

A METHODOLOGICAL APPROACH TO THE COMPARATIVE
STUDY OF POLITICAL PARTIES

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This paper describes my plans for conducting a comparative study of all the political parties in the world. As yet, the study has no name and has no funds. The lack of a name can be rectified, temporarily at least, by referring to it as "the comparative parties project." The lack of funds cannot be solved quite so easily, but the problem will be worked on. What the parties project does have is a multi-faceted "methodological approach" to the enormous task of gathering, processing, and analyzing information on all the world's political parties. This paper describes that methodological approach.

Most research projects can be understood better by learning why the investigator became interested in the topic, what initial steps he took in following up his interests, and how he responded to failures and successes encountered along the way. Because these factors were especially important in shaping my approach to the comparative study of political parties, they are discussed at some length in the first section of this paper, which describes the background of the project. Subsequent sections will discuss the prominent methodological features of the project.

History and Background

Most large political science departments across the country offer some kind of "parties" course. Northwestern's equivalent, "Political Parties and Elections," was one of my teaching responsibilities in the Spring of 1962, during my first year out of graduate school. Never having taken a "parties" course in college or graduate school, I probably did more thinking than usual on what things ought to be covered. Many instructors limit their coverage to American political parties for

sound reasons: there are some fine texts on American parties, their students are attracted to the course by a desire to learn about the Democrats and Republicans, and the time limitations of a one quarter or one semester course prevent covering everything one would like. Despite these reasons, it seemed important to me to introduce the students to foreign countries' experiences with political parties. The benefits that promised to be derived from comparing different party systems seemed to outweigh the advantages of covering American parties in greater depth.

In planning the course, I found no shortage of good texts on American parties but few texts at all on comparative party politics. Maurice Duverger's relatively young but already classic book, Political Parties, was about the only truly comparative analysis available.¹ There are, however, some problems involved in using this book as a text. It was originally written in French, and the translation into English did not improve its readability. Furthermore, it is probably longer than necessary; it contains what have been called "logical fallacies"; it oversimplifies relationships among variables; it often uses only single case examples to support sweeping generalizations; and so on.² Nevertheless, Duverger constructs a useful set of concepts for studying political parties and actually compares parties across nations.

In applying his concepts and drawing his comparisons, Duverger demonstrated amazing breadth and depth of knowledge about parties and party systems on the European and American continents. He frequently buttressed his remarks with charts and figures on election returns, membership reports, legislative representation, and so on. But despite his heroic attempts to document his general propositions, he never provided

¹(New York: Wiley, 1959) The book was originally published in Paris in 1951. The First English Edition was published in 1954. The 1959 publication is the revised Second English Edition.

²An especially critical treatment of Duverger is given in Aaron B. Wildavsky, "A Methodological Critique of Duverger's Political Parties," Journal of Politics, 21 (May, 1959), 303-318.

an adequate picture of the situation. His supporting evidence always consisted of a series of selected examples, sometimes one or sometimes several, but never a full disclosure of all or nearly all of the relevant cases. He simply did not have the data needed to prove or disprove his theoretical statements.

To take one example, Duverger suggested a relationship between the "basic elements" of party organization and the activities carried out by the party. Parties organized on a "caucus" basis are more likely to restrict their activities to contesting elections than "branch-based" parties, which also perform political education and social welfare functions. "Cell" and "militia" parties are even more likely to exercise welfare functions than branch parties. Duverger supports these propositions by citing specific caucus, branch, cell, and militia parties and describing their activities. But he does not provide the reader with a general overview of the relationship between these concepts for all or a large sample of the world's parties. He lacked the data needed for filling in the cells of a table that related these concepts as in Table 1.

TABLE 1: Relationship of Basis of Organization
to Functional Orientation of Activities

	Caucus	Branch	Cell-Militia
<u>Party Activities:</u>			
Contests elections (only)	xx	xx	xx
The above and educates politically	xx	xx	xx
The above and serves welfare role	xx	xx	xx
	<u>100%</u>	<u>100%</u>	<u>100%</u>
(Total number of parties)	()	()	()

Duverger was simply unable to provide such cross-tabulations to test his theories.

Parties Course, Spring of 1962: Despite its limitations, Duverger's Political Parties was clearly the best available, and I adopted it as one of the basic texts in my first parties course.³ It soon occurred to me that my students could be given the task of collecting data to test some of Duverger's propositions. Individual students could be assigned different countries to research for information relating to several of Duverger's key concepts. This seemed to fulfill the important objective of providing the students with genuine research experience relating directly to their course work and reading. At the same time, it could provide an important body of information that might be used to construct a "profile" of world party systems. The objective was to plan the research project in such a way that this profile could be constructed in class at the end of the course, permitting the students to benefit from the results of their collective research while testing some of Duverger's propositions.

There were several factors which led me to believe that my students could do what Duverger had not done. First, they outnumbered him more than twenty to one. Second, their data collection tasks would be more narrowly defined. Third, they would be provided with special forms designed to collect the data in terms of his concepts. These factors caused me to believe that we could collect the data during the quarter. Analyzing the data before the end of the course was another matter but one that could be handled easily with the use of punchcards and data processing equipment. The data collection forms could be designed so the students need only check the appropriate coding categories for each variable on each party. The information reported in their research "papers" could then be punched directly into cards and analyzed on the computer for class presentation. Conceivably, the data could be punched and processed in time for analysis the last day of class if the students handed in their data collections forms several days before the end of the course.

³The other texts adopted were Clinton Rossiter, Parties and Politics in America (Ithaca: Cornell University Press, 1960) and Austin Ranney and Willmoore Kendall, Democracy and the American Party System (New York: Harcourt, Brace, 1956).

Because it seemed essential that the students be thoroughly familiar with Duverger's main concepts before collecting data on those concepts, they were not assigned countries for research until after the mid-term exam, leaving about five weeks in the quarter to do research. Each student was assigned three different countries and was provided with two types of forms for each country. One type was to be used for collecting data on the political institutions and electoral systems in the countries and the other type was for data on the parties within the countries. The students were required to document their coding decisions on the "countries" and "parties" sheets by providing the sources of their information and exact page numbers. They were also required to submit the entire list of sources typed on 4x6 index cards.

This attempt to improve on Duverger resulted in less than a qualified success; it was almost a complete failure. The students were given too many countries to research, they received their assignments too late in the quarter, they had difficulty in locating helpful sources, and they found the data gathering forms almost completely unworkable. Many of the forms were turned in nearly blank, and those that were not blank contained information of dubious quality. Nevertheless, data on about 180 parties in some 66 nations were punched on cards, and some very crude comparisons were made in class on the very last day of the quarter. The effort served mainly to illustrate what might have been done if the project had been planned better. I apologized to my students for the disaster and threw the data away the next day.

Although the thought of the experience with the world-wide research project made me shudder, the experience with the parties course as a whole convinced me of the value of teaching it in a comparative framework. The students not only learned about party politics in foreign countries, a worthy objective in itself, but I submit that they also learned more about American party politics through international comparisons. True, they learned fewer details about party operations in the U.S., but these are the things they are most likely to forget within weeks after the quarter ends. The basic nature of American parties as non-membership,

decentralized, loosely disciplined organizations stood out in sharp contrast to parties in other countries, and the American party system was better understood because of the comparison.

Parties Course, Spring of 1963: My increased conviction of the importance of the comparative approach in studying political parties was reflected in a syllabus prepared for the next year's course.⁴ The Duverger book was retained and additional readings were assigned on foreign party systems. The passing of several months had dulled my unpleasant memories of the experience in cooperative research on world political parties. The idea seemed to have so much potential that I decided to try it again, with some major changes in planning. This time only one country, instead of three, was assigned to each student, and the assignments were made during the first week of class, instead of after the mid-term examination. The students were also provided with more workable forms for recording data. A separate sheet, giving the complete coding categories, was designed for each variable, and adequate room was left on each page for typing in comments and qualifications if the pre-coded categories were not suitable for the data. Again the students were required to document their coding decisions with citations to the literature. They were helped in searching the literature with bibliographies produced by the previous class.

The result of this attempt to systematically collect data on the world's political parties was a complete reversal of the earlier experience. Although some of the information the sheets requested simply could not be found, the students this time reported far more success and showed far less frustration in their research. Some countries, of course, proved more difficult to research than others. As a group, the Latin American countries were particularly troublesome. The final tally showed data of varying quality reported on some 205 different parties in 55 countries drawn from every area of the world except the African continent, which was

⁴ Sigmund Neumann's Modern Political Parties (Chicago: University of Chicago Press, 1950) and Thomas Hodgkin's African Political Parties (Baltimore: Penguin Books, 1961) were adopted along with those by Duverger and Ranney and Kendall.

specifically excluded in this study. The data were again turned in early enough to put the information on punchcards and report on the analysis the last day of class. The data were still inadequate by professional standards, but they were not thrown away.

Up to that time, I had not thought seriously about extending my data collection project outside of the course framework. The recent success, however, encouraged me to think about a major research project on comparative political parties based on a concerted, cooperative, and systematic attempt to gather data on parties throughout the world. The key to this research project would be a well-constructed set of forms or "instrument" for gathering the data. The development of such an instrument could be aided by having my parties course students "pre-test" different types of forms and different methods of coding. After a satisfactory data gathering instrument had been hammered out, the research on the party systems of individual countries could be begun in earnest. I could enlist the help of graduate students in seminars on comparative politics and get the cooperation of area specialists and perhaps even native scholars. The data gathered from a project of this scope would be of enormous value in the comparative study of political parties.

Parties Course, Spring of 1964: My plans for the parties course the following year built upon these thoughts.⁵ The data gathering forms were revised again and tried out on the African nations, which had not been studied before. The general problem of locating relevant literature was attacked by providing the students with an extensive bibliography on African politics.⁶

The results of this attempt offered further encouragement. Information on 72 different parties in 26 African countries was added to the previous data, making a pool of information on 277 parties in 81 countries. Again, these data were far

⁵The syllabus used in this course is given in Appendix A.

⁶Kenneth Janda (ed.), Cumulative Index to the American Political Science Review, Volumes 1-57: 1906-1963 (Evanston: Northwestern University Press, 1964).

from ideal in quality, but they were the best available and did allow for some interesting tests of Duverger's statements during the last class meeting.

Just as my initial teaching experience had convinced me of the desirability of teaching political parties in a comparative framework, my second and third research experiences convinced me of the possibility of conducting concerted, cooperative and systematic research on the world's political parties. Of course, this had always been possible, in principle, but its realization in practice was another matter entirely. The goal is not achieved merely by inducing many scholars to conduct research on political parties; that has been going on for years. Moreover, the solution is not merely in coordinating their individual efforts, for coordinated research alone would produce a mass of information that posed new problems of analysis. The practical solution to the problem of a world-wide research project involves both the coordination of individual scholars in systematic data collection and the development of methods for handling the information produced in the process.

There are at least four major information handling problems confronting comprehensive research in comparative political parties. These are

1. developing a data gathering instrument that employs workable operationalizations of concepts relevant to the comparative study of political parties,
2. locating literature containing information about these concepts for specific parties and party systems,
3. identifying and retrieving information from this literature when needed in filling out the data forms, and
4. analyzing the data obtained on hundreds of parties throughout the world.

We have already discussed the comparative parties project's approach to solving the first of these problems--the development of the data collection instrument. Work in the parties course would be directed toward improvement of data forms. Appendix B gives the most recent (1964) version of the forms used for classifying information about the political institutions of the countries. Appendix C gives the

most recent forms for recording information about parties in those countries.

Standardized forms are often used in social research for gathering various types of information, like responses to interview questions. Although the use of standardized forms for recording data on political parties may be unique, the research principle is the same.

The discussion of the data gathering instrument will not be continued in the remaining sections of the paper, which will be concerned instead with the three other practical problems confronting a world-wide study of comparative political parties: locating the literature, retrieving information from the literature, and analyzing the data collected from the information. These problems are especially acute because of the sheer size of the relevant literature and the amount of data to be generated. Fortunately, modern technology has produced some useful tools for dealing with problems in information processing that were not available to earlier scholars like Duverger. These information processing techniques should be able to handle the problems posed by the research demands of the comparative parties project. The following sections will discuss three specific methods for dealing with each of the three problems confronting the project.

Preparing Bibliographies

One of the underlying assumptions of the comparative parties project is that most of the necessary information about the world's parties and the party systems exists somewhere in the enormous literature on foreign and comparative government. Some idea of the size and diversity of this literature can be gained by browsing through the "Foreign and Comparative Government" bibliographies published regularly in the back pages of the American Political Science Review. The September 1964 issue, for example, contained brief reviews of twenty-three books and citations to more than one-hundred and forty selected articles and documents on politics abroad. Lists like this have been published for years in every quarterly issue of the Review, and, of course, the items in those lists represent only part of the total literature.

The comparative parties project must try to harness the relevant information out of this vast literature. The first step in this task is to identify books, articles, papers, and documents that deal with foreign parties and party systems. This is an old-fashioned problem of preparing a comprehensive bibliography, but the magnitude of the problem demands new and better methods of dealing with it.

Bibliographies have traditionally been prepared by building up index card files of entries usually arranged by author and, in some cases, cross-indexed by subject. The card file itself usually constitutes the working bibliography for the individual scholar. If it is to be used by other researchers, the bibliography must ordinarily be re-typed from the cards. There are several disadvantages with this procedure for compiling and distributing bibliographies. Re-typing is costly and subject to error; lists of items arranged by authors obstruct retrieval of the information by subject; cumulating the bibliography after new items have been added seems scarcely worth the effort, hence the appearance of supplementary listings.

The demands of the comparative parties project cannot be met with traditional methods that were barely suitable for individual scholars operating with smaller bodies of literature. The project needs working bibliographies of thousands of items that can be furnished at low cost to many researchers. It needs a method for compiling, revising, and continually updating this bibliography. The problem calls for solution through mechanized means of document retrieval.

To many students in the behavioral sciences, computer techniques for information or document retrieval may seem like promises of the future, still on the drawing board and hardly operational. To be sure, many exciting techniques are still in the process of development, but there are also some tested methods ready for practical applications to literature problems in the behavioral sciences. The most widely used computer method of document retrieval, "KWIC" indexing, has already been used to compile a cumulative index for more than 2,500 titles published during the

first 57 years of the American Political Science Review.⁶ "KWIC" or "Key-Word-In-Context" indexing is also suggested as a method for preparing bibliographies for the comparative parties project.

The methodology of keyword indexing is a subject in itself and will not be discussed here.⁷ In outline form, the system operates as follows. Article or book citations, complete with author, title, and publication information, are punched on IBM cards. A computer reads these cards and, by referring to a previously defined list of non-keywords, prepares an alphabetical listing of all the keywords in the titles of the articles. The computer then prints out this listing of keywords as they appear in the context of the titles themselves. The indexing technique can be understood best by looking at the finished product. Figure 1 shows a portion of a page from the Cumulative Index to the American Political Science Review. The example is taken from the "I-J" portion of the alphabetical keyword listing. Articles on Italy and Japan can easily be located in the keyword indexing, and the nature of the articles can be determined by reading the rest of the titles which surround the keywords.

Once an interesting title has been located, the user of the index looks at the reference code given in the right-hand column of the same line. This code gives the first six letters of the senior author's last name, his initials, the year of publication, and the identification number of the article. The code enables the user to locate the complete citation in an author-alphabetized bibliography also prepared by the computer but not shown here.

The advantages of KWIC indexing are those generally associated with the use of computers in any research operation. The indexes are easily and inexpensively

⁷Kenneth Janda, "Keyword Indexes for the Behavioral Sciences," American Behavioral Scientist, 7 (June, 1964), 55-58. The entire issue of this journal is devoted to information retrieval in the social sciences and deserves to be investigated by those interested in the methodology.

HING	=	THE 'GREAT ISSUES' COLLEGE AT DARTMOUTH COLLEGE (TEAC	WILSON	AM	1960
WHAT IS THE PODESTA (EARLY ITALIAN CITY-MANAGER).=		ITALIAN CITY-MANAGER).=	BORN	LK27	877
THE IMPLEMENTATION OF THE ITALIAN CONSTITUTION.=		ITALIAN CONSTITUTION.=	ADAMS	JC53	2155
THE GOVERNMENT OF ITALIAN EAST AFRICA.=		ITALIAN EAST AFRICA.=	STEINE	HA36	1355
THE RECENT ITALIAN ELECTIONS.=		ITALIAN ELECTIONS.=	HERSHE	AS14	275
THE CONSTITUTION OF THE ITALIAN REPUBLIC.=		ITALIAN REPUBLIC.=	EINAUD	M 48	1936
FACTIONAL CONFLICT.=		THE ITALIAN SOCIALIST PARTY-- A CASE STUDY IN	ZARISK	R 62	2566
GI STURZO-- CHRISTIAN DEMOCRAT (IN ITALY).=		ITALY).=	DON LUI	MOOS	M 45
THE MENTORS OF MUSSOLINI (ITALY).=		ITALY).=	STEWAR	WK28	923
THE PARTITU NAZIONALE FASCISTA (IN ITALY).=		ITALY).=	STEINE	HA37	1386
AMERICAN PUBLICITY IN ITALY (PROPAGANDA).=		ITALY (PROPAGANDA).=	MERRIA	CE19	531
LOCAL GOVERNMENT IN ITALY UNDER FACISM.=		ITALY UNDER FACISM.=	ROSSI	C 35	1301
MENTAL AND PARTY LEADERS IN FASCIST ITALY.=		ITALY.=	LASSWE	HD37	1413
POLITICAL DEVELOPMENTS IN ITALY.=		ITALY.=	SPENCE	HR29	947
THE TREATY-MAKING POWER IN FASCIST ITALY.=		ITALY.=	STEINE	HA31	1047
POLITICAL CHANGE IN FRANCE AND ITALY.=		ITALY.=	EINAUD	M 46	1843
EO - FASCISM IN WESTERN GERMANY AND ITALY.=		ITALY.=	COLE	T 55	2250
URTS-- A COMPARISON (WEST GERMANY, ITALY, AND AUSTRIA).=		ITALY, AND AUSTRIA).=	COLE	T 59	2455
T LITERATURE AND DEBATES (BRITAIN, ITALY, FRANCE).=		ITALY, FRANCE).=	EINAUD	M 50	2013
UTH IN THE DICTATORSHIPS (GERMANY, ITALY, USSR).=		ITALY, USSR).=	MILLER	JW38	1462
VE REPRESENTATION).=		FASCIST ITALY'S FASCIST BUKEAUCRACY.=	COLE	T 38	1468
		ITALY'S FASCIST BUKEAUCRACY.=	STEINE	HA39	1488
		ITALY'S NEW LEGISLATIVE SYSTEM (CORPORATI	WELLS	RH24	728
		THE ITEM VETO AND STATE BUDGET REFORM.=	DEAN	HE56	2326
		J. ALLEN SMITH-- JEFFERSONIAN CRITIC OF TH	ELLIOT	WY24	696
		J. LASKI.=	HOUSE	AV35	1316
		J. RANDALL TO THE RULES OF THE NATIONAL HO	SHKLAR	JN50	2448
		JAMES HARRINGTON.=	ZEBEL	SH41	1598
		JAMES I (BRITISH PARLIAMENT).=	BRAIBA	R 54	2234
		JAPAN).=	WRIGHT	Q 30	1010
		JAPAN).=	COLTON	KE48	1945
		JAPAN).=	LOCKWO	WW34	1255
		JAPAN AT THE PREFECTURAL LEVEL.=	BRAIBA	RJ49	1963
		JAPAN.=	MENDEL	DH54	2229
		JAPAN.=	WILDES	HE48	1950
		JAPAN.=	WARD	RE51	2091
		JAPAN.=	WARD	RE52	2109
		JAPAN.=	PASSIN	H 62	2567
		JAPAN.=	COLEGR	K 29	951
		JAPAN.=	YANAGA	C 41	1584
		JAPAN.=	COLEGR	K 27	874
		JAPAN.=	IYENAG	T 17	430
		JAPAN.=	LATANE	JH14	0296
		JAPAN-- THE CASE OF CENTRAL BANK REFORM.=	LANGDO	FC61	2516
		JAPAN'S CONSTITUTIONS--- 1890 AND 1947.=	QUIGLE	HS47	1889

Figure 1

prepared, readily updated, and quickly reproduced. Further more, the listing of articles by keywords rather than authors makes them more useful in research than conventional bibliographies. These advantages prompt the use of KWIC indexing to prepare two different types of bibliographies for the comparative parties project.

At one level, KWIC indexing will be used to prepare "crude" indexes to the thousands of items appearing in the foreign and comparative government bibliographies in each issue of the American Political Science Review for the past decade or more. These keyword indexes can be prepared at very low cost by a keypunch operator working directly from library volumes of the Review. This job has already been done for all the issues from 1959 to 1962. The resulting index contained more than 10,000 keyword entries for a 2,500 item bibliography. The titles were punched, processed, and indexed at a cost of less than \$300.⁸ All the titles on African politics in that bibliography were later supplemented by other entries on Africa to prepare a special 900 item KWIC Index for my 1964 parties course, which was researching the African countries.⁹ This crude KWIC index helped locate elusive journal citations by sorting them according to country and provided my students with valuable research leads.

The items that my students found helpful on African parties will be included in a "refined" bibliography of titles with special relevance for the comparative study of political parties. As they are entered in the refined bibliography, these citations will be checked for accuracy in spelling, pagination, etc. If needed, additional keywords can be enclosed within parentheses and placed after a title to improve its descriptiveness and hence its retrievability. If corrections or additions are not needed, the citations do not even have to be repunched. The cards can

⁸I want to thank Professor Richard Snyder and the Comparative Politics Program at Northwestern University for making these funds available to me.

⁹I am indebted to the Program of African Studies at Northwestern University for supporting my research on African parties.

simply be taken out of the crude bibliography file and entered at random in the refined file. The computer will take over from there to compile an alphabetized, updated, refined index of comparative parties literature.

Retrieving Information from the Literature

It is one thing to prepare extensive bibliographies on a subject and quite another to use them in research. The difficulty lies not only in reading the material but in making adequate use of what has been read. A high degree of coordination and cooperation among individual scholars will be required to make effective use of the lengthy bibliographies compiled for the comparative parties project. Individual efforts must be cumulated to build an inventory of research findings and propositions serving the entire project. But building the inventory is only one aspect of the problem; the other is retrieving information from the inventory when needed. The comparative parties project has devised a double-barrelled method for dealing with both aspects. The first barrel proposes to translate research findings into a basic "language" and the second promises to search and retrieve the translated findings upon request. The translation and retrieval features of the method are tied together and cannot be discussed in isolation from each other. The following discussion will begin with the translation features.

Information retrieval techniques assume that the information is expressed in a common language, but this is not always true in political research. Different writers often use different words to discuss the same phenomenon. The simple notion of "enfranchisement," for example, can be expressed in terms of "extension of the suffrage," "providing new classes of the population with the right to vote," and "increasing the electorate." In this example, different wording may not trouble the interpretation because the idea is relatively clear. But political concepts are not always clear; a "centralized" party may or may not mean the same thing as a "cohesive" party. Further more, there is no guarantee that writers who use

identical terms are in fact applying them to the same concepts.

Terminological differences in the parties literature are ordinarily resolved by an implicit process of "translation." The parties project proposes to make this process explicit by translating major research findings and propositions into a basic parties "language." The vocabulary of this language will be codified into a thesaurus of terms. By itself, successful translation of research findings into a basic language will produce clarified concepts, sharpened theories, and improved comparisons within the literature. As a by-product of the translation, the thesaurus will provide a means of access to the inventory of findings and propositions built out of the literature.

Translating and thesaurus-building are crucial methodological objectives of the comparative parties project, although their achievement suggests undertaking a painstaking enterprise fraught with frustrations and ambiguities. The basic vocabulary underlying these objectives cannot be developed simply by thinking long and hard about common concepts and important terms in the literature. The development of a basic vocabulary requires a continual interaction between thinking and reading, for entries in a basic vocabulary derive from the words and terms actually used in the literature.

In the comparative parties project, this job has been tackled at the bottom-- during the actual process of building the inventory of propositions and findings about the literature. This approach might be described as the "translate-as-you-go" plan, and the first few payments are especially costly in time and frustration. But much like learning a new language, the job becomes easier as the basic vocabulary builds up and fewer terminological decisions need be made. The process itself might best be understood by evaluating some specific examples of translations done to date. These examples will be given after discussing the information retrieval technique that will be used to retrieve the translated findings.

The information retrieval problems of the comparative parties project will be handled at least in part by an IBM 709 computer program called "TRIAL", for "Technique to Retrieve Information from Abstracts of Literature." A complete discussion of this technique is, again, the subject of another paper, and only its main features will be sketched out here.¹⁰

TRIAL is a computer program for searching and retrieving information from natural language text according to specified logical combinations of keywords. The input to the TRIAL program for the parties project consists of human-prepared abstracts of articles and books on political parties. Every TRIAL abstract of an article is divided into a "summary" section describing the study as a whole and one "statement" and one "elaboration" section for each proposition or finding identified in the study. The "summary" section of the abstract attempts to describe the article according to each of the following headings: "the problem," "research design," "conclusions," and "suggestions for research." An abstracter may omit reference to these headings if they are inappropriate, for they are only intended to give some structure to the information in the summary.

Each proposition or finding identified in an article or book is represented in the abstract by a "statement" and an "elaboration." The "statement" expresses the finding or proposition in the basic vocabulary of the parties project. This is followed immediately by an "elaboration," which quotes the passage containing the statement and provides additional information for interpreting the proposition or finding. In this way, the author's original words are always available for checking against the "translated" statement.

Examples of translated propositions about political parties are given in

¹⁰ ¹⁰Lester W. Milbrath and Kenneth Janda, "Computer Applications to Abstraction, Storage, and Recovery of Propositions from Political Science Literature," Paper delivered at the 1964 Annual Meeting of the American Political Science Association, Chicago, Illinois.

Figure 2, which reproduces a punchcard printout of some propositions from Samuel Eldersveld's Political Parties: A Behavioral Analysis.¹¹ The first STATEMENT OF PROPOSITION has translated Eldersveld's language into the basic language of the parties project. The translation facilitates both the retrievability of his proposition and its comparison with similar propositions by other authors. The translation contains words like "heterogeneous," "identifiers," "centralization," and "factionalism" These are all candidates for a basic vocabulary on political parties. I say "candidates" because subsequent experience may suggest better terms. It may seem that developing a basic vocabulary is a never-ending process, and in a sense it is. No technical vocabulary should ever be closed to new terms or tied to obsolete ones, and an adequate thesaurus must provide for revisions and improvements.

Making vocabulary changes in the parties project will be greatly facilitated by the manner in which the translated statements are recorded. Not only are they always juxtaposed with the original language, but both the statements and the elaborations are recorded on punchcards. This permits the use of computers to content analyze the statements and make systematic changes in terminology if necessary. The vocabulary can grow and improve through periodic review and analysis.

The development of a suitable thesaurus of basic terms is essential for adequate retrieval of information from abstracts literature. A researcher who wants to conduct a specific search of the magnetic tapes containing abstracts of parties literature, need only refer to the thesaurus to identify the relevant terms in the basic language. Under the TRIAL system, he then instructs the computer to conduct its search with these terms. TRIAL search commands are communicated to the computer by specifying terms within parentheses and stating logical connections that must exist among the terms in order to cause a statement to be retrieved.

¹¹(Chicago: Rand McNally, 1964)

STATEMENT OF PROPOSITION...

THE MORE SOCIALLY HETEROGENEOUS THE PARTY IDENTIFIERS, THE LESS CENTRALIZATION OF CONTROL, THE MORE FACTIONALISM, THE LESS OPERATING EFFICIENCY, AND THE MORE CONFLICT OVER GOALS AND IDEOLOGY.

"THE PARTY IS ALWAYS 'POTENTIAL-CLIENTELE' CONSCIOUS. IT IS OPEN AT ITS BASE TO NEW RECRUITS FOR PARTY WORK AS WELL AS TO NONACTIVIST SUPPORTERS. IT IS OFTEN OPEN AT THE HIGHER LEVELS ALSO, INDEED, SOMETIMES AT THE ELITE APEX, IF SUCH A STRATEGY WILL PROFIT THE PARTY'S POWER ASPIRATIONS. THUS IT IS PERMEABLE AND ADAPTIVE....
... WHERE ADAPTATION IS MAXIMAL, INTERNAL MANAGERIAL CONTROL IS DIFFICULT, FACTIONAL PLURALISM MULTIPLIED, OPERATIONAL EFFICIENCY LIKELY TO BE IMPAIRED, AND GOAL ORIENTATIONS AND IDEOLOGICAL CONSENSUS HIGHLY NONCONGRUENT. WHERE ADAPTATION IS MINIMAL, SUCH CONSEQUENCES FOR INTERNAL CONTROL AND PERSPECTIVES WILL, DOUBTLESS BE LESS SEVERE."
(PP. 5-6)

STATEMENT OF PROPOSITION...

PARTY STRUCTURES ABSORB CONFLICT BETWEEN THE GROUP GOAL AND COALITION GOALS.

"THE SUBCOALITIONS WITHIN THE PARTY MAY BE IDENTIFIED VARIOUSLY--IN TERMS OF GEOGRAPHICAL BOUNDARIES, ON THE BASIS OF ORGANIZATIONAL STATUS, AS DEMOGRAPHIC OR SOCIAL CATEGORIES, OR ON THE BASIS OF IDEOLOGICAL DIVISION. ...
... CONFLICT WITHIN THE PARTY MUST BE TOLERATED. AS A POWER-ASPIRING GROUP, 'GREEDY' FOR NEW FOLLOWERS, THE PARTY DOES NOT SETTLE CONFLICT, IT DEFERS THE RESOLUTION OF CONFLICT. THE PARTY IS THUS NO GENUINE MEDIATOR, IT SEEKS TO STABILIZE SUBCOALITIONAL RELATIONSHIPS AND INTERACTIONS SO THAT THESE MULTIPLE INTERESTS WILL REMAIN COMMITTED TO THE ORGANIZATION... (PP. 6-7)

STATEMENT OF PROPOSITION...

CONTROL IN THE PARTY STRUCTURE IS NOT CENTRALIZED IN AN ELITE, AS ASSUMED BY THE "IRON LAW OF OLIGARCHY."

"...WE TAKE ISSUE WITH THE NECESSITY OF ONE CRUCIAL ASSUMPTION IN THAT 'IRON LAW,' THE ASSUMPTION THAT CONTROL OF THE PARTY STRUCTURE IS INEXORABLY CONCENTRATED IN THE HANDS OF A SINGLE LEADERSHIP CORPS, THE TOP, ELITE, MANAGERIAL NUCLEUS OF THE STRUCTURE." (P. 8)

The power of the search command inheres in the use of the standard logical operators: "not," "or," and "and." If the researcher wanted to search the abstracts for all statements about the relationship between "heterogeneity of party identifiers" and "factionalism," he would construct the following command:

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( /HETEROGEN/ .AND. IDENTIFIERS .AND. /FACTION/)
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Placing a word between slashes defines it as a "root" word, retrieving any word that begins with the same root. Thus, /HETEROGEN/ would retrieve HETEROGENEOUS and HETEROGENEITY. Any number of "nests" of parentheses can be used to increase the flexibility of the logical statement.

The first proposition in Figure 2 would have been retrieved by the above search command. The computer would not only have printed out the "statement" of the proposition but also the complete citation to the source, the summary of the entire study, and the elaboration attending the statement. Theoretically any number of searches can be made at any one time on the computer.

The TRIAL system and the thesaurus of basic terms together will form the primary method of managing the information in the vast literature awaiting the parties project. The thesaurus will be central to whatever information retrieval techniques are used, but it is possible that computer techniques will be supplemented by fast access microfilm systems like Recordak's "Miracode". In the Miracode system, index codes are prepared for the keywords contained on each page of a book, article, etc. These codes are then automatically put on film as the pages are photographed. A search of the literature is conducted by placing a 100foot reel of 16mm microfilm in a special reader and entering the desired code numbers into the keyboard of the Miracode console. The reader then searches the film images of the index codes and stops when the code matches a number entered on the console. The photograph of the page is displayed on a large viewing screen. If the researcher finds the information of interest to him, a hard copy will be produced at the press of a button. If he decides the screen does not show information he wants, he

presses another button and the search is continued.

The possibilities of Miracode certainly deserve further investigation. The important point here is that technological advances have produced some powerful tools for solving problems in information retrieval. The enormous literature searching tasks of the comparative parties project may be made manageable by such tools.

Processing the Data

The comparative parties project will generate scores of variables on hundreds of political parties in almost one hundred countries. Electronic data processing methods will certainly be needed to analyze these data effectively. The basic type of analysis called for by the parties project is cross-tabulation of variables.¹² Fortunately, there are a variety of computer programs already available to cross-tabulate the parties data. The specific program that will probably be used for most if not all of the data analysis is Northwestern University's NUCROS, written for the IBM 709.

The NUCROS program is described in detail elsewhere, and only its main features will be sketched out here.¹³ In its present form, NUCROS can prepare up to 72 tables involving up to 40 different variables on a maximum of 9,999 cases. Each of the individual tables can consist of simple bivariate cross-tabulations or can involve third and fourth variables introduced as controls. The program provides for automatic recoding of variables, automatically identifying the tables with the variables involved in the cross-tabulation, and optional calculation of percentages, chi-square values, and other nonparametric statistics.

The data collected by my parties courses were analyzed with this program, enabling me to report the results of their research before their final exams.

¹²Cross-tabulation of political and social variables on 115 countries was the method used by Arthur S. Banks and Robert B. Textor in preparing their Cross-Polity Survey (Cambridge: M.I.T. Press, 1963), a landmark study in comparative politics. Although they dealt with countries rather than parties, the studies have definite parallels.

¹³See Chapter Six in Kenneth Janda, Data Processing: Applications to Political Research (Evanston: Northwestern University Press, forthcoming, 1965).

Selected cross-tabulations of data collected by these classes will be presented to illustrate the analyses that can be carried out with this approach. The data used in the cross-tabulations are squishy at best. Some of the information has been collected by mediocre to poor students; some even failed the course. On the other hand, several students did absolutely first-rate jobs of research that I would be proud to call my own. But the quality of these data is not at issue here, for the comparative parties project proposes to re-collect all the information. Their data are reported in these tables only to illustrate the approach.

One of the tables constructed from the data collected by my 1963 parties class was designed to test Duverger's proposition about the relationship between a party's basis of organization and its activities. This proposition was discussed in the first section of this paper. Table 1 presented a framework for testing the proposition given the necessary data. Table 2 is an exact reconstruction of Table 1, except that Table 2 contains actual data collected on both concepts for 87 of 205 non-African political parties.

TABLE 2: Relationship of Basis of Organization
to Functional Orientation of Activities

	Caucus	Branch	Cell-Militia
<u>Party activities:</u>			
Contests elections (only)	68	2	5
The above and educates politically	32	85	35
The above and serves welfare role	0	13	60
	<u>100%</u>	<u>100%</u>	<u>100%</u>
(Total Number of parties)	(22)	(45)	(20)

The data on these 87 parties clearly support Duverger's proposition.

In addition to testing out propositions, the data collected by the parties classes were well-suited to finding out the distribution of characteristics in

the population. Although Duverger talks about different types of party origins, some forming inside parliament by legislators with similar interests and other forming outside the legislature by social organizations, he does not have the data for telling which origins occur most frequently. A break-down of party origins for 205 non-African and 72 African parties is given in Table 3. According to these data, the one clear difference between African and non-African parties is that African parties are more likely to be formed outside the legislature, as might be expected.

TABLE 3: Distribution of Party Origins for African and Non-African Political Parties

	African	Non-African
Formed inside the legislature	3	9
Splinter group from another party	18	16
Merger of two or more parties	18	15
Organized by religious leaders	1	3
" " labor leaders		5
" " intellectuals	3	9
" " regional, ethnic leaders	25	3
" " promote specific issues	11	7
Other condition of origin	17	18
No information reported	4	13
	100%	100%
(Total number of parties)	(72)	(205)

In Duverger's analysis, the nature of a party's origin is related to its politics. He contends that parties which originate inside the legislature are more likely to be conservative than those originating outside. Table 4 cross-tabulates condition of origin by ideological orientation for 113 non-African parties classified on both characteristics. As the data indicate, the pattern is not clear in this case but seems ever so slightly to favor his proposition.

The title to this paper refers only to a "methodological" approach to the comparative study of political parties. The "theoretical" aspects of the approach can best be described as eclectic. The many concepts and theories proposed in Duverger's Political Parties have guided the development of the data gathering instrument to this point, and most of the theoretical notions of the project

TABLE 4: Condition of Origin by Ideological Orientation,
For Non-African Parties Only

	Parliamentary origin of parties		
	Inside	Split/Merger	Outside
Leftist	31	46	533
Centerist	19	24	15
Rightist	50	30	32
	<u>100%</u>	<u>100%</u>	<u>100%</u>
(Number of parties)	(16)	(50)	(47)

derive from Duverger. The data to be collected, however, will permit testing other propositions disclosed through the search and retrieval operations.

A science never really matures until it can lay claim to powerful theories that explain its data. Presumably, the comparative study of political parties aims at the development of a general body of theory that can be used to explain and predict the activities of parties and party systems across the world. This study is not designed to make a frontal attack on the general problem of theory development. It can, however, contribute directly to the general assault by sharpening up concepts, providing facts, and testing narrow-range hypotheses and middle-range propositions--the stuff out of which bodies of theory are made.