

# COMPUTER APPLICATIONS TO SOCIAL INQUIRY

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## "Analysis of Qualitative Materials: Library Research in the Comparative Study of Political Parties"

### I. Introduction

#### A. Library sources as qualitative materials

1. Scholarly observations contained in books and journal articles are the major source of information for students of politics
2. The computer can be used to assist with traditional methods of library research
3. The International Comparative Political Parties Project will be used as an example of computer analysis of qualitative materials in the form of library research on political parties

#### B. Objectives of the ICPP Project

1. Formulate and test three bodies of party theory
  - a. parties as dependent variables
  - b. parties as independent variables
  - c. parties as organizational settings
2. Conceptual framework for the theorizing
  - a. Concepts dealing with the party's external relations with society
    - (1) Institutionalization
    - (2) Governmental status
    - (3) Social aggregation
    - (4) Social Articulation
    - (5) Social Representation
    - (6) Issue Orientation
    - (7) Goal Orientation
    - (8) Autonomy
  - b. Concepts dealing with the party's internal organization

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(9) Degree of Organization

(10) Centralization of Power

(11) Coherence

(12) Involvement of Party Members

3. Apply this conceptual framework to parties across the world  
by drawing a representative random sample

C. Methodology of the ICPP Project

1. Draw a random sample of 50 countries from 10 cultural-geographical areas (later supplemented by the inclusion of U.S. and U.K.)
2. Conduct bibliographic searches for each country
3. Index selected material for inclusion in a microfilm information retrieval system
4. Code the parties on variables in the conceptual framework using information from the library material
5. Describe the quantitative code in verbal terms to explain how and why we coded the parties on each variable--recording this information in computerized form for purposes of data management
6. Analyze the quantitative data to test party theory

D. Topics for treatment today

1. Use of the computer to handle political parties bibliographies
2. Use of the computer to manage the ultimate information file--including quantitative codes and verbal descriptions of codes
3. Example of computer analysis of data concerning the distribution of political parties across the world on a left-right continuum

II. Bibliographical applications of the computer

A. Purposes of computerized bibliography in the ICPP Project

1. Creation of machine-readable records for each country's bibliography enables us to update the bibliograph as new items are added

2. The computerized bibliography enables us to merge the items with bibliographies from other countries to produce area bibliographies or bibliographies for all the
3. A computerized bibliography provides great flexibility in making alternative listings of the items in the bibliography
4. Computerized bibliographies facilitate publication: examples of bibliographies on Bulgaria and Greece distributed at the conference

B. Methodology of the computerized bibliography

1. Particular system called TRIAL
2. Records information on different "classes" of cards

III. Data management applications of the computer

A. Purposes of making the codes and comments machine-readable

1. Provides for easy revision of information through corrections or updating
2. Provides for selective search and retrieval of information on command
  - a. Request for information concerning the names of all parties in the study plus their year of origin--
  - b. Request for information about social welfare policies of all parties in the study
  - c. Request for information about issue positions of all parties in the European countries
3. Facilitates publication of information--can print out the file according to different length and width

B. Technology of the computerized file

1. Particular system called RIQS
2. Records different "items" of information within a record
3. There are 70 items of information recorded for each party in the study

III. Examples of computer analysis of data extracted from qualitative materials

A. Coding the parties on 13 issue orientation variables

1. Rules for coding were presented in 200 page coding manual
2. Intercoder reliability was  $.87$  for 160 comparisons

B. Identification of 6 issues constituting a Left-Right scale from the original 13

1. Loadings above  $.57$  following orthogonal rotation *61% of var. explained*
2. Cronbach alpha of  $.87$

C. Distribution of 136 of the world's parties from 1957-62 on the Leftism scale

1. Relatively normal distribution
2. Placement of the U.S., U.K., and U.S.S.R. parties

D. Validity of the scale

1. Comparison to U.S. State Department Experts  $r = .78$
2. Comparison to Soviet Experts  $r = .76$
3. U.S. and Soviet Experts compared  $r = .81$
4. Comparison to combined Experts ratings  $r = .84$