new independence parties. If this relationship had held in Africa (although there is some belief that "contagion from the right" is now occurring in the West; see Epstein, 1967; pp. 126-129), the organizational roots of both parties might have penetrated much deeper than post-independence diggings have disclosed.

This analysis suggests that what often passes for conceptual inapplicability at the level of the unit of analysis is more accurately described as the lack of conceptual equivalence among variable unit properties. We will confront the issue of conceptual equivalence among properties in Part II of this paper, but we must first fashion for our usage a conceptual definition of party as the unit of analysis that is suitably inclusive for cross-cultural research.

Conceptual Applicability in Parties Research

Our review of aspects of concept applicability identifies a two-sided desideratum that ought to be obtained in the cross-cultural analysis of political parties. First, with respect to the choice of units of analysis, we want a high degree of inclusiveness, embracing most entities that are called "parties" by experts in the area. At the same time, one must avoid the danger of creating a non-empirical universal by allowing anything to qualify for study simply on nominal grounds--that someone calls it a party. Essentially, the problem is one of formulating a concept at a high level of abstraction that also figures in theory of high generality, recognizing that the generality and accuracy of a theory are not only different but often inversely related. (Przeworski and Teune, 1970; pp. 20-22).

Where does the pursuit of this desideratum lead in the cross-cultural study of political parties? Defining the unit of analysis might seem easy for such a well-studied institution, but LaPalombara writes:

The problem of the comparability of the unit of analysis is also apparent when one chooses such a seemingly obvious structure as political parties as the focus for research. The political party appears to be a deceptively stable unit concerning which much comparative research can be generated. Yet, it is obvious that little attention has been paid to the question what it is one is comparing when one looks analytically at parties across either national or cultural boundaries, or within a single nation-state (1970), p. 146).

Notwithstanding LaPalombara's reference to the study of parties across cultural boundaries, we have few truly cross-cultural studies of political parties, which may account for the particular problem in arriving at a universal conceptualization that is intellectually satisfying to most parties scholars and area experts. Most of the comparative studies of parties--as opposed to collections of case studies--are distinctly limited to an area or cultural focus (see Epstein, 1967; Hodgkin, 1961). While they may be cross-national, they are not cross-cultural, and citing LaPalombara again:

Cross-national studies, whether of whole or partial systems, tend to be culture-bound. Where cross-national studies focus on institutions such as legislatures, political parties, interest groups, and the like, they may obscure the nature of politics in cultural settings where such institutions do not exist or, if they do, represent radically different meaning for the societies involved. ... In short, a probabilistic theory of politics can emerge only from a consideration of the full range of cultures and societies in which politics and political systems are found (1970, p. 128).

This statement suggests that a satisfactory universal conceptualization of party is unlikely to be created unless one finds the need for one to guide his inquiry. If one samples widely so that parties are disclosed in "the full range of cultures and societies in which politics and political systems are found," the diversity disclosed in the process is itself likely to facilitate construction of a concept at a high level of abstraction, with the properties of the entities so defined also demonstrating the full range of variation. Similarly, if one samples widely from the range of political systems, he turns up the full range of possible variation in systemic factors linked theoretically with parties as both dependent and independent variables. Because the explanatory utility of variables is in principle at a maximum only when the full range of variation of the variables is available for analysis, only a fully cross-national study insures that the maximum analytical potential of a theory can be realized. To the extent that any theoretically relevant variables--whether pertaining to parties or to systems--are attenuated in their range of variation within a culture area, comparative studies--even if cross-national in scope within the culture area--tend to be limited as well in their theoretical generality.

A fully cross-cultural study of political parties not only facilitates the formulation of a satisfactory universal conceptualization for the units of analysis and maximizes the explanatory power that inheres in the property and system concepts, but it also tests the property concepts for breadth of application and permits tests to be made for conceptual equivalence. It is noteworthy that few, if any, comparative studies of political institutions are fully cross-cultural, although many are cross-national. In Przeworski's and Teune's vocabulary, most comparative analyses have opted for a "most similar systems" research design rather than a "most different systems" design, and they note:

Since the goal of research is to confirm general statements about human behavior, the process of sampling, even if it is not random, should be oriented toward this goal. No research based on a design other than a random multistep sample of all social systems will allow universal generalization (p. 37).

While they point out that random sampling of nations can seldom be random for practical reasons (p. 32), their reasoning is based largely on the impracticalities of cross-cultural survey research. Random sampling of nations drawn for the comparative study of political parties is feasible and was conducted by the International Comparative Political Parties Project.

The Unit of Analysis in the ICPP Project

The general methodology and ultimate objectives² of the ICPP Project are described elsewhere (Janda, 1968; 1969; 1970a). Eventually, the Project will cover some 150 parties in 50 countries, selected in random lots of 5 from each of 10 cultural-geographical areas of the world. At

present, data have been collected and coded for only 90 parties representing 33 countries chosen from each of the 10 areas, with a slight under-representation of Western Europe and a somewhat stronger neglect of Latin America. The time period selected for study is 1950-1962, but most data reported in this paper will pertain only to the second half of that time period, usually 1957-1962 but occasionally₃ adjusted to fit abrupt changes in certain national political systems.

Despite the argument elaborated above in favor of a random sampling approach in comparative research, one of the most frequent queries--if not criticisms--about the ICPP sample of parties is its random selection. Many questioners have favored selecting nations on other bases, notably those in which parties are "important." To repeat the general argument above for this particular case, selecting parties for analysis according to their importance in the political system tends to reduce the observed variation among the parties chosen on such concepts as institutionalization and status within the government. As a result, this alternative criterion for selection is very definitely "bounded" within certain limitations of political culture. The random selection of countries, on the other hand, allows parties to vary freely (within the possibilities of sampling error) on this as well as other cultural dimensions.

The random selection of countries turned up a wide variety of organizations that were called "parties" by scholars of the countries. The search for a useful universal conceptualization of party across countries led to a consideration of structural criteria rather than functional criteria for some of the same reasons argued by Riggs (1968; 1969), but I would make the argument even stronger: if functional analysis shows that the same functions can be performed by different structures and that different functions can be performed by the same structure, then functional definitions of political institutions in general are necessarily culture bound. If it is culturally parochial to study functions defined in terms of particular structures, it is equally parochial to study structures defined in terms of particular functions. There have been many definitions of political parties in terms of the functions they supposedly perform, and these are in principle unsuitable for cross-cultural research.

While there are good intellectual reasons for conducting comparative study with a focus on functions rather than structures, there are equally good reasons for focusing on structures instead of functions (LaPalombara, 1970). The ICPP Project has adopted a structural or institutional focus, and therefore, in accordance with Riggs, we have defined parties in terms of structural criteria, leaving functional variables for use in hypotheses involving parties (1968, p. 50). We depart from Riggs, however, in the specific structural definition used to define political parties. Neither his earlier definition, "any organization which nominates candidates for election to a legislature" (1968, p. 51), nor his later one, "a membership association that has as its formally stated purpose the nomination of public officer holders whose selection is determined by electoral means" (1970, p. 93), are general enough to include many of the organizations widely regarded as parties.

The definition in the ICPP Project is formulated at a higher level of abstraction, with a political party defined as an organization that pursues a goal of placing its avowed representatives in government positions. This definition is explicated elsewhere:

A political party is defined first as an organization--implying recurring interactions among individuals with some division of labor and role differentiation. All organizations are acknowledged to have multiple goals; to qualify as a political party, an organization must have as one of its goals that of placing its avowed representatives in government positions. Moreover, these individuals must be avowed representatives of the party, which means in practical terms that they must be openly identified with the party name or label (Janda, 1970a, p. 83).

Finally, the term "placing" should be interpreted broadly to mean more than just through competition in the electoral process but also through direct acts of designation (when the party has no electoral competition) or through subversion of the political system. For practical research considerations, the universe of parties as conceptually defined is restricted by the operational definition used to identify units of analysis for the study. One restriction requires that the parties operate in national politics, which excludes purely local parties. Another is that they achieve some minimum levels of strength and stability during our time period, 1950-1962, before qualifying for study. These criteria are elaborated in another publication, which includes also the total samples of countries and the number of parties identified in each according to our operational definition (Janda, 1970a).

This conceptual definition--even when qualified by its operational interpretation--includes many organizations that would otherwise be excluded by a definition of party based on experiences with organizations that are known as parties in Western politics. I contend that the broader definition of the ICPP Project is more intellectually satisfying because it is more general theoretically, but the test of whether it is more general theoretically must be made apart from contention or assertion. This question must still be answered partly in terms of conceptual equivalence, but the investigation must focus on the properties of the units of analysis rather than the "equivalence" of the units themselves. In a logical sense, the units have all been rendered equivalent through definition at an abstract level. We now must study these units from three perspectives in investigating the conceptual equivalence of their properties. (1) We must look at the interrelationships of indicators--both overall and within systems--used to measure the properties of parties so abstractly conceived. (2) We must examine the range of variation of these property measures, within systems. (3) We must study the intercorrelations of these properties with other variables, within systems, in the context of party theory. The first two tasks will be undertaken in Part II of this paper. If the results of these first two investigations are generally supportive of a claim for conceptual equivalence, then we will be entitled to progress to the third task, which lies beyond the scope of this paper but will be accepted as a welcome research responsibility of the ICPP Project.

PART II: MEASURING PARTY PROPERTIES WITH MULTIPLE INDICATORS

Conceptual Equivalence and Measurement Equivalence

In comparative inquiry, our strivings for conceptual equivalence have to be mediated through measurement equivalence. To repeat, conceptual equivalence obtains when observations made in one cultural context mean the same thing as observations in another, with "mean the same thing" being interpreted in theoretical terms. But we cannot reject a concept on theoretical grounds unless we can be satisfied that we are measuring it adequately. So tests for conceptual equivalence usually begin with investigations into measurement equivalence, and the complications of cross-cultural research usually present themselves first in measurement terms. The concepts we formulate for the properties of units of analysis are often impeccably cross-cultural in the abstract, but we soon tangle with the issue of measurement equivalence when making observations in different contexts. Frey elaborates the problem:

. . . notions such as political culture, political socialization, power and authority, political recruitment, and so on, are at a level of abstraction that is clearly cross-cultural. However, almost never is research able to proceed at such a general level. Specific dimensions of political culture must be investigated--specific subjects or agencies of political socialization, specific types or aspects of power relations, and specific varieties of political recruitment. Although the most general level of conceptualization may be cross-cultural, very frequently the researcher is in danger of reverting to culture-bound notions at subordinate levels (1970, p. 188).

Thus the issue of conceptual equivalence (following common usage, this term will be used in preference to the more descriptive "measurement equivalence") arises only when our observations in different contexts are regarded primarily as indicators of some more abstract concept involved in social theory and when there is doubt that the observations mean the same thing for measuring the concept in the different contexts. In the more formal statement of Przeworski and Teune, "The question of equivalence arises if and only if system interference is present and measurement involves inference" (p. 106, italics removed).

In the context of cross-cultural survey research, which has dominated most discussions of conceptual equivalence, "system interference" has been countered by efforts to obtain "phenomenal identity" (Strauss, 1969) in the stimuli presented to respondents in the interview situation. Thus, researchers have used the technique of translating interview schedules from the originating language into the field languages and back again to determine if the questions have lost (or gained) anything in the translation (Almond and Verba, 1963). But as Przeworski and Teune argue:

An instrument is equivalent across systems to the extent that the results provided by the instrument reliably describe with (nearly) the same validity a particular phenomenon in different social systems. In a questionnaire it is not relevant whether the stimuli were the same or whether a question was well translated from one language to another. What is important is whether this question as asked allows for a valid inference to the same underlying properties regardless of the social system (p. 108).

Clearly, cross-cultural survey research is especially sensitive to problems of conceptual equivalence purely at the language level (Hymes, 1970), but even library research--which is purely unobtrusive and employs no reactive instruments for getting data--does not escape the main issue: do our observations "mean" the same thing in different societies? We will seek to answer that question for the cross-cultural study of political parties by examining the use of multiple indicators to measure party properties along several major dimensions of variation in the ICPP Project.

The Conceptual Framework of the ICPP Project

To speak of the "properties" of political parties is to speak of the ways in which parties can differ, and properties, in this usage, are therefore variable in quantity or quality. More simply, party properties are party variables. To think of the many ways in which parties can differ from one another is to recognize that there must be almost an infinite number of potential party variables. The conceptual framework that guided data collection in the ICPP Project tried to isolate the major dimensions of party variation as represented in the theoretical literature. It identified eleven major concepts organized into two groupings based on their pertinence to the party's external relations with society or to its internal organization (Janda, 1970a). These concepts or dimensions of variation are listed in the middle of Table 1. In the column to the right of these concepts are the numbers of "basic variables" that have been proposed as indicators of the major concepts.

TABLE 1: Conceptual Framework for the ICPP Project

Groupings	Major Concepts	No. Indicators
External Relations:	1. Institutionalization	6
	2. Governmental Status	6
	3. Social Aggregation	6
	4. Social Articulation	6
	5. Issue Orientation	13
	6. Goal Orientation	36
	7. Autonomy	5
Internal Organization:	8. Degree of Organization	7
	9. Centralization of Power	8
	10. Coherence	6
	11. Involvement	6

^aDue to refinements and revisions, these numbers differ slightly from those in Janda, 1970a, p. 86.

This is not the place for a detailed conceptual discussion of these eleven dimensions of variation (see Janda, 1970a). I believe that at the conceptual level, these dimensions of variation are truly cross-cultural. But let us recall Frey's warning that conceptual abstractions are virtually always compromised by the practicalities of empirical research. He continues, "The truly cross-cultural quality of the most abstract conceptualization trickles away in the parochial subordinate conceptualization that actually defines the research" (1970, pp. 188-189). The procedure of choosing specific variables as indicators of the ICPP concepts is unavoidable. There is no other way that concepts like "institutionalization," "governmental status," and so on can be "directly" measured. Przeworski and Teune comment:

Since many concepts of general theoretical significance cannot be defined satisfactorily by a specific measuring operation, inferences are made from the specific observations to general phenomena. Specific phenomena are treated as indicators or pointers. The inferences are based on general laws about behavior (p. 95).

Cultural shortsightedness can result in the choice of specific indicators that are not conceptually equivalent to one another as measures of these concepts within different systems or culture areas. Or, cultural ignorance may result in a lack of imagination in choosing indicators that are especially suited to measuring the phenomenon within a given system but which are not generally applicable across systems. Przeworski and Teune argue that comparative inquiry must eventually

involve "system-specific" indicators in order to accurately measure a cross-cultural concept and approximate the true range of variation of the property within any system. In the ideal model, measurement would then involve both the indicators common to all systems and the system-specific ones.

Admitting my ignorance of other cultures, I did not make an effort to build system-specific indicators into the conceptual indicators of the ICPP Project, and most of my indicators were intended to be cross-culturally common. One might argue to the contrary that all or most of my indicators are indeed "specific" to Western systems. Some analysis of the indicators might forestall the argument in brew or at least join the debate in a constructive way.

According to Przeworski and Teune a "common" indicator is not necessarily an "equivalent" one. A common indicator is simply one which is "used in all systems and produces variance in all these systems," and it is to be distinguished from an identical indicator, which "is a common indicator that indicates the same property across systems" (p. 119). Identical indicators are necessarily equivalent, but equivalence can also be achieved when system-specific indicators are shown to indicate the same property across systems. Because the ICPP Project does not involve system-specific indicators, the immediate problem for assessing conceptual equivalence is to determine whether our common indicators can be regarded as identical indicators. My reading of Przeworski and Teune discloses three components proposed for an overall strategy for assessing conceptual equivalence. Toward the end of the book, they offer a general criterion of equivalence:

The similarity of the structure of indicators is the criterion for establishing the equivalence of measurement instruments. The similarity of structure can be defined in terms of the patterns of intercorrelations among the indicators (p. 117, italics omitted).

But earlier, they propose a logic for research designs in comparative inquiry that involves, initially, "univariate comparisons":

If no differences /in the distribution of the measure are found among systems, the population is homogenous as systemic factors cannot be expected to be important as determinants. Thus the test of differences between or among national means--either a mean test or a variance test--provides a general estimate of the relevance of systemic factors . . . (p. 42);

and then "comparing relationships":

Systems differ not when the frequency of particular characteristics differ, but when the patterns of the relationships among variables differ (p. 45, italics omitted).

"Comparing relationships" amounts to the ultimate test of conceptual equivalence, and this is an on-going research task that lies outside the scope of this paper. We will limit our present inquiry into the conceptual equivalence of our indicators to studying the patterns of intercorrelations among the indicators across and within systems and the univariate comparisons of means and variances across and within systems.

Our investigation into conceptual equivalence of the ICPP indicators will be further limited to the number of ICPP concepts that share the appropriate measurement model. Although all the concepts employ multiple indicators, not all of them combine the indicators in an additive measurement model. "Social Aggregation" and "Social Articulation," for example, are measured quite differently through a multiplicative model, and the test for intercorrelations among indicators just does not apply to these concepts (see Janda, 1970a, pp. 92-96). A somewhat different twist is involved in measuring "Goal Orientation," and the test cannot be applied to this concept either (pp. 98-102). Therefore, for our present purposes, we will inquire into the conceptual equivalence among indicators for only eight of our original eleven concepts. These are "Institutionalization," "Governmental Status," "Issue Orientation," "Degree of Organization," "Centralization of Power," "Coherence," "Involvement," and "Autonomy." Each of these concepts will be treated in turn, providing a brief conceptual definition of the variable; reporting the scale ranges, means, and standard deviations for its proposed indicators; and stating the interrelationships among the indicators and the measure's means and variances across and within systems. The indicators for the concepts missing from this treatment are listed for the record in the Appendix.

Measuring Institutionalization

"Institutionalization" is defined in the ICPP Project, similarly to McDonald (1955) and Huntington (1965), as the establishment of recurring patterns of behavior within a persistent organization that exists apart from its momentary leaders (Janda, 1970a, pp. 87-88). Six variables were proposed to indicate the extent of party institutionalization. For lack of space in this treatment, these variables--and all the subsequent ones--will be identified only by their names, which should be sufficiently descriptive of their nature. The conceptual definitions underlying each of the basic variables, their operationalizations, and their coding categories are described fully elsewhere (Janda, 1970c). Table 2 names these institutionalization indicators, provides some basic statistics about them, and shows the results of a series of principal components factor analyses performed on different sets of the variables for the worldwide sample of 90 parties.⁴ In this and all subsequent examples, the signs of the loadings have been reversed for variables that may have been scored in reverse originally.

TABLE 2: Statistical Analysis of Institutionalization Indicators

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated Factor Loadings and % Explained Variance		
					45%	54%	63%
Year of Origin	1832-1961	90	34.1	26.6	74	75	78
Name Changes	0-18	90	1.1	2.9	22		
Organizational Discontinuity	0-19	88	7.8	6.9	54	51	
Leadership Competition	0-16	87	7.3	5.2	65	67	72
Legislative Instability	0-1.7	86	.55	.54	79	80	80
Electoral Instability	0-1.8	65	.36	.42	89	89	86

In principal components analysis, the proportion of variance "explained" by the first unrotated factor can be interpreted directly as shared variance, and the loadings of the variables on the factor can be read directly as linear correlations of the variables with that factor. The first solution shows that the indicators are generally intercorrelated, with the underlying factor explaining 45% of the variance among them. However, Name Changes correlates only .22 with the factor, meaning that it shares the least amount of its variance (only about 4%) with the other indicators. Upon examining the low mean (1.1) and relatively large standard deviation (2.9) for this variable, we realize that it has a highly skewed distribution with some deviant parties that could profoundly affect the calculation of its correlations with the other variables. We will not now inquire into the patterns of its relationships with the other variables nor will we challenge the assumption of linearity in an effort to save the indicator in the measurement of institutionalization. Instead, we will drop it as an indicator or on the grounds that it does not correlate highly enough with the others across systems and thus cannot be conceptually equivalent to them.

The second solution in Table 2 is for the five indicators less Name Changes. Note that the proportion of explained variance has risen to 54%. The minimum correlation of an indicator with the refined factor is now .51 for Organizational Discontinuity, which has dropped from .54 for the first solution, revealing that it must have been more highly correlated with Name Changes than were the other variables. The proportion of variance explained in a principal components analysis can be further increased by dropping Organizational Discontinuity from the set and conducting the analysis for only four variables. This results in a higher percentage of explained variance (now 63%, see the final column in Table 2), but it comes at a cost of reducing the scale from five items to four. Because reliability of a measuring instrument is a function of the number of items as well as the magnitude of their intercorrelations, one cannot use only the principal components solution to

decide what constitutes the optimum scale from the standpoint of test reliability. According to an approximation of the Spearman-Brown formula for determining the effect of test length on reliability, the five item scale is slightly more reliable, with a coefficient of .80 compared to .78 for the other.⁵ But classical reliability estimates take no account of conceptual equivalence, and before accepting the five item scale on conventional grounds, we should pursue the study of the indicator interrelationships, as Przeworski and Teune suggest, within systems as well as across them.

Emphasis was placed on the phrase, "within systems," in recognition of the view advanced by Przeworski and Teune:

In our view the formulation of general theories is possible if and only if these theories take into account what appears to us to be a pervasive property of social reality: social phenomena are not only diverse but always occur in mutually interdependent and interacting structures, possessing a spatiotemporal location. . . .

If social phenomena are treated as components of systems, two major implications follow. The first is that the behavior of any component of a system is determined by factors intrinsic to the system and is relatively isolated from influences outside of the system. The fact that behavior takes place within a relatively isolated context may mean that a certain proportion of the explanation of this behavior may be found among factors extrinsic to all systems--universal factors--and a certain proportion may be found among factors that are intrinsic to particular systems and not generalizable across systems. . . .

The second implication . . . is that specific observations must be interpreted within the context of specific systems (pp. 12-13).

Although they conveniently discuss "system" in terms of the nation, it is clear that systemic factors can be shared by more than one nation. "Cultural areas" that embrace several nations can be treated as systems. Indeed, much of the criticism directed toward the comparative study of political institutions is phrased in terms of culture-area (systemic) interactions that confound analysis within a given context. According to Przeworski and Teune, we must explicitly provide for the operation of these factors in assessing conceptual equivalence. We will do so by examining both the interrelationships of our indicators of party properties and the variation of those properties within three cultural-geographic areas: Europe (both East and West) and the Anglo-American countries; Africa south of the Sahara; and the remaining countries in North Africa, the Middle East, Asia, and Latin America.⁶ These divisions, the nations that they encompass, and the numbers of parties for each nation in our study are given in Table 3.

TABLE 3: Parties and Nations by Three Culture-Area Divisions

European and Anglo-American Countries		N. Africa, Middle East, Asia, and Latin America		Africa South of the Sahara	
1	Albania	4	Burma	1	Cent. Af. Rep.
3	Australia	2	Cambodia	2	Chad
4	Denmark	4	Cuba	2	Congo (Brazz)
5	France	2	El Salvador	4	Ghana
5	Germany, East	4	Indonesia	1	Guinea
3	Germany, West	1	Korea, North	2	Kenya
4	Iceland	4	Lebanon	3	Sudan
3	Ireland	3	Nicaragua	6	Togo
2	New Zealand	1	Tunisia	3	Uganda
1	Portugal	2	Turkey	1	Upper Volta
2	United Kingdom	3	Venezuela	—	
2	United States	—		25	parties, 10 countries
—		30 parties, 11 countries			
35 parties, 12 countries					

What seems to be in order here are a series of separate factor analyses for the parties within each culture area, but technical considerations make this impractical.⁷ Instead, use will be made of a recent technique developed specifically in order to investigate conceptual equivalence in the ICPP Project (Janda, 1971a). Called Z Score Matrix Analysis, or simply Z analysis, this technique is used subsequent to a factor analysis of all the proposed indicators across all the cases. The indicators shown to be highly interrelated for all the cases are then subjected to a z-score transformation, and the z-scores of the indicators are summed to produce a mean z-score for each party over all the available indicators. The mean z-scores are regarded as the "concept scores" for the cases on the properties being measured. Properties of the mean z-scores and the z-score matrix are then used to assess the patterns of interrelationships among the indicators without reference to correlation coefficients.

This technique, which unfortunately cannot be explained fully here, has already been applied to both sets of five and four institutionalization indicators that passed the factor analysis hurdle with results shown in Table 4 (see Janda, 1971a).

TABLE 4: Z Analysis Results for the Institutionalization Indicators

Matrices in the Z Analysis:	<u>Concept Score</u>	<u>Coefficient of Concept Variation</u>	<u>Coefficient of Indicator Covariation</u>	<u>Coefficient of Case Variation</u>
<u>Five Item Scale:</u> N = 90	-.02	.51	.49	.14
European, etc. N = 35	.61	.23	.43	.13
N. Africa, etc. N = 30	-.30	.27	.51	.11
Africa S. of Sahara N = 25	-.56	.25	.56	.18
<u>Four Item Scale:</u> N = 90	-.03	.61	.38	.10
European, etc. N = 35	.68	.27	.39	.13
N. Africa, etc. N = 30	-.30	.28	.39	.08
Africa S. of Sahara N = 25	-.69	.27	.35	.09

The "Concept Scores" in Table 4 correspond to the means of the mean z-scores calculated initially for all 90 cases for the five and four item scales and then calculated for the culture area subgroups. In the absence of missing data, the concept score for the entire set of data will tend toward 0, but the concept scores for the subgroupings can vary according to the impact of systemic factors on the phenomenon being measured. Clearly, for both the five and four item scales, party Institutionalization--as we have measured it--varies greatly in tendency from the European or Western parties to the Africa parties. But we should consider not only the differences in the tendencies of the phenomenon or property being measured but also the variation around that central tendency within each system.

In Z analysis, the "Coefficient of Concept Variation" is our measure of within system variation of mean z-scores. Technically, it is the variance of the mean z-scores calculated for subsets of cases. The value of the coefficient of concept variation for the full set of cases will be linearly related to the proportion of explained variance that emerges from a principal components factor analysis of the same set. When calculated for subsets of the z-score matrix, the coefficient of concept variation can be taken as a measure of the retained variation within each system. Note that the concept variation within each culture area is far less than the total variation for the worldwide sample, but that the variation is relatively equal between areas and slightly greater across all divisions for the four item as opposed to the five item scale.

The "Coefficient of Indicator Covariation" is the z-score measure for consistency of the interrelationships of z-scores across the indicators for sets of cases. Technically, it is the mean of the variances of indicators around the mean z-scores. The larger this value, the less the systematic covariation of the indicators and thus the weaker the

interrelationships among the indicators. Note that the coefficient of indicator covariation is not only reduced substantially from the five item to the four item scale, but the four item scale also shows considerably less discrepancy in indicator covariation within systems. Organizational Discontinuity, the indicator dropped to create the four item scale just did not relate equally well to the other indicators within Africa. The coefficient of indicator covariation does not tell us, however, if the lack of indicator covariation within Africa is generally true for the African parties or whether a problem exists only for several cases.

The "Coefficient of Case Variation" is a measure for isolating the source of low indicator covariation. Technically, it is the variance of the variances of indicators around the mean z-scores. High scores for the coefficient of case variation signal the presence of deviant parties for which the indicators are highly inconsistent. It directed us to several African parties which were generally low on every Institutional indicator but Organizational Discontinuity, for these parties had experienced no splits or mergers. Dropping that variable from the scale resulted in reducing the coefficient of case variation for the African parties in half while leaving the corresponding coefficient unchanged for the European parties.

According to the results of the Z analysis, our four item scale is clearly preferable from the standpoint of conceptual equivalence, despite the fact that the five item scale was computed to be slightly more reliable by classical measurement criteria. Through the combination of factor analysis and Z analysis, we have refined our initial set of six indicators of Institutionalization down to four, which are tentatively advanced as the Institutionalization indicators of the ICPP Project. The examination of conceptual equivalence in terms of the structure of indicators and the means and variances within and across systems will be made later for the entire set of 150 parties, but for the present set of 90, these indicators seem suitably interrelated. The same analytical procedures--first factor analysis and then Z analysis--will be employed in investigating conceptual equivalence among the indicators for each of the remaining ICPP concepts that employ multiple indicators in an additive measurement model.

Measuring Governmental Status

"Governmental Status" refers to the nature and extent of the party's participation in national politics. It reflects both the importance of the party in politics and its "establishment character." The principal components factor analysis of our six Governmental Status indicators for 84 parties during 1956-1962 is given in Table 5.⁸ The first solution for all six variables explained fully 60% of the total variance in the indicators, but the loading for National Orientation was only .40, meaning that it shared only 16% of its variance with the factor. The very low standard deviation of this variable in comparison to its mean shows that it is an indicator that hardly varies and thus would not be expected to

TABLE 5: Statistical Analysis of Governmental Status Indicators

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated and % Exp. 60%	Loadings and Variance 69%
Government Discrimination	-16 to +16	81	.56	8.8	86	86
National Orientation	1 to 6	81	5.3	.8	40	
Legislative Strength	0 to 100	82	26.7	25.6	70	71
Electoral Strength	0 to 100	61	38.1	28.4	88	87
Government Leadership	0 to 1.	84	.33	.42	90	91
Cabinet Participation	0 to 1.	83	.55	.41	78	79

be highly intercorrelated with the others. Dropping this variable to form a five item scale results in a solution that explains 69% of the total variance with every variable having a loading greater than .70, which is evidence of considerable across system interrelationships among the indicators.

When this set of five indicators is subjected to Z analysis, as reported in Table 6, a far different pattern from that of Institutionalization emerges for the concept scores and concept variations within culture areas. The concept scores within areas are much closer for

TABLE 6: Z Analysis Results for the Governmental Status Indicators

Groupings of Parties	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
Worldwide Sample, N = 84	-.05	.73	.31	.09
European etc., N = 35	.03	.35	.36	.07
N. Africa etc., N = 26	-.10	.73	.34	.16
Africa S. of S., N = 23	-.12	1.3	.19	.01

Governmental Status than was the case for Institutionalization. While parties in general tend to rank higher in Governmental Status in Western than non-Western countries, the difference in tendency is not great. Moreover, note that the concept variations in Governmental Status within the groupings are dramatically different. Whereas the concept variations

within areas for Institutionalization was only about half the variation across areas, actually greater variation is shown by the African parties than the average variation for the worldwide sample, which is a function no doubt of the existence of one-party states and illegal parties within Africa. The Western parties, of course, show the least variation on this concept. The coefficients of indicator covariation and case variation tend to be somewhat lower than those for Institutionalization, attesting to a better "fit" overall, with the most consistency shown for the African parties.

If anything, our Z analysis findings suggest the presence of even greater conceptual equivalence among our refined set of five indicators for Governmental Status than was deemed satisfactory for Institutionalization, and we will tentatively accept these as our ICPP measure of the concept.

Measuring Issue Orientation

Unlike Institutionalization and Governmental Status, the concept of Issue Orientation was never conceived as a unidimensional concept in the ICPP Project. There was the belief, however, that the traditional left-right dimension would dominate the definition of issue orientations. Accordingly, it was used as a reference axis for scoring the parties on issues, following the somewhat arbitrary convention (in certain cases) that a negative score--meaning opposition to the issue or policy--was the rightist position and a positive score the leftist position (see Janda, 1970d). Thirteen discrete issues were selected for their cross-national relevance to national party politics. A party could be scored from -5 to +5 on an issue, depending on its stance for or against the policy. Table 7 contains the names of these issues and the statistical data relevant for our purposes.

TABLE 7: Statistical Analysis of the Issue Orientation Indicators

Name of Issues	No. of Cases	Mean	Std. Devn.	Unrotated Loadings & Exp. Variance					
				31%	49%	54%	60%	60%	69%
Government Ownership	72	.8	3.0	88	89	90	91	91	92
Economic Planning	67	1.9	2.8	86	87	88	87	89	88
Redistribution of Wealth	61	1.0	2.5	78	82	82	84	82	84
Social Welfare	57	2.7	2.3	58	66	69	81	72	74
Secularization	64	-1.1	2.5	48	42	43			
Support of the Military	58	.7	2.7	-05					
East/West Alignment	74	-1.6	2.9	84	81	80	78	78	76
Anti-Colonialism	73	1.7	2.3	44	47		46		
Supranational Integration	63	.9	2.4	02					
National Integration	69	1.8	2.3	50	47	46		45	
Extension of Franchise	62	4.3	1.1	03					
Civil Rights	45	2.5	2.9	-25					
Civil Liberties	55	-1.3	3.4	36					

Except for four variables which have negative or near zero loadings, the general left-right dimension is roughly upheld in the first unrotated factor, with 31% of the variance explained. Obviously, if one wanted to pursue the delineation of different dimensions within this set of issues, a rotated factor solution would be in order. But for our present purposes, we will be content with the identification of a relatively pure left-right dimension involving as many indicators as possible. Hence, we persist in computing a series of principal components solutions, dropping and adding variables along the way. It seems that one cannot get a set of items all loading higher than .70 unless the set is reduced to five variables as in the last column on the right, which represents 69% of the variance explained. Disregarding some of the intriguing patterns presented in this series of loadings, we will focus on the final set of five variables, treating them as indicators of a refined left-right dimension and seeing if these indicators are consistently related within culture areas under the scrutiny of Z analysis, see Table 8.

TABLE 8: Z Analysis Results for the Issue Orientation Indicators

Groupings of Parties	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Variation	Coefficient of Case Variation
Worldwide Sample, N = 73	.03	.75	.29	.09
European etc., N = 31	-.12	.69	.33	.05
N. Africa etc., N = 31	.08	1.1	.32	.14
Africa S. of S., N = 17	.20	.47	.18	.08

The Z analysis shows more variations in the tendencies of parties among the areas according to their left-right orientations than was shown in Governmental Status but not as much as displayed in Institutionalization. The European parties tend to be on the "right" side of course and the African ones on the "left," but there is more variation within the conglomerate "other" grouping. The coefficients of indicator covariation and case variation are as low for the left-right concept as for the other two, and there is generally less indicator covariation for African parties. Again, the conditions for conceptual equivalence among the indicators of our left-right dimension seem to hold for this reduced five item scale.

Measuring the Degree of Organization

Degree of Organization is defined in the ICPP Project as the existence and extent of regularized procedures for mobilizing and coordinating the efforts of party supporters in executing the party's strategy and tactics. Seven variables were proposed as indicators of Degree of Organization; they are named in Table 9 along with the relevant statistics from our sample of 90 parties.

TABLE 9: Statistical Analysis of Degree of Organization Indicators

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated Loadings & Exp. Variance		
					55%	62%	70%
Structural Articulation	0 to 11	70	7.9	3.0	55	51	
Intensiveness of Organization	0 to 6	67	4.5	1.0	83	86	89
Extensiveness of Organization	0 to 6	60	5.0	1.5	80	80	81
Freq. of Local Meetings	0 to 6	36	4.0	2.0	90	91	89
Freq. of National Meetings	0 to 7	48	4.0	2.1	46		
Maintains Records	0 to 16	68	6.9	4.8	82	81	80
Pervasiveness of Organization	0 to 18	72	8.0	6.4	74	77	80

All of the indicators correlate rather well with the first unrotated factor with the exceptions of Structural Articulation (a measure of structural differentiation) and Frequency of National Meetings, which at .46 has the lowest loading. Dropping this latter variable increases the explained variance to 62%, but the loading for Structural Articulation actually decreases. Dropping both variables could produce a five item scale accounting for 70% of the variance, but before dropping items so readily let us consult the results of a Z analysis for both the full seven item scale and a six item scale without Frequency of National Meetings, which becomes a candidate for omission not only because of its low loading but also because only 48 parties could be scored on it given the available information.

TABLE 10: Z Analysis Results for Degree of Organization Indicators

Matrices in the Analysis	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
<u>Seven Item Scale, N = 76</u>	-.09	.61	.42	.12
European etc., N = 35	.18	.28	.46	.12
N. Africa etc., N = 24	.00	.58	.36	.06
Africa S. of S., N = 17	-.76	.77	.42	.23
<u>Six Item Scale, N = 76</u>	-.08	.63	.38	.11
European etc., N = 35	.19	.30	.44	.11
N. Africa etc., N = 24	.03	.57	.32	.05
Africa S. of S., N = 17	-.77	.66	.37	.19

The results of the Z analysis in Table 10 are generally similar for the seven and six item scales, but there are some interesting differences. The coefficient of concept variation has been increased slightly for the refined scale and the coefficient of indicator co-variation shows some drop overall as well as within each of the areas. Except for a higher coefficient of case variation for African parties (still .19 for the six item scale), the Z statistics are quite similar to those for the final Institutionalization scale, with even more variation shown within areas for Degree of Organization. Because the results are approximately equal to ones found satisfactory before, we will tentatively accept the six item Degree of Organization scale and not pursue the search through a Z analysis of the smaller five item scale, which will surely provide a better fit but again at the cost of losing an item of information.

Measuring the Centralization of Power

Centralization of Power is viewed as the location and distribution of effective decision making authority within the party, with primary reference to the national party organs. Thus a centralized party is one which features the concentration of effective decision making in the national organs with a premium placed on a smaller number of individuals participating in the decision. The indicators selected to measure this concept are given with the data in Table 11.

TABLE 11: Statistical Analysis of Centralization of Power Indicators

	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated Factor Loadings & Exp. Variance			
					46%	48%	50%	52%
Nationalization of Structure	0 to 6	71	4.6	1.2	67	70	69	74
Selecting National Leader	0 to 8	72	5.5	2.3	66	67	66	67
Selecting Parl. Candidates	1 to 9	59	5.9	2.1	79	78	77	76
Allocating Funds	0 to 6	40	4.0	2.0	66		69	
Formulating Policy	0 to 7	69	5.8	1.2	67	63	66	61
Controlling Communications	0 to 7	67	5.3	2.3	73	70	73	71
Administering Discipline	0 to 4	63	2.6	1.7	74	79	75	82
Leadership Concentration	0 to 6	73	4.4	1.5	50	55		

The principal components solutions for the Centralization of Power indicators are not as immediately encouraging as those previously. The first solution for all eight indicators accounts for only 46% of the variance. Dropping the item on Allocating Funds, for which there was data on only 40 parties, increases the explained variance very slightly. Dropping Leadership Concentration, which had the lowest initial loading,

improves the explained variance somewhat more, and dropping both items finally pushes the explained variance above 50%. Before dropping any items at all, however, let us examine the Z analysis results for the entire set of indicators.

TABLE 12: Z Analysis Results for Centralization of Power Indicators

Groupings of Parties	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
Worldwide Sample, N = 82	.00	.47	.61	.46
European etc., N = 35	-.08	.43	.47	.08
N. Africa etc., N = 25	.06	.36	.67	.63
Africa S. of S., N = 22	.04	.66	.76	.90

The Z analysis statistics in Table 12 show sharp differences from any reported thus far. This is the first time that the coefficient of indicator covariation has been higher than the coefficient of concept variation, and we have never seen a coefficient of case variation as high as .46 overall or .90 within an area! These statistics reveal that there are some markedly deviant parties within the non-Western areas that have highly inconsistent scores on these indicators. An examination of the original z-score matrix discloses that 12 parties out of the 90 had variances greater than 1.0 when calculated across all the indicators. This number in itself is higher than usual, but more significantly, 4 of the 12 had variances greater than 2.0--which is a value never obtained in any of the z-scores matrices we analyzed to now. Before reflecting further on the overall lack of fit among our indicators, we had better inquire into these startlingly deviant cases which are depressing our indicator interrelationships. They are identified in Table 13 along with their mean z-scores, the variance around the z-scores, and the indicators for which they were able to be scored.

TABLE 13: Deviant Parties for Centralization of Power Indicators

Name of Party	Mean z-score	Variance of scores	Centralization of Power Indicator z-scores								
			1	2	3	4	5	6	7	8	
Chadian Social Action	-.48	3.8		-2.4	1.5						
Lebanese Constitutional	-.30	3.5	-3.7	1.1	-.9		.9				1.1
Ghanian United	.10	2.9	1.2		1.5				-2.3		
Nicaraguan Conservative	-.69	2.5		.7			.1				-2.9

As this bit of detective work shows, the parties that display the greatest discrepancy in their indicator scores are also riddled with missing data. We begin to suspect that our inconsistency problems may be linked with the quality of the data. Fortunately, the ICPP Project provides explicitly for systematic examination into data quality in several ways (see Janda, 1970b). Two of these provisions can be of help in checking the scoring of these four deviant parties on our Centralization of Power indicators. We can look first at the "adequacy-confidence" code--which accompanies every one of our variable codes--to see whether the variable was coded with the "highest confidence" (Adequacy/Confidence code 9) or the "lowest confidence" (A/C code 3--code 1 is used when no information can be found on the party for the indicator and code 2 when the available information is too confusing to permit coding the variable). We can also look at the machine-readable verbal discussion of the variable code to see why the party was coded any given way. We can turn to these aids in checking the scoring of the parties in Table 13.

The Chadian Social Action Party could only be coded on two of the eight centralization indicators, Selecting the National Leader and Selecting Parliamentary Candidates, and the A/C codes for both of these codes were only 5 and 3 respectively. The verbal comment for the former is "After Rogue's early leadership, the leadership does not seem to be identifiable," and the analyst assigned the party the lowest possible code, 0 for "no national leader can be identified." His comment for Selecting Parliamentary Candidates is "Selections were apparently made by an influential minority," and he assigned the highest code, 9 for "selection is determined by a national committee or party council." While these comments are not contradictory, they do seem anomalous and fail to dispel our worry over the quality of these data.

The Lebanese Constitutionalist Bloc's coding cannot be checked out as thoroughly, for I do not have the written record available (as I write this paper in England), but the respective A/C codes for the five indicators that were coded are 9, 6, 3, 9, and 9. Despite the highest A/C for the coding of the first variable, I find it hard to believe that the Constitutionalist Bloc has only local organizations and no higher party organs--which is the meaning of the 0 code assigned to it that produces the -3.7 z-score. Moreover, the other negative z-score (which does not contribute nearly as much to the high variance) has the lowest possible A/C rating. I question these data as well.

The Ghanaian United Party could only be coded on three of the indicators. The A/C codes for the first two are 6 and that for the third--which is discrepant with the other two--is again the lowest, 3. The coding comment, "It is inferred from no information that the United Party controls no important communications media," supports the assigned variable code of 0, which produces the -2.3 z-score. This indicator inconsistency is more credible than the other cases, but I would still like to re-examine the information base to be more confident about the scoring.

The final party, the Nicaraguan Conservative Party, is again coded on only three indicators, with the A/C codes for all being only 3. The comment for the eighth indicator, Leadership Concentration, is "There appears to be no single leader who dominated the PCN; collective centralization of leadership is possible, but not documented," which earns the PCN the lowest code of 0 and a z-score of -2.9.

In general, our suspicions about the quality of the data for these discrepant parties are confirmed. The scorings which generated the unprecedented variances across the indicators do not appear to be firmly based. There is not much that can be done at present to clarify the matter further, but we can see the effect of eliminating these four highly deviant parties from the data set and redoing the Z analysis for only 78 parties, with the loss of two parties each for the two non-Western groupings. The results of this re-analysis are given in Table 14.

TABLE 14: Z Analysis Results for Centralization Indicators Less Deviant Cases

Groupings of Parties	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
Worldwide Sample, N = 78	.01	.48	.48	.11
European etc., N = 35	-.08	.43	.47	.06
N. Africa etc., N = 23	.11	.34	.47	.12
Africa S. of S., N = 20	.06	.68	.50	.18

With the troublesome (or errorful) parties removed, the Z analysis is strikingly different from that in Table 12 and conforms more closely to the patterns of the other Z analyses, especially with respect to the coefficients of indicator covariation and case variation. The indicator covariation measure is down to .48 from .61 and those for the non-Western countries drop even more. The astounding coefficients of case variation for the non-Western countries are also down from .63 and .90 to .12 and .18. Although the overall coefficient of concept variation remains at a level below that of any other of our concepts, given the data checking that needs to be done on the deviant cases, we will not work at refining the scale by dropping items. Reluctantly, we must be content with the eight item scale and the four problem cases for now.

Measuring Coherence

The concept of "Coherence" is defined as the degree of congruence in the attitudes and the behavior of party members, especially party officials and militants. Six indicators were advanced initially to measure this concept, with the statistical results shown in Table 15.

TABLE 15: Statistical Analysis of Coherence Measures

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Rotated Loadings & Exp. Variance	
					41%	49%
Legislative Cohesion	0 to 1.0	56	.86	.20	55	58
Ideological Factionalism	0 to 6	73	1.9	2.1	84	83
Issue Factionalism	0 to 6	66	1.2	1.6	70	70
Leadership Factionalism	0 to 6	78	1.6	2.1	56	57
Strategic or Tactical Factions	0 to 6	62	1.5	1.9	77	77
Party Purges	0 to 4	79	.1	.5	19	

The first principal components solution accounts for only 41% of the variance, and it shows that Party Purges--which has been a difficult variable throughout the ICPP Project--correlates only .19 with the factor. The very low mean and relatively large standard deviation for Party Purges suggest that it has not been operationalized well and undoubtedly accounts in part for its lack of relationship to the other indicators. Eliminating this indicator from the set raises the explained variance among the remaining five indicators to a respectable level but one still below that attained by the indicators for the other concepts. Both Legislative Cohesion and Leadership Factionalism, with loadings of 58 and 57 respectively, offer themselves next for sacrifice in an effort to improve the unidimensionality of the measure. A Z analysis of the shortened five item scale finds Leadership Factionalism more dispensible than Legislative Cohesion. The results of the analyses for both the five and four item scales are given in Table 16.

TABLE 16: Z Analysis Results for Coherence Indicators

Matrices in the Analysis	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
<u>Five Item Scale, N = 77</u>	-.02	.54	.50	.32
European etc., N = 35	.06	.36	.45	.20
N. Africa etc., N = 24	-.26	.85	.58	.40
Africa S. of S., N = 18	.15	.45	.48	.46
<u>Four Item Scale, N = 73</u>	-.04	.64	.41	.27
European etc., N = 35	.01	.41	.43	.22
N. Africa etc., N = 23	+.27	.97	.45	.28
Africa S. of S., N = 15	.18	.50	.31	.34

Note that the real gain of the four item over the five item scale comes in the coefficients of concept variation, which are increased overall and within each of the areas. The coefficients of indicator covariation reflect the gain in concept variation some what irregularly, however, with the fit of the indicators improved more for the non-Western parties than the Western ones. The relatively high coefficients of case variation imply that the lack of fit is again more a problem of deviant parties rather than general inconsistency across indicators. This suggests that additional research on the deviant parties will improve the measurement of the concept.

Measuring Involvement

Involvement is defined in the ICPP Project as the degree of intensity of psychological identification with the party and commitment to further party objectives by participating in its activities. Six different indicators were selected to tap the degree of party involvement; they are named in Table 17.

TABLE 17: Statistical Analysis of Involvement Indicators

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated Loadings & Explained Variance		
					37%	44%	50%
Membership Requirements	0 to 7	65	2.5	1.9	53	53	
Membership Participation	0 to 6	53	2.2	2.1	70	69	61
Material Incentives	0 to 4	67	1.2	1.4	62	62	74
Purposive Incentives	0 to 4	69	1.8	1.4	80	81	87
Doctrinism	0 to 3	75	.9	1.0	63	63	60
Personalism	0 to 4	77	.6	.8	06		

As the principal components analysis clearly shows, Personalism-- which is operationalized by estimating what proportion of the militants are devoted to the party leader--is virtually unrelated in any systematic way to the other indicators. Without that variable, however, the proportion of explained variance increases only to 44%, reaching 50% only when Membership Requirements--operationalized in terms of the severity of those requirements--is dropped as well. We will examine the Z analysis results for the five item scale with Membership Requirements and the four item scale without it.

TABLE 18: Z Analysis Results for Involvement Indicators

Matrices in the Analysis	Concept Score	Coefficient of Concept Variation	Coefficient of Indicator Covariation	Coefficient of Case Variation
<u>Five Item Scale</u> , N = 76	-.02	.47	.54	.20
European etc., N = 35	.01	.33	.52	.22
N. Africa etc., N = 24	.10	.60	.53	.20
Africa S. of S., N = 17	-.20	.53	.62	.20
<u>Four Item Scale</u> , N = 72	-.01	.56	.46	.22
European etc., N = 35	-.03	.42	.47	.23
N. Africa etc., N = 24	.05	.56	.46	.21
Africa S. of S., N = 13	-.04	.76	.45	.21

Reflecting the results of the factor analysis, the Z analysis results in Table 18 detect more concept variation in the four item than in the five item scale. This finding by itself would argue for use of the smaller scale, but it also turns out that the smaller scale reduces the indicator inconsistency within each of the areas, leaving the African parties, in fact, with the lowest value. But the level is still higher than that attained for most of our scales, showing some overall lack of fit, and the coefficient of case variation implies that there are some deviant cases as well. Yet, whatever the lack of interrelationships among these indicators, the source of the discrepancies cannot be fixed to the cultural areas, for the relevant coefficients are remarkably even. Indeed, if anything the fit is slightly better for the non-Western parties than the Western ones.

Measuring Autonomy: A Reconceptualization

All the concepts examined for conceptual equivalence of indicators have been taken up in the order that they first appeared in the ICPP conceptual framework (Janda, 1970a)--except for Autonomy, which is being considered last as the exception that proves the rule. Originally, eight of the eleven major concepts in the ICPP Project were formulated in a manner that allowed for measurement with multiple indicators in an additive model. The indicators for Social Aggregation and Social Articulation were proposed for use in a multiplicative model from the start, and those for Goal Orientation--while involving the assumption of additivity--were proposed largely as tactical validators of three distinct strategic dimensions (Janda, 1970a; pp. 98-102). Data collection on Social Aggregation, Social Articulation, and Goal Orien-

tation has lagged behind data collection on the other concepts, so no report can be made on our attempt to measure those three important concepts. The full set of indicators for each, however, is given in the Appendix.

The concept of Autonomy, which has been neglected up to now, was subjected to examination for indicator consistency with results that did not support the original conceptualization and measurement model. In the ICPP Project, Autonomy was defined as the party's structural independence from other institutions and organizations, whether in or out of the country. Taking some suggestions from Huntington (1965), I proposed five indicators of Autonomy. The relevant data are in Table 19.

TABLE 19: Statistical Analysis of Autonomy Indicators

Name of Indicator	Range of Scores	No. of Cases	Mean	Std. Devn.	Unrotated Loading %
					Exp. Variance 30%
Sources of Funds	1 to 7	62	4.1	2.5	26
Sources of Members	1 to 6	60	4.7	1.1	-71
Sources of Leaders	1 to 5	72	2.4	1.4	77
Domestic Relations	1 to 7	79	5.1	2.0	53
Foreign Relations	1 to 5	76	4.2	1.1	-22

The principal components solution represents barely 30% of the variance. Moreover, some of this explained variance comes unaccountably from indicators that are negatively correlated with the factor. It is clear that these indicators do not come near constituting a unidimensional scale for Autonomy. As in so many other instances of empirical research, the "clarity" of it all comes after the data are in hand. Upon reflection, we see that the reason these indicators did not interrelate is that they pointed out quite different types of Autonomy. In conceiving of Autonomy as structural independence from other institutions or organizations, I did not recognize that this independence could be compromised in different ways, any one of which was sufficient to constitute an abridgment of Autonomy, and there was no reason to expect that these different infringements of Autonomy are in any way substitutable indicators of the concept. Instead of a set of multiple indicators for the same concept, I have a set of single indicators for different types of autonomy. This is not to say that these variables will not be useful, but it does mean that we do not have the reliability in measuring these types of autonomy that comes from multiple indicators.

Summary and Conclusions

Part I of this paper concluded with a call for an investigation into the interrelationships of indicators used to measure party properties across and within systems and an examination of the range of variations of these property measures across and within systems. Part II has done this for a series of concepts in the cross-cultural analysis of political parties. The findings in Part II deserve summary for their contributions to answering questions raised in Part I, especially whether the properties of political parties defined so abstractly for cross-cultural research are conceptually equivalent across and within all culture areas. If a reasonable claim for conceptual equivalence cannot be supported, then there is little theoretical value in fashioning a definition of party broad enough to embrace entities called "parties" in all culture areas.

Findings on the interrelationships among indicators within systems can be summarized with reference to the coefficients of indicator covariation and case variation produced from the Z analyses of the most acceptable scales for seven of our eight measured concepts--excluding of course Autonomy, for which the indicators did not satisfactorily relate across systems. Taking first only the area coefficients of indicator covariation, which measure overall fit of the indicator interrelationships within systems, we find that the coefficients for a given concept are generally similar across culture areas, revealing no pronounced differences in the "fit" of the indicators and therefore no basis for expecting the "inapplicability" of the indicators or concepts within any culture area. Indeed, insofar as the problem of inapplicability in parties research is thought to lie in using "Western" concepts for non-Western parties, it is instructive to point out that for five of the seven concepts the coefficients for the non-Western parties are lower than those for the Western parties. Furthermore, in five of the instances, the coefficients for the African parties are lower than those for the other "Third World" parties. The picture of indicator interrelationships becomes mixed within culture areas only when we turn to the coefficients of case variation, which express the lack of fit among indicators for particular parties. We had the special problem as noted of huge coefficients for some non-Western parties on the Centralization indicators. The coefficients also are consistently higher for the non-Western parties for the Coherence indicators. But otherwise, the values are about as low for the non-Western areas as for the European and Anglo-American grouping. In sum, although a few non-Western parties may be highly deviant in demonstrating great discrepancies in indicator scores, the general picture presented by the patterns of interrelationships among indicators within systems is one of regularity. According to this test, the claim of conceptual equivalence of party properties is supported.

Much less attention was paid in Part II to the second test, examining the means and variances for the concept measures within systems. According to this test, cultural "interferences" with the incidence of the property are not likely to be present if the means and variances

for a measure are equal (or approximately so) when calculated separately for the parties within systems. The Z analyses show that there most certainly are systemic interferences reflected in the measurement of all the concepts, as shown by different concept scores and coefficients of concept variation. The differences in concept scores--a measure of the central tendency of the property--are greatest for Institutionalization and somewhat less for Degree of Organization. They are least for Involvement. The differences in concept variation--analogous to the variance of the property--are greatest for Governmental Status and somewhat less for Issue Orientation. They are least for Institutionalization. What are the implications for these findings for conceptual equivalence?

Let us consider in more detail the Institutionalization and Governmental Status Z statistics. Should a finding of great differences in party Institutionalization from European to African areas be regarded as demonstrative of the cross-cultural inapplicability of the measure? Would we want a measure that did not score the European parties high on the concept in comparison with parties in the developing areas? Similarly, should a finding of greater differences in the Governmental Status of African parties compared to European parties be construed as a problem of conceptual equivalence? I think not. Univariate comparisons of means and variances must be made with caution in judging conceptual equivalence. One ought to check to see if any expected patterns of similarities or differences are in fact obtained. If they are not, then conceptual equivalence may be suspect. Specific patterns of similarities and differences were not anticipated for all our concepts, but where anticipated, they developed. The differences already noted for Institutionalization and Governmental Status were expected, as were the differences in means for both Issue Orientation and Degree of Organization. The comparable means and variances test is felt to be distinctly limited in its potential for exposing a lack of conceptual equivalence, but within its limitations, the test does not succeed in failing our measures on the subject of conceptual equivalence.

The ICPP measures have withstood the first stage of testing for conceptual equivalence, and they lend support to the contention that the party properties measured are conceptually equivalent across and within cultures. But the issue of conceptual equivalence is not laid to rest, for the final and by all means the most crucial test is yet to come. We must determine whether or not the patterns of relationships that exist among these concepts and between these concepts and others are interpretable within a common theory. The relationships need not be exactly the same, but they must be interpretable under stated conditions. The test of comparing relationships in reality is akin to the establishment of construct validity, and it cannot be jumped like a single hurdle. We must start on the process of accumulating numerous research findings involving these variables. At least we can begin our journey with some assurance that the concepts have passed the preliminary investigations at the measurement level.

Notes 1

¹This paper was prepared while I was on leave from Northwestern University for 1970-71 as a Visiting Fellow of the Foreign Policy Research Institute in Philadelphia. I am grateful to Dr. William Kintner, Director of FRRI, for supporting me while I devoted full time to my parties research from September to February in Philadelphia and from March to June at the University of Essex in England. I am also indebted to Professor Henry Teune, Acting Chairman of the Department of Political Science at the University of Pennsylvania, and Professor Anthony King, Chairman of the Department of Government at the University of Essex, for welcoming me into their departments as a visitor on leave and allowing me to make extensive use of their computing time and facilities. Jean Blondel, through his many kindnesses, helped to make my stay at Essex particularly enjoyable, and Mary Welfling, who administered my research project at Northwestern so capably in my absence, improved my peace of mind the entire year by insulating me from crises at home. Jacqueline Bayes kindly typed the paper for reproduction at Essex.

²The International Comparative Political Parties Project was established in 1967 with support from the National Science Foundation, Grants GS-1418 and GS-2533. The ICPP Project uses a variety of information retrieval techniques to extract data about political parties from the available literature. Discussions of the project's methodology are contained in Janda (1968 and 1969). Its substantive objectives are described in Janda (1970a).

³The ICPP Project looks at parties at a particular "slice" of time following the Second World War. The time period chosen for study was the thirteen years from 1950 through 1962. With one exception, all of our observations of party properties can be regarded as "cross-sectional" in time. While our basic design is cross-sectional, we do provide for some expression of party change during this period by scoring parties separately for the first and second halves. Given the nature of library materials on which the study was based, it was felt that only a two part division in time could be supported with available information. Wherever possible, we tried to divide our scoring for parties in all countries into 1950-1956 to represent the first "half" of our time period and 1957-1962 to represent the second. But fundamental changes in the political systems of certain countries during our time period argued for different cutting points to produce more homogeneity into the political systems within the two halves. Thus, we have departed from the standard 1950-1956 and 1957-1962 breakdowns for these countries as follows: France, 1950-1957 and 1958-1962; Cuba, 1952-1958 and 1959-1962; El Salvador, 1950-1955 and 1956-1960; Burma, 1950-1957 and 1958-1961; Cambodia, 1950-1955 and 1956-1962; Sudan, 1953-1958 and 1958-1962; Turkey, 1950-1956 and 1957-1960; Ghana, 1951-1956 and 1957-1962; Kenya, 1950-1956 and 1957-1963; and Uganda, 1952-1957 and 1958-1962. With the exception of Institutionalization, which was coded according to observations over the entire time period, all of our variables are coded separately for the first and second halves of our time period. The data selected for presentation in this paper, however, come only from the second half-- which usually means 1957-1962 with exceptions as noted above.

⁴All the statistical analyses reported herein were performed at the University of Essex Computing Centre using the flexible SALY system for social science data analysis on the ICL 1900. James Alt was kind enough to prepare my data for SALY initially and then help me use the system. Lynn and Michael Doscher also answered my questions and solved many of my problems in using SALY. In addition, Lynn Doscher was kind enough to write a special z-score program for use under SALY that served my special needs.

⁵The measurement literature is evasive in providing exact formulae for calculating reliabilities in the present situation. A suitable Kuder-Richardson formula probably exists for use with the inter-item correlation matrix, but Spearman-Brown reliabilities were instead estimated from the average item intercorrelations using formulae 17.15 and 17.16 in Guilford (1956, p. 454).

⁶Alternative cultural-geographic groupings can be and will be examined, but this one seemed most suitable for our present purposes given the available data. Still other bases for grouping nations into cultural clusters are suggested by alternative conceptions of systemic factors. A report of findings for data grouped into three levels of industrialization can be found in Janda (1971b). Yet other examinations of conceptual equivalence based on nations grouped by typology of party systems, or even goal orientation of the party, must await the collection of data on more units of analysis.

⁷While progress had been made in the comparison of factor structures and several techniques are available, all of them necessarily depend initially on stable factor structures. Based on a total of 90 parties, the correlations underlying the overall factor analysis can be regarded as fairly stable--hence the factor solution can be considered stable. But when the sample is divided into three culture groupings with a maximum of 35 parties per group, problems of deviant cases and sampling error present themselves to a degree that puts factor analysis into serious question as an acceptable technique for comparing intercorrelation patterns for parties within systems. Indeed, when a "control" variable like culture area is introduced to produce the sample reductions, the problem of attenuated variance thus becomes so severe that the correlational model itself becomes unsuitable for studying interrelationships among indicators. This argument is expanded in Janda (1971a).

⁸For the Governmental Status concept and all subsequent ones, the numbers of parties involved in the analyses will drop below 90 depending on the existence of parties in the second half of our time period and the availability of data for those parties on the conceptual indicators.

APPENDIX

Social Aggregation: Within the ICPP Project, social aggregation refers to the gathering of different social groups or categories within the party. The term "social" aggregation is preferred to "interest" aggregation because we cannot actually study the gathering of interests as easily as we can the structural representation of interests in the form of social groups. Based on the proportion of the groups' support given to a party, a social aggregation measure presumably indicates the extent to which the party represents significant interests within society. We have identified six major "cultural differentiators" within societies and attempt to determine the proportions of support given to the party from each of the main groups within each cultural differentiator: occupation (or class), religion, ethnic/language/racial, region, urban/rural, and education. We employ the following formula:

$$\text{Party Aggregation} = \frac{\sum X_i}{k} (1 - CV)$$

Where: X_i = proportion of group's support given to party i
 CV = Mean deviation of support + mean
 k = number of main groups within differentiator

Social Articulation: Within the ICPP Project, social articulation refers to the expression of predominant social groups or categories within the party. Based on the proportion of the party's support derived from given groups, a social articulation measure presumably indicates the voice that different social groups have within the party. The same six cultural differentiators are used in computing the measure, but the data are percentagized differently and a different formula is used:

$$\text{Party Articulation} = \sqrt{\frac{\sum Y_i^2 - 1/k}{1 - 1/k}}$$

Where: Y_i = proportion of party's support from each group
 k = number of main groups

Goal Orientation: Outline of indicators in the ICPP Project--

Strategy: 6.00 Open competition in the electoral process

Direct Tactics: 6.01 Advertising candidates by mass media
 6.02 Advertising by signs, posters, mail
 6.03 Promoting candidates through direct contact
 6.04 Holding public meetings and rallies
 6.05 Registering voters, transporting to polls

Strategy: 6.10 Restricting opposition party activities

Direct Tactics: 6.11 Interfering with opposition advertising
 6.12 Harassing opposition party workers
 6.13 Harassing opposition candidates
 6.14 Harassing opposition voters; buying votes
 6.15 Falsifying vote reports
 6.16 Coopting political opponents

Strategy: 6.20 Subverting the political process

Direct Tactics: 6.21 Boycotting elections, destroying ballots
 6.22 Terrorizing the population
 6.23 Leading strikes and riots
 6.24 Sabotaging government facilities
 6.25 Attempting assassinations; attempting coups
 6.26 Conducting guerilla warfare

Indirect Tactics Supporting Different Strategies:

6.30 Propagandizing ideas and programs

6.31 Operating mass communications media
 6.32 Operating party schools (Political focus)
 6.33 Passing resolutions and platforms
 6.34 Publishing position papers

6.40 Entering alliances with other parties

6.41 Electoral agreements
 6.42 Legislative blocs
 6.43 Cabinet coalitions
 6.44 Supporting common presidential candidate

6.50 Providing for social welfare

6.51 Providing food, clothing, or shelter
 6.52 Running employment services
 6.53 Interceding with government administration
 6.54 Providing basic education (not political)
 6.55 Providing recreational facilities or services

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