

## MANAGING QUALITATIVE INFORMATION AND QUANTITATIVE DATA ON POLITICAL PARTIES\*

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### ABSTRACT

Techniques are described for managing information collected for a project to compare 158 political parties from 53 countries during 1950–1962. Information obtained from bibliographic searches and correspondence was stored on microfilm; the MIRACODE system was used for retrieval. Researchers scored the parties examined on thirteen different issues along a scale ranging from +5 (leftist) to –5 (rightist). Each code assigned was accompanied by a discussion of the coding judgments and a code to indicate adequacy of the information and the researcher's degree of confidence. The use of the system is demonstrated with reference to the two major parties in the US and UK, the Communist Party of the Soviet Union and the (now defunct) Portuguese National Union. The accuracy of the coding is evaluated by comparing the ratings of experts from the US and Soviet Union.

### INTRODUCTION

The power of computers to analyze great quantities of numerical or coded data is well known among social scientists. But there are aspects of computer information processing that are not common in social research, and many social scientists are not familiar with alternative, *non-computer*, technologies for information processing. These gaps in knowledge and utilization are unfortunate, because scholars whose research interests do not invite easy quantification may be depriving themselves of analytical capabilities offered by modern information technology.

This paper does not review the range of computer and non-computer technologies available for information processing (see McMurdo, 1980; Williams, 1980; Orden and Evens, 1981). Its objective instead is to illustrate the

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application of available technologies in a long-range, on-going research project dealing with the comparative study of political parties. The study involved a variety of information processing techniques (Janda, 1968a, 1969). This paper will discuss only three techniques, two for handling qualitative information and one for processing quantitative data. The three together constitute an information system in operation.

### INTERNATIONAL COMPARATIVE POLITICAL PARTIES PROJECT

The study in point is the International Comparative Political Parties Project, which aimed at conducting the first systematic, comprehensive, empirically-based study of political parties across the world. The study covered 158 parties of widely different types operating in 53 countries during 1950–1962. This period was divided into two parts, 1950–56 and 1957–62, and the parties were studied separately within each. Coverage of the ICPP Project by area, country, and time period is reported in Table 1.

TABLE 1. Coverage of the ICPP Project: parties by area, country and time period

Cultural-geographical area	Country	Parties per country	Parties by area	Number of parties in 1950–56	Number of parties in 1957–62	Number of parties in both periods
Anglo-American:	United States	2	} 22	22	22	22
	United Kingdom	2				
	Australia	3				
	Canada	4				
	New Zealand	2				
	Ireland	3				
	Rhodesia/Nyasaland Fed.	4				
India	2					
West Central Europe:	Austria	3	} 16	16	16	16
	France	5				
	West Germany	3				
	Greece	4				
	Portugal	1				
Scandinavia and Benelux:	Denmark	4	} 22	22	22	22
	Iceland	4				
	Sweden	4				
	The Netherlands	6				
	Luxembourg	4				
South America:	Ecuador	5	} 18	14	18	14
	Paraguay	3				
	Peru	5				
	Uruguay	2				
	Venezuela	3				
Central America:	Dominican Republic	1	} 17	12	12	7
	El Salvador	2				
	Guatemala	7				
	Nicaragua	3				
	Cuba	4				

Cultural-geographical area	Country	Parties per country	Parties by area	Number of parties in 1950-56	Number of parties in 1957-62	Number of parties in both periods
Asia and the Far East:	Burma	4	16	13	14	11
	Cambodia	2				
	Indonesia	4				
	North Korea	1				
	Malaya	5				
Eastern Europe:	Albania	1	10	10	10	10
	Bulgaria	2				
	East Germany	5				
	Hungary	1				
	USSR	1				
Middle East and North Africa:	Sudan	3	14	12	14	12
	Tunisia	1				
	Lebanon	4				
	Iran	4				
	Turkey	2				
West Africa:	Dahomey	3	13	10	9	6
	Ghana	4				
	Guinea	1				
	Upper Volta	1				
	Togo	4				
Central and East Africa:	Central African Republic	1	10	4	10	4
	Chad	2				
	Congo-Brazzaville	2				
	Kenya	2				
	Uganda	3				
Totals			158	135	147	124

The ICPP Project was begun in 1967. Its major findings were published in a 1000 page reference book, *Political Parties: A Cross-National Survey* (Janda, 1980). The data are available for distribution through the Inter-University Consortium for Political and Social Research (Janda, 1979b). The long delay between launching and landing the study was due in part to inadequate funding but mainly to the study's broad scope, covering at least five countries in each of ten cultural-geographical areas of the world. The scope of the project ensured from the very beginning that the study would extend for several years and involve scores of student assistants investing thousands of hours in research. This multi-year commitment raised problems in managing the information between the time it was collected and the time it was used, and information management was an integral part of the project's research design.

The study sought information about political parties from library materials such as books, articles, newspapers, and party documents. Material relevant to party politics in each country was identified through lengthy bibliographic searches and correspondence with party scholars in the US and abroad (Janda, 1968a, Chapter 5). More than 3500 documents of various types were selected as data sources. Information about the activities and characteristics of particular parties had to be mined from this bulky literature, sorted and stored for later use, and retrieved for research after the information base was completed

(Janda, 1968b). These needs defined three aspects of the information management problem which attract our attention.

1. The indexing, storage, and retrieval of the information extracted from the source material.
2. The recording and preservation of researchers' judgments and decisions about party characteristics.
3. The storage and analysis of the party characteristics.

Each of these will be treated in turn below.

### STORING INFORMATION ON MICROFILM FOR RAPID RETRIEVAL

The problem of storing the information for rapid retrieval in research was handled through the use of microfilm technology, specifically Eastman Kodak's MIRACODE system (Janda, 1967). MIRACODE is an acronym for 'Microfilm Information Retrieval Access CODE'. The system invited use because of its advantages over computer technology in certain respects. Use of microfilm as a storage medium accommodates large amounts of textual material in original form without endless keystroking. The MIRACODE system in particular allows direct man-machine interaction with browsing capabilities and features powerful searching capabilities, employing Boolean logic on machine-readable optical codes.

The basic components of the MIRACODE system are a special microfilm camera and microfilm reader. The system can store and retrieve individual pages of original documents according to one or more three-digit code numbers assigned to the input material. At the microfilming stage, the MIRACODE camera transforms the code numbers into machine-readable binary codes recorded on film next to the page image. The film, which is loaded into magazines for convenient handling, can be rapidly searched for logical combinations of code numbers at the MIRACODE retrieval station. Upon retrieval, the page image is projected on a ten-by-twelve inch viewing screen. Hard copies can be produced by pressing a button on the microfilm reader. Depending on the amount of coding per image, several hundred pages of material can be stored on one 100-foot film magazine and searched for specified combinations of code numbers in seconds\*.

Researchers in the ICPP Project prepared their source material for the MIRACODE system by indexing the topics discussed on each page with reference to a set of coding categories, similar to the practice followed in the Human Relations Area Files (Murdock *et al.*, 1967). The codes used to index the substantive content of the party literature are given in Table 2. One or more of these index numbers were assigned to each page discussing party features or activities. The codes were then keypunched and fed into the MIRACODE camera as the original pages were being microfilmed.

The index codes were translated into a binary pattern of clear and opaque rectangles recorded on the film next to the page image. Figure 1 reproduces an actual frame from the microfilm cartridges for the Soviet Union, which contained 3091 pages from 139 documents. The page in Figure 1 is from a

\* The Eastman Kodak Company has informed me that the MIRACODE system has been superseded by their 'ORACLE' system, which handles the storage and retrieval of information from microfilm somewhat differently from that described here.

TABLE 2. Outline of substantive information codes used in indexing literature for the MIRACODE system

0	What is a political party—definition, functions, theory, method of studying	440	National party committee
000	Definition of a political party	450	Legislative organization
010	Typology of parties	460	Ancillary organizations
020	Functions of political parties	470	Functional/dysfunctional aspects of party structure
030	Explicit propositions about parties	480	Articulation of party structure
040	General theory about parties	490	Centralization of power
050	Purpose of studying parties	5	What does the party seek to accomplish—party goals
060	Approaches to the study of parties	500	Gain control of the government
070	Methodology of studying parties	510	Engage in coalitions and constitute oppositions
1	How does a political party begin—party origin	520	Place members in government positions
100	When was it formed	530	Issue orientation
110	Who formed it and what was its base of electoral support	540	Ideological orientation
120	Why was it formed	550	Subvert the government
130	How was it formed	560	Efficiency and effectiveness
140	Political history of party	6	Under what conditions does the party operate—political environment
150	Organizational history of party	600	National crises
2	What does a political party do—party activities	610	Political issues of consensus or cleavage
200	Selects candidates and party officials	620	Electoral system
210	Conducts election campaigns	630	Popular participation
220	Formulates party policy and builds party organization	640	Political norms and attitudes
230	Influences government policy	650	Administrative bureaucracy
240	Propagandizes its goals and activities	660	The executive
250	Discipline—maintenance of group solidarity	670	The legislature
260	Raises and disperses funds	680	Government structure and political history
270	Causes demonstrations, riots, assassinations, sabotage, etc.	690	Geographical allocation of authority
280	Intercedes in government action on behalf of citizens (including members)	7	Under what conditions does the party operate—social, economic, geographic
290	Social activities	700	Economic
3	Who belongs to the party—party membership	710	Geographic
300	Party supporters	720	Social
310	Party contributors	730	Religious
320	Party members	740	Social norms and attitudes
330	Party workers and activists	750	Activities of the military
340	Party candidates	760	Activities of the students
350	Party members in government posts	770	Activities of the trade unions
360	Party leaders and officials	780	Activities of voluntary associations and interest groups
370	Party factions	8	Under what conditions does the party operate—party system
380	Organizational support	800	Number of parties
390	Independents	810	Election results
4	How is the party organized—party organization	820	Stability of parties in system
400	Local party organization	830	Interparty competition
410	Constituency party organization	840	Interparty cooperation
420	Regional party organization	850	Origin, support, and history of system
430	National party convention, conference or congress	860	Status of party in party system
		870	Typology of party systems
		880	International party system

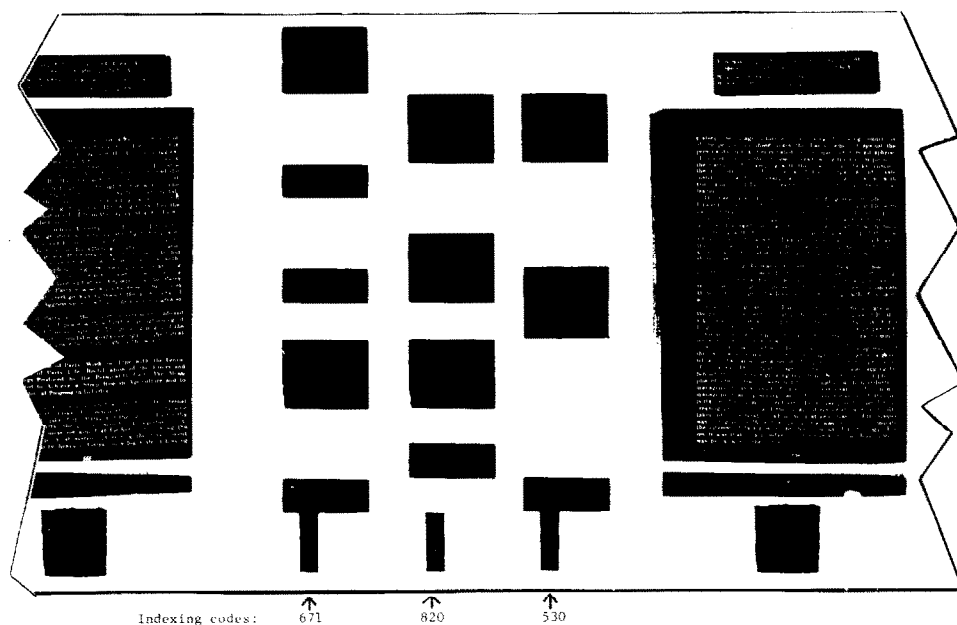


FIG. 1. Segment of MIRACODE 16-mm microfilm for the Soviet Union showing p. 654 of *History of the Communist Party of the Soviet Union* (by B. N. Ponomaryov *et al.*; Moscow: Foreign Languages Publishing House, 1960)

Soviet English-language publication, *History of the Communist Party of the Soviet Union*. The film segment shows page 654 tagged with three indexing codes: 671 (for the CPSU), 820 (stability of parties in system), and 530 (issue orientation). The indexer selected these codes as most appropriate for retrieving the page's information content, which dealt with the discussion of the CPSU'S new role in the development of a socialist economy.

The codes on the microfilm are sensed by an optical scanning device which reads the codes flashing by the scanning head at a rate of about 100 pages *per second*. Simply by pressing the desired numbers on a bank of buttons at the MIRACODE station, a researcher can search the film quickly to retrieve all pages indexed with the desired code or logical combination of codes. By searching for code 530, for example, one can rapidly retrieve and display in sequence all the pages for party politics in a given country that discuss the topic 'issue orientation'. A search of our microfilm file for the Soviet Union would return 248 pages indexed for 'issue orientation'. Working on a multi-party country, the researcher could use the logical search capabilities of MIRACODE selectively retrieve discussions of any *particular* party's issue orientation. For example, our file of 2844 pages from 92 documents on French party politics would return 571 pages indexed for issue orientation (530) alone. But by combining the search for 530 with code 113 for the French Socialist Party, the researcher would retrieve only 172 pages discussing both issue orientation *and* the Socialist Party.

However swift and powerful the MIRACODE system is for retrieving information from the literature stored on microfilm, the system does not eliminate the need for old-fashioned scholarship. Researchers must still sit

patiently at the retrieval station, taking notes on the information retrieved. The system simply saves enormous time in searching the literature and provides the important advantage of retrieving, upon demand, the full text from which the notes were taken. But as always, researchers are left to themselves to collate the retrieved items of information and draw judgments from the literature about any party's issue orientation.

### FORMALIZING AND RECORDING RESEARCHERS' JUDGMENTS

Indexing the literature in the MIRACODE system merely tagged the information for retrieval. The ICPP Project sought ultimately to score parties on a large number of variables organized under ten major concepts. Six concepts pertained to the parties' 'external relations' with society: Institutionalization, Governmental Status, Goal Orientation, Issue Orientation, Social Support, and Autonomy. Four concepts dealt with parties' 'internal organization': Complexity of Organization, Centralization of Power, Coherence, and Involvement. The information retrieved under the 'issue orientation' indexing code was used to score the parties on several different issues under the general concept of issue orientation. We will limit our attention to this concept in explaining the other aspects of information management in the ICPP Project.

Researchers attempted to score all the parties in the project on thirteen different issues:

1. Government ownership of the means of production.
2. Government role in economic planning.
3. Providing for social welfare.
4. Redistribution of wealth.
5. Secularization of society.
6. Support of the military.
7. Alignment with East-West Blocs.
8. Anti-colonialism.
9. Supranational integration.
10. National integration.
11. Electoral Participation.
12. Protection of civil rights.
13. Interference with civil liberties.

For the most part, these items were scored along a scale ranging from +5 (meaning a 'leftist' response) to -5 (meaning a 'rightist' response). For example, favoring nationalization of all means of production would earn a party the score of 5, while -5 would be assigned for opposing even government *regulation* of industrial production and marketing. Intermediate policy positions would be given intermediate scale positions according to specific instructions in a lengthy coding manual (Janda, 1980).

Due primarily to weaknesses in the information in our microfilm files, not all parties could be scored on each of these issues. Moreover, the quality of the information retrieved varied from poor to excellent, depending on the party and the issue. We indicated the quality of our scoring judgments in two ways. First, each quantitative code assigned to a party for a variable was supported by an accompanying *qualitative* or verbal discussion of the coding judgment. The discussion might be as short as one or two lines or as much as one or two pages

of text. Second, every variable code was also accompanied by an 'adequacy-confidence' code, ranging from 1 to 9, designed to express the *adequacy* of the information base underlying the judgment and the researcher's *confidence* in scoring the party on the variable (see Janda, 1970). The highest degree of confidence was expressed by a score of 9, which meant that at least three sources provided the same information about the party and that there was no disagreement in the literature about the code that should be assigned. On the other hand, a code of 3 indicated that the variable score was inferred from scarce or even contradictory information. Adequacy-confidence codes of 1 and 2 were reserved for our inability to score the variable due to a total lack of information (AC1) or due to an irreconcilable conflict in the available information (AC2).

The combination of quantitative variable and adequacy-confidence codes plus the qualitative supporting commentary constituted a rich mixture of quantitative and textual material assembled for 111 variables and 158 political parties. Our solution to the problem of managing this information mix was to employ a computer system for information retrieval. The system chosen was Northwestern University's RIQS: Remote Information Query System (see Mittman and Borman, 1975). RIQS was used for storing the information as it was collected, for editing the material to correct errors and improve verbal descriptions, for updating the file as new information was received, and for printing all or part of the file on request. In fact, the computer printout of the entire RIQS file of ICPP information constituted the camera-ready copy for photo-offset printing of the first major publication from the project (see Janda, 1980).

Like most other information retrieval systems, RIQS allows the user great freedom in organizing the structure of information within the file. For the ICPP file, each party was established as a 'record' of information. Each record (party) was defined in RIQS terms as consisting of seventy *items* of information, as listed in Figure 2. The first item contains the English name of the party, its identifying code number, and the native language name (if the country is non-English speaking). Item two describes the amount of literature indexed for the party and included in our microfilm files. The last 68 items in the RIQS record definition pertain to basic variables underlying the major concepts in our conceptual framework.

RIQS has the ability to search for specified combinations of terms within any item or across items and to retrieve only those records (in whole or part) which satisfy the search command. RIQS also can produce alphabetized indexes to terms within any item. We will ignore these more powerful capabilities of RIQS and discuss only its simpler uses for selective retrieval of information from the ICPP file in response to requests from outside users. For instance, RIQS has enabled us to respond easily to three actual requests for:

1. The names, name changes, and years of origin for all parties in the study.
2. Certain issue orientation scores for selected European parties.
3. Scores for yet a different set of issue orientation variables for all the parties in the study.

In each case, we used RIQS to select from our entire set of data only that information of interest to the writer, and we were able to provide not only the raw quantitative codes we had assigned to the parties on the variables but also the rich verbal discussion supporting and otherwise clothing the naked data.



- (1) PARTY NAME AND CODE NUMBER
- (2) INFORMATION BASE AND RESEARCHERS
- (4) 1.03 ORGANIZATIONAL DISCONTINUITY
- (5) 1.04 LEADERSHIP COMPETITION
- (6) 1.05 / 2.05 LEGISLATIVE INSTABILITY AND STRENGTH
- (7) 1.06 / 2.06 ELECTORAL INSTABILITY AND STRENGTH
- (8) 2.01 GOVERNMENT DISCRIMINATION
- (9) 2.02 GOVERNMENTAL LEADERSHIP
- (10) 2.03 CABINET PARTICIPATION
- (11) 2.04 NATIONAL PARTICIPATION
- (12) 2.07 OUTSIDE ORIGIN
- (13) 3.01-4.01-12.01 OCCUPATIONAL SUPPORT
- (14) 3.02-4.02-12.02 RELIGIOUS SUPPORT
- (15) 3.03-4.03-12.03 ETHNIC SUPPORT
- (16) 3.04-4.04-12.04 REGIONAL SUPPORT
- (17) 3.05-4.05-12.05 URBAN-RURAL SUPPORT
- (18) 3.06-4.06-12.06 EDUCATIONAL SUPPORT
- (19) 5.01 OWNERSHIP OF MEANS OF PRODUCTION
- (20) 5.02 GOVERNMENT ROLE IN ECONOMIC PLANNING
- (21) 5.03 REDISTRIBUTION OF WEALTH
- (22) 5.04 SOCIAL WELFARE
- (23) 5.05 SECULARIZATION OF SOCIETY
- (24) 5.06 SUPPORT OF THE MILITARY
- (25) 5.07 ALIGNMENT WITH EAST-WEST BLOCS
- (26) 5.08 ANTI-COLONIALISM
- (27) 5.09 SUPRANATIONAL INTEGRATION
- (28) 5.10 NATIONAL INTEGRATION
- (29) 5.11 ELECTORAL PARTICIPATION
- (30) 5.12 PROTECTION OF CIVIL RIGHTS
- (31) 5.13 INTERFERENCE WITH CIVIL LIBERTIES
- (32) 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS
- (33) 6.00 OPEN COMPETITION IN THE ELECTORAL PROCESS
- (34) 6.10 RESTRICTING PARTY COMPETITION
- (35) 6.20 SUBVERTING THE POLITICAL SYSTEM
- (36) 6.30 PROPAGANDIZING IDEAS AND PROGRAM
- (37) 6.40 ALLYING WITH OTHER PARTIES
- (38) 6.50 PROVIDING FOR WELFARE OF PARTY MEMBERS
- (39) 7.01 SOURCES OF FUNDS
- (40) 7.02 SOURCE OF MEMBERS
- (41) 7.03 SOURCES OF LEADERS
- (42) 7.04 RELATIONS WITH DOMESTIC PARTIES
- (43) 7.05 RELATIONS WITH FOREIGN ORGANIZATIONS
- (44) 8.01 STRUCTURAL ARTICULATION
- (45) 8.02 INTENSIVENESS OF ORGANIZATION
- (46) 8.03 EXTENSIVENESS OF ORGANIZATION
- (47) 8.04 FREQUENCY OF LOCAL MEETINGS
- (48) 8.05 FREQUENCY OF NATIONAL MEETINGS
- (49) 8.06 MAINTAINING RECORDS
- (50) 8.07 Pervasiveness of Organization
- (51) 9.01 NATIONALIZATION OF STRUCTURE
- (52) 9.02 SELECTING THE NATIONAL LEADER
- (53) 9.03 SELECTING PARLIAMENTARY CANDIDATES
- (54) 9.04 ALLOCATING FUNDS
- (55) 9.05 FORMULATING POLICY
- (56) 9.06 CONTROLLING COMMUNICATIONS
- (57) 9.07 ADMINISTERING DISCIPLINE
- (58) 9.08 LEADERSHIP CONCENTRATION
- (59) 10.01 LEGISLATIVE COHESION
- (60) 10.02 IDEOLOGICAL FRACTIONALISM
- (61) 10.03 ISSUE FRACTIONALISM
- (62) 10.04 LEADERSHIP FRACTIONALISM
- (63) 10.05 STRATEGIC OR TACTICAL FRACTIONALISM
- (64) 10.06 PARTY PURPOSES
- (65) 11.01 MEMBERSHIP REQUIREMENTS
- (66) 11.02 MEMBERSHIP PARTICIPATION
- (67) 11.03 MATERIAL INCENTIVES
- (68) 11.04 PURPOSEIVE INCENTIVES
- (69) 11.05 DOCTRINISM
- (70) 11.06 PERSONALISM

FIG. 2. List of 70 items defining a record of information in the RIQS file on political parties

We can illustrate this usage of RIQS by reporting the results of a search to display selected items of information for selected parties in the study. Consider the RIQS command:

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ACCESS ICPP FILE
BEGIN SEARCH OF RECORDS 1,2,11,12,171,671
PRINT (1) (19) (32)
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The PRINT statement in this command identifies the items of information to be retrieved: (1) is the name of the party, (19) is the party's position on government ownership of the means of production, and (32) is the party's ideological position as described independently by 'experts' in the United States and the Soviet Union. The BEGIN SEARCH OF RECORDS statement identifies the parties for which this information was requested. As revealed in Figure 3, the six parties chosen for this demonstration were the two major parties in the US and UK plus the Portuguese National Union (now defunct, it was Salazar's old ruling party), and the Communist Party of the Soviet Union.

It is always risky for any broadly comparative cross-national researcher to expose his codings for specific institutions in particular countries to scrutiny by area and country experts. The student who analyzes many institutions across nations must be satisfied with a level of knowledge that the expert would regard as superficial. In studying Figure 3, recall that the codes in the text apply to parties as they operated in 1957-62, not as they necessarily operate today. (Indeed, the Portuguese party no longer exists.)

Looking only at the scores for item 19, we find that these six parties span the continuum in our coding of ownership of the means of production. The leftist end is anchored at +5 by the CPSU, while the Portuguese National Union at -5 stands at the extreme right. The other four parties are positioned in the middle ground. The British Labour Party stands closest to the CPSU and is the only other party on the 'leftist' side of the continuum. The US Democratic Party is located slightly to the right of the midpoint, just slightly less rightist than the British Conservatives. The US Republican Party is placed further to the right but not as far as the Portuguese Party.

The 'AC7' codes accompanying our scores for the Democratic, Labour, and Conservative parties reveal something less than complete confidence in those evaluations, while the 'AC9' codes for the other parties indicate more satisfaction with their placements. The text accompanying each code is intended to provide some explanation of the coding judgment. Obviously, the brief space allotted to these comments dictated that they be only illustrative rather than complete discussions of any party's positions, and no doubt the remarks will themselves occasion some disputes concerning our interpretations.

One should always inquire into the validity and reliability of any research, especially a study which seeks to 'rate' parties for their issue orientations. Concern about the validity and reliability of our research was paramount in the ICPP Project and has been discussed at length elsewhere (see Janda, 1980, Chapter 14). In this paper, we will only consider the matter of the reliability of our scoring of parties on ownership of the means of production by comparing our ratings with those of presumed 'experts' in the United States and the Soviet Union. The experts' ratings are reported under item 32 in Figure 3.

From the early 1950s until 1974, the US State Department's Bureau of Intelligence and Research classified parties as 'Communist,' 'Non-Communist Left,' 'Center,' and 'Conservative' in its annual report, *World Strength of*

RECORD NUMBER 1  
 1. PARTY NAME AND CODE NUMBER  
 AMERICAN DEMOCRATIC PARTY, 001  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 -1, AC7  
 IN GENERAL, THE DEMOCRATS HAVE NOT ADVOCATED GOVERNMENTAL CONTROL OF BASIC INDUSTRIES, WITH ONE EXCEPTION, THEY HAVE TENDED TO FAVOR GOVERNMENTAL OWNERSHIP OF POWER FACILITIES IN THE SOUTH AND WEST. THE DEMOCRATS BACKED RURAL ELECTRIFICATION PROGRAMS IN THEIR PLATFORMS OF 1932 AND 1936, AND IN 1960 THEY CALLED FOR THE DEVELOPMENT OF MULTI-PURPOSE PLANS FOR MAJOR RIVER BASINS--ALTHOUGH THEY DID NOT PUSH NEW PROJECTS ONCE IN OFFICE.  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS NOTHING  
 SOVIETS SAY 1, ONE OF THE TWO PARTIES OF MONOPOLISTIC CAPITAL IN THE USA. IN THE SECOND HALF OF THE 19TH CENTURY, THE PARTY BECAME ONE OF THE RULING PARTIES OF FINANCIAL CAPITAL. AT THIS TIME, DIFFERENCES BETWEEN THE DEMOCRATIC AND REPUBLICAN PARTIES BECAME OBLITERATED AS BOTH BECAME THE POLITICAL ORGANIZATIONS OF THE RULING CLASS OF THE BOURGEOISIE.

RECORD NUMBER 2  
 1. PARTY NAME AND CODE NUMBER  
 SUB-1, AMERICAN REPUBLICAN PARTY, 002  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 -3, AC9  
 REPUBLICANS HAVE CONSISTENTLY OPPOSED THE ESTABLISHMENT OF FEDERAL 'VALLEY' AUTHORITIES, SUCH AS TVA, AND HAVE STOOD AGAINST FEDERAL GOVERNMENTAL OWNERSHIP OF POWER FACILITIES BUILT IN CONNECTION WITH SUCH PROJECTS. INSTEAD, THE PARTY HAS CONTINUALLY WORKED TO RESTORE POWER DEVELOPMENTS TO PRIVATE ENTERPRISE. IN ADDITION, THE PARTY HAS SUPPORTED THE FREE ENTERPRISE SYSTEM IN COMMON CARRIER TRANSPORTATION, AND IT HAS OPPOSED THE FEDERAL GOVERNMENT'S CLAIM TO OIL IN THE TIDELANDS OFF STATE COASTS. (MARRIS, 1962--12)  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS NOTHING  
 SOVIETS SAY 1, ONE OF TWO PARTIES OF MONOPOLISTIC CAPITAL IN THE USA. AFTER THE CIVIL WAR, THE PARTY BECAME A REACTIONARY PARTY OF THE UPPER BOURGEOISIE AND A SUPPORTER OF LARGE MONOPOLIES.

RECORD NUMBER 11  
 1. PARTY NAME AND CODE NUMBER  
 BRITISH LABOUR PARTY, 011  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 3, AC7  
 IN THE ELECTION OF 1945, THE VICTORIOUS LABOUR PARTY CAMPAIGNED ON A PROGRAM OF NATIONALIZATION, WHICH WAS CARRIED OUT, TO VARIOUS DEGREES, IN THE COAL INDUSTRY, ELECTRICITY, GAS, RAILWAYS, ROAD TRANSPORT, STEEL, AND BANKING. IT PLEDGED TO EXTEND THE SCOPE OF NATIONALIZATION IN 1950, THE LABOUR GOVERNMENT IN FACT FAILED TO ACT AND EVEN DROPPED PLANS TO NATIONALISE THE SUGAR AND CEMENT INDUSTRIES. IT PLEDGED TO NATIONALISE THE STEEL INDUSTRY WERE CONSTANT AFTER THE CONSERVATIVES DENATIONALIZED THEM IN 1951, BUT PLANS TO EXTEND THE SYSTEM TO BROAD AREAS OF THE ECONOMY FROM WATER SUPPLY TO MACHINE TOOLS WERE EVENTUALLY SHELVED IN FAVOR OF VAGUE PROMISES TO TAKE OVER 'CONCERNS THAT FAIL THE NATION.' DESPITE AN OCCASIONAL VOICE DEMANDING THE ABOLITION OF CAPITALISM, THE PARTY WAS BY 1959 QUICK TO DESTROY RUMORS THAT IT INTENDED TO TAKE OVER THE 600 LARGER FIRMS, EMITTING THAT THE PLANS WERE REGULATORY ONLY. THE PARTY SET INCREASING STORE UPON 'ENTERPRISES' EVEN IN PRIVATE HANDS AND TOWARDS THE END OF THE PERIOD WAS URGING THAT THE COMMUNITY BE ALLOWED TO PROFIT FROM THE FRUITS OF CAPITALISM BY THE PURCHASE OF SHARES OF PUBLIC INVESTMENT AGENCIES FOR REVENUE. NATIONALIZATION, HOWEVER, WAS INCREASINGLY A DEAD ISSUE ELECTORALLY AND THIS PARTIALLY ACCOUNTS FOR DECREASING LOYALTY TO THE PRINCIPLE. HOWEVER, ALL ATTEMPTS TO DROP THE IDEAL OF PUBLIC OWNERSHIP FROM THE PARTY'S PROGRAM IN 1959 WERE DEFEATED.  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS 3, NON-COMMUNIST LEFT  
 SOVIETS SAY 2, THE PARTY MEMBERS AMONG ITS RANKS TRADE UNION MEMBERS AND MEMBERS OF COOPERATIVE SOCIETIES AND PROFESSIONAL ORGANIZATIONS. IT HAD A BROAD PROGRAM OF SOCIOECONOMIC REFORMS, BUT IT SUCCEEDED TO PRESSURE FROM ENGLISH MONOPOLISTIC CIRCLES AND INTERNATIONAL FINANCIAL UNIONS AND WAS UNABLE TO CARRY OUT ITS REFORMS.

RECORD NUMBER 12  
 1. PARTY NAME AND CODE NUMBER  
 BRITISH CONSERVATIVE PARTY, 012  
 STRICTLY SPEAKING, THE TERM CONSERVATIVE PARTY APPLIES ONLY TO THE PARLIAMENTARY ORGANIZATION, WHICH IS SUPPORTED OUTSIDE OF PARLIAMENT BY THE NATIONAL UNION OF CONSERVATIVE AND UNIONIST ASSOCIATIONS OF ENGLAND AND WALES AND SEPARATE ORGANIZATIONS IN SCOTLAND AND NORTHERN IRELAND.  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 -2, AC7  
 THE PARTY'S ATTITUDE TO THE OWNERSHIP OF THE MEANS OF PRODUCTION IN THIS PERIOD WAS SOMEWHAT AMBIGUOUS. PARTY ORATORY CONSISTENTLY DENOUNCED STATE OWNERSHIP IN PRINCIPLE AND ALIGNED ITSELF WITH FREE PRIVATE ENTERPRISE AND ON ACCESSION TO POWER IN 1951 THE PARTY DENATIONALIZED SEVERAL INDUSTRIES, NOTABLY STEEL AND ROAD MAINTENANCE, BOTH ACTIONS AND RHETORIC, HOWEVER, WERE DECEPTIVE. AS A CONSEQUENCE OF THEIR CRUSHING ELECTRICAL DEFEAT IN 1945 THE PARTY LEADERSHIP HAD COME TO REALIZE THAT CERTAIN SOCIAL-DEMOCRATIC PROGRAMS, INCLUDING A DECREE OF NATIONALIZATION, WERE INSEPARABLE FROM ELECTORAL SUCCESS. IN OPPOSITION, THEREFORE, THE PARTY CONCENTRATED ITS ATTACK UPON RECENTLY AND INEFFECTUALLY NATIONALISED INDUSTRIES, WHILE CRITICISING ONLY THE MANAGEMENT OF OTHERS. IN GOVERNMENT, HOWEVER, THE EXTENT OF DENATIONALIZATION WAS LESS THAN PLEDGED AND THE PARTY EVEN VOLUNTARILY EXPANDED THE STATE SECTOR INTO ELECTRICAL GENERATION BY ATOMIC POWER, SEEKING CREDIT FOR THIS ACTION IN ITS PROGRAMS.  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS 1, CONSERVATIVE  
 SOVIETS SAY 1, REPRESENTED BY THE RULING CLASSES OF ENGLAND AND REFLECTS THE INTERESTS OF MAJOR FINANCIAL AND INDUSTRIAL CAPITAL AND LANDOWNERS. MEMBERS ALSO INCLUDE UPPER MILITARY OFFICERS, CIVIL SERVANTS, PART OF THE BOURGEOISIE INTELLIGENTSIA, MERCHANTS, AND WORKERS ARISTOCRACY.

RECORD NUMBER 171  
 1. PARTY NAME AND CODE NUMBER  
 PORTUGUESE NATIONAL UNION, 171  
 UNIAO NACIONAL, 171  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 -5, AC9  
 PRIVATE OWNERSHIP IS A GENERALLY ACCEPTED PRINCIPLE AND INVITES LITTLE DISCUSSION IN THE LITERATURE. EVEN IN THE CASE OF THE RAILWAYS, THE STATE HOLDS ONLY A MINORITY OF THE SHARES.  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS ONLY THAT THE PARTY IS AUTHORITARIAN  
 SOVIETS SAY 1, FASCIST CHARACTER, ANTI-COMMUNIST, ANTI-SOVIET, REPRESSION OF DEMOCRATIC FORCES.

RECORD NUMBER 671  
 1. PARTY NAME AND CODE NUMBER  
 COMMUNIST PARTY OF THE SOVIET UNION, CPSU, 671  
 KOMMUNISTICHESKAYA PARTIYA SOWIETSKOGO SOJUZA  
 19. 5.01 OWNERSHIP OF MEANS OF PRODUCTION  
 9, AC9  
 WHILE GOVERNMENT OWNERSHIP OF ALL MEANS OF INDUSTRIAL AND AGRICULTURAL PRODUCTION EXISTS GENERALLY, VESTIGES OF PRIVATE OWNERSHIP REMAIN IN THE SOVIET AGRICULTURAL SYSTEM AS EXEMPLIFIED BY THE PRIVATE PLOTS OWNED INDIVIDUALLY BY THE COLLECTIVE FARM WORKER. INDEED, THE COLLECTIVE FARMERS--WHO NUMBER 50,000,000--ARE NOT GOVERNMENT SALARIES AS THEIR COUNTERPARTS ON THE STATE FARMS, BUT IN PRINCIPLE JOINTLY OWN THE COLLECTIVE FARM AND SHARE IN ITS PROCEEDS. IN THE EARLY 1960S, THERE ALSO REMAINED APPROXIMATELY 200,000 PRIVATE FARMERS, ALTHOUGH GOVERNMENT OWNERSHIP AND CONTROL ALSO EXTEND INTO ALL AREAS OF BUSINESS AS WELL AS NON-BUSINESS ACTIVITIES--SUCH AS EDUCATION, SCIENCE, ARTS--AND THE PROVISION OF PUBLIC AND PROFESSIONAL SERVICES. PRIVATELY SALARIED ARTISANS NUMBER ABOUT 500,000 AND A FEW DOCTORS, DENTISTS, AND LAWYERS CONDUCT PRIVATE PRACTICE ON THE SIDE.  
 32. 5.14 / 5.15 US--SOVIET EXPERTS LEFT-RIGHT RATINGS  
 U.S. SAYS 4, COMMUNIST.  
 SOVIETS SAY NOTHING.

FIG. 3. Example of RIQS printout of issue orientation items

*Communist Party Organizations*. In addition to providing detailed information on the membership and strength of communist parties throughout the world, this publication reported election results and legislative representation for all parties in each country, with the parties classified in one of the four categories mentioned above. Although the State Department appears not to have used 'right' or 'rightist' as a regular category, it occasionally identified parties as 'ultra-conservative' or, as in the case of the Portuguese National Union, 'authoritarian.' The ICPP Project translated the State Department's four regular categories into the following scale: 1 = Conservative, 2 = Center, 3 = Non-Communist Left, and 4 = Communist. Naturally, the State Department did not rate the American Parties, but one can see that their ratings for the other parties corresponded rather well to our scorings on ownership of the means of production.

Those who might be suspicious of values or biases affecting the judgments of country experts in the US State Department might welcome the alternative ratings by experts in the Soviet Union. *Politicheskie Partii Zarubezhnykh Stran* (*Political Parties of Foreign Countries*, 1967) is a Soviet publication that reviews the origins, support, and programs of parties across the world. Done in reference-book style like *World Strength of Communist Party Organizations*, this source devotes approximately a page to each country covered. While it does not conveniently classify parties into four categories as does the State Department, it does employ a limited and familiar vocabulary in describing parties. We have translated these descriptions into a three-point scale as follows:

- 1 = *Right*: parties described as supported by the upper bourgeoisie, church leaders, landowners, reactionaries, capitalists, anti-democratic elements, anti-communists.
- 2 = *Center*: parties characterized as supported by the petty bourgeoisie or characterized with contradictory terms.
- 3 = *Left*: parties supported by workers or revolutionary, socialist, or progressive forces; parties described as Communist, Marxist-Leninist, or Socialist.

Naturally, the Soviet experts did not rate the CPSU, but one can see that their evaluations of the other parties on the left-right scale again coincided rather well with the ICPP Project's classification for ownership of the means of production. Moreover, the US and Soviet experts are largely in agreement on the three parties that they both describe. The only discrepancy, and it is slight, concerns the British Labour Party, which the US rates as definitely leftist, while the Soviets describe it somewhat ambiguously, leading to our interpretation of their judgment as 'centrist.'

These isolated comparisons are interesting, but there is also value in the broader picture concerning the reliability of our coding. What is the relationship between our codes and the experts' ratings for all the parties in the study? To express this relationship succinctly, we must turn to the last aspect of the ICPP Project's information system, the management of quantitative data collected on the parties.

## ANALYZING QUANTITATIVE DATA IN THE ICPP PROJECT

The scores and associated adequacy-confidence codes for 111 variables subsumed by the ICPP conceptual framework were incorporated into a

computer data file for processing with SPSS (Statistical Package for the Social Sciences) (see Nie *et al.*, 1975). SPSS can be used to generate a cross-tabulation between the two sets of experts' ratings and government ownership of the means of production for all parties scored on these variables during 1957–62. The cross-tabulation appears in Table 3.

TABLE 3. Cross-tabulation of US and Soviet experts' ratings with parties' scores on government ownership of the means of production

ICPP variable: ownership of means of production	US State Department experts				Soviet experts		
	Communist 4	Leftist 3	Center 2	Conservative 1	Left 3	Center 2	Right 1
Strongly opposed	-5		1	5		1	7
	-4			1			1
	-3			6	9	1	14
	-2			2	2	1	4
	-1		1	7	10	4	14
Neutral/ambiguous	0		1	1	1	3	1
	1		5	3	5	4	2
	2		4		4	4	1
	3	5	7	5	1	8	11
	4	1	3			3	1
Strongly support	5	13	2			13	2
Pearson's correlation: $r = 0.81$					$r = 0.75$		

One can see the strong relationship between our scoring of parties on ownership of the means of production and the US ratings for 97 parties and also between our scores and the Soviet ratings for 109 parties. The correlations are 0.81 and 0.75, respectively, for the data in the tables.\* The similarity of these results leads to the expectation of a high correlation between the US and Soviet ratings themselves. In fact, the correlation is very high, 0.86, as displayed in Table 4. The Americans and Soviets differ no more than one code number for all the parties, with one exception: a party classified 'Non-Communist Left' (our code 3) by the State Department but classified as

TABLE 4. Cross-tabulation of US and Soviet experts' ratings of the world's parties

Soviet experts'	US State Department experts			
	Communist 4	Leftist 3	Center 2	Conservative 1
Right	1	1†	12	24
Center	2	16	11	3
Left	3	18	7	
Pearson's correlation; $r = 0.86$				

† COPEI in Venezuela; see discussion in text.

\* Due simply to the fact that the US ratings are measured on a four-point scale and the Soviet ratings on a three-point scale, one would expect somewhat higher correlations between the US ratings and the issue scores than between the Soviet ratings and the issue scores. In essence, the argument is that the greater number of scale points allows for finer and thus 'truer' measurement, which would yield a higher correlation.

'Rightist' (our code 1) from our reading of the Soviet description. This party was the Social Christian (COPEI) of Venezuela, which the Soviets described as representing the interests of landowners, upper bourgeoisie, and church leaders—resulting in our 'Rightist' classification. Otherwise, there is an extraordinary, and perhaps unexpected, similarity between the ratings of parties on the left-right continuum by experts in systems with opposing ideologies.

Of course, the left-right continuum embraces a variety of issues in addition to 'ownership of the means of production'. The ICPP data can be used to determine what other issues relate to the experts' ideological ratings. Table 5 reports the simple correlations between the party scores in 1957–62 and the scales created to capture the US and Soviet experts' ratings. Not all 147 parties in 1957–62 could be scored on all 13 issues. Moreover, the Soviet source only reported information useful for coding 117 parties, and the US source classified only 101. Thus, the number of parties underlying each correlation varies with the issue. The average number supporting the correlations with the Soviet ratings is 87 and that for the US is 79. Although the data are not complete, substantial numbers of political parties are involved in these correlations, and the results cannot be attributed to idiosyncratic patterns of a few cases.

TABLE 5. Correlations of experts' ratings with all issue orientation variables

Issue orientation variables	US experts	Soviet experts
Government ownership*	0.81	0.75
Economic planning*	0.61	0.59
Redistribution of wealth*	0.70	0.66
Social welfare*	0.53	0.50
Secularization of society*	0.39	0.40
Support of the military**	-0.29	-0.37
East/West alignment*	0.72	0.67
Anti-colonialism*	0.38	0.40
Supranational integration	-0.12	0.02
National integration	0.19	0.37
Electoral participation**	-0.15	-0.24
Protection of civil rights**	0.26	0.25
Interference with civil liberties**	0.20	0.24

\* Variables which emerged on a 'Marxism' factor after factor analysis. (See footnote on p. 127 for a discussion of the factor analysis.)

\*\* Variables which appeared on a 'Liberalism' factor after factor analysis.

There are several striking features about the data in Table 5. First, the correlations of the issue orientation variables with the US ratings and the Soviet ratings are similar over all the issues, which follows from the high correlation between the experts themselves. Second, note the signs attached to the correlations. Recall that the variables were all operationalized in a manner which equated positive scores with 'leftist' positions and negative scores with 'rightist' positions. For most of the issues, 'leftism' was interpreted as favoring greater governmental activity in the issue area. According to the assumption in our scoring, therefore, all thirteen issue variables should correlate *positively* with the experts' ratings, which were also coded with the high values equated

with 'leftism'. The correlations are indeed positive for all but three of the thirteen variables, and only two display negative correlations for both experts' ratings.

'Support of the military' is consistently, significantly (at the 0.05 level), and *negatively* correlated with expert ratings of party ideology. Although the granting of increased financial support to the military would appear to be consistent with a general position favoring greater governmental activity to solve social problems, the parties of the world are able to separate this particular issue area from their basic governmental philosophy, with parties of the right and left switching positions, as it were, when the support of the military is at hand. Thus, the 'popular' image of rightist parties being pro-military and leftist parties being anti-military tends to be confirmed, contrary to the logic of our scoring.

'Electoral participation' and 'supranational integration' are the two other issues which are either negatively or negligibly related to the expert ratings. For both groups, high electoral participation is *not* a hallmark of leftism, and 'supranational integration' (e.g., support of the European Community) is essentially unrelated to this continuum also.

As we examine more carefully the US and Soviet patterns in comparison with one another, some of the minor deviations begin to gain importance, suggesting factors that influence US and Soviet evaluations of political parties as 'leftist' and 'rightist'. Issues with high correlations for both experts in Table 5 signal the existence of important factors in their ideological ratings.\* The factor that appears to loom largest in their judgments is the parties' positions on 'government ownership of the means of production', which correlates the highest with the ideological rankings of communists and capitalists alike. Although the next two issues are also economic in character and have substantial correlations with the Soviet and US ratings, they seem less important than the non-economic but politically strategic variable, 'East/West alignment', whose correlations are second only to ownership of production. Thus it appears that a party's position on global politics contributes independently of its economics to its placement on the left-right scale.

If we limit ourselves to accepting as important ingredients of common left-right judgments only those issues which correlate consistently above 0.45 in

\* 'Electoral participation' and 'supranational integration' are not the only variables only weakly related to the experts' ratings. The last five variables all have uninspiring correlations with their ratings. Although there is some element of commonality among these variables and an underlying left-right continuum, it is not great, and one suspects there is some other dimension that might hold more in common with the errant variables.

A general statistical method for identifying such underlying dimensions is factor analysis, and a factor analysis of the entire matrix of intercorrelations did prove helpful (see Janda, 1980: p. 148). In brief, the analysis disclosed four factors accounting for 70 per cent of the variance among the thirteen issues but only two major dimensions. The first was the postulated left-right dimension, which encompassed the seven variables starred in Table 5. The second dimension extracted high loadings from these variables: 'support of the military', 'electoral participation', 'protection of civil rights', and 'interference with civil liberties'. This pattern of variables has been interpreted as indicative of an underlying 'liberalism' factor—so named due to the predominance of variables associated with classical liberal values. These variables, which are double-starred in the table are intercorrelated more closely among themselves than they are with those in the left-right factor.

Table 5, our search is satisfied only by 'economic planning', 'distribution of wealth', and 'social welfare'—in addition to government ownership and East/West alignment. It seems that the Soviet and American experts relied on these five to approximately the same extent in making their judgments. But looking further, we find that the Soviets are somewhat more likely to involve in *their* ratings, the parties' positions on such issues as 'secularization of society', 'support of the military', and 'national integration'. The US State Department, on the other hand, is less likely to reflect any of these political issues in their ratings, which are based more on party economics. Thus there are important similarities in the experts' bases of judgment but significant differences as well. By and large, the Soviet evaluation is sensitive to a wider range of issues than the US evaluation, which, ironically, tends to classify parties on a more economic—even Marxist—basis.

### SUMMARY AND CONCLUSION

The information processing techniques described in this paper have been discussed mainly for their contributions to managing the information collected in the ICPP Project rather than for their role in *analyzing* the information to advance our understanding of political parties. Of course, the project exists for the comparative analysis of parties across nations and not primarily for the collection and distribution of data. Only a few examples of analyses of the ICPP data will be cited to illustrate the research undertaken already. Studying the effect of environmental and party-level factors on centralization of power within parties, Harmel (1981) found that environment alone (i.e., the political structure of the country and its demographics) explained 68 per cent of the variance in party centralization. Inquiring into the effect of social support on electoral success, Gillies (1979) concluded that electoral success was as likely to cause social diversity as it was likely to be a *consequence* of social diversity, which runs counter to most arguments in the literature. In his studies of environmental effects on complexity of party organization Janda (1978) determined that 70 per cent of the variance in party complexity could be explained with a combination of 6 environmental variables and 4 party-level variables, and (in keeping with Harmel's findings) the environmental factors themselves accounted for most of the total effect on complexity. In a later study of organizational effects on party performance, Janda (1979a) found that complexity, centralization, and involvement could explain nearly 30 per cent of the variance in electoral success, with complexity and centralization both positively related to electoral success, while involvement was negatively related. The same variables, plus factionalism, could also explain about 40 per cent of the variance in party cohesion in conflictual legislatures. Harmel and Janda have integrated some of these findings in their analysis of environmental effects on party reform (1982).

Although it is true that the ICPP Project is essentially a quantitatively oriented study, the information technology that it utilizes is not wedded to that type of study. Any scholarship which involves compiling large bibliographies, storing and retrieving documents for analysis, and storing and retrieving copious notes on those documents should find value in the integrated use of information processing technologies.



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