INTRODUCTION

Advances in Information Retrieval in the Social Sciences

KENNETH JANDA

■ In June, 1964, the American Behavioral Scientist published a special issue devoted to "Information Retrieval in the Social Sciences: Problems, Programs, and Proposals," edited by Ted Gurr and Hans Panofsky.

Most of the articles in that issue described — as the subtitle suggests — some "problems, programs, and proposals" for information retrieval in the social sciences. For the most part, the articles were concerned more with future developments than with operational systems.

In contrast, the articles in this two-part sequel to the June, 1964 issue largely describe on-going activities in information retrieval; hence the title, "Advances in Information Retrieval in the Behavioral Sciences." This is especially true of the articles in this issue (Part I), which focuses on operational information retrieval applications. These applications consist of computerizing a social science bibliography on Korea (Koh); compiling a dictionary of Navaho medical terms (Werner); retrieving data from banks of sample surveys on public opinion toward national security (Wilcox, Bobrow, and Bwy); retrieving information from abstracts of political science literature (Welsh); selectively disseminating information to social scientists on the Northwestern faculty (Janda and Rader); and employing citation indexing in a personalized reference subscription service (Garfield and Sher).

The February issue, which is Part II of the series, will include broader topics in information retrieval as well as two other examples of data retrieval. There will be a review of experiences with the Universal Reference System (de Grazia); a statement on information retrieval activities of the Americal Council of Learned Societies (Condon); a conference report which includes a useful inventory of information retrieval activities (Libaw); an announcement of a series of FORTRAN computer programs for information retrieval (Vinsonhaler); and another announcement of a general computer program for keyword indexing (Aagaard). The two data retrieval examples involve the Human Relations Area Files (Morrison) and Eastern European political elites (Beck and Stewart).

Some mention also deserves to be made of other advances in information retrieval in the social sciences that have appeared elsewhere since the publication of the June, 1964 issue. Foremost, perhaps, is Philip J. Stone, et al., The General Inquirer: A Computer Approach to Content Analysis (Cambridge, Mass.: M.I.T. Press, 1966), which expands upon the

system described by Scheuch and Stone in June, 1964. Similarly, Gardin's brief article describing a European research program in document retrieval has been superceded by Jean-Claude Gardin, Syntol (New Brunswick, New Jersey: Graduate School of Library Service, Rutgers University, 1965). Ralph Bisco's description in the June, 1964 issue of the ICPR system for retrieving information from data archives was updated in a paper prepared for the Third Technical Conference of the Social Science Data Archives, held in Ann Arbor, Michigan, during May, 1966. His paper will be reprinted in a special issue of Social Science Information, a publication of the International Social Science Council, which will appear in the spring of 1967.

One of the most successful information retrieval applications to social science material has been at the Health Law Center in the School of Law, University of Pittsburgh, by John Horty and his associates, who have contracts for recording and searching the collected statutes for several state governments. The system is described in a booklet, Sample Computer Search on Pennsylvania Statutes (Health Law Center, University of Pittsburgh, undated). While not designed solely for social science applications, the BOLD system for "Bibliographic On-Line Display" developed at the System Development Corporation should interest social scientists thinking of the timesharing capabilities of computers. The BOLD system is described in H. Borko and H. P. Burnaugh, "Interactive Displays for Document Retrieval," Information Display of October, 1966. Finally, Kenneth Janda's Information Retrieval: Applications to Political Science (Indianapolis: Bobbs-Merrill, 1967) illustrates various applications of the methodology within a given discipline.

Indicative of the growth and development of information retrieval in general is the appearance of the first Annual Review of Information Science and Technology (New York: Wiley, 1966), edited by Carlos A. Cuadra under the sponsorship of the American Documentation Institute. The social sciences have few entries in the initial volume of this annual review, but this is undoubtedly due more to a lag in the social scientist's awareness and his utilization of information retrieval techniques than to the nature of social science inquiry. As knowledge of these techniques becomes part of conventional methodological training in the social sciences, their applications will surely increase. It is hoped that these special issues of the ABS will contribute to the awareness and utilization of information retrieval techniques within the social sciences.