Inc., Hilary Baker. Each of these organizations provides time-sharing network access to large-scale numerical, social, and economic data bases.

Topics covered were vendors' information services, content and scope of the data bases, data sources and update procedures, access and analysis capabilities, and costs. After the presentations, workshops and demonstrations were given on system access, retrieval, and analysis capabilities.

SOCIAL TREND STUDIES: A REVIEW ESSAY

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With the wealth of data now archived at centers like the Inter-university Consortium for Political and Social Research (ICPSR) and Roper, it is not surprising that there have recently appeared a number of studies of historical trends in social attitudes. Two sourcebooks from ICPSR (via Harvard University Press) and a compendium from the National Opinion Research Center (NORC) are examples. American Social Attitudes Data Sourcebook presents trends in attitudes and behavior from 1947 to 1978. Its companion, American National Election Studies Data Sourcebook, includes election and demographic data from 1952 to 1978. A Compendium of Trends on General Social Survey Questions examines the changes in issues, attitudes, and demographics from the late 1930s to 1970.

The Social Attitudes Sourcebook presents 84 repeated items drawn from a potential pool of 500. These variables are taken from 15 major studies archived at ICPSR, including the Panel Study of Income Dynamics, the American National Election Studies, the Surveys of Consumer Finances, the seasonal Surveys of Consumer Attitudes and Behavior, and the Fall and Spring Omnibus Studies. Developed by Philip Converse, Jean Dotson, Wendy Hoag and William McGee, the report runs from personal items to abstract, national issues. The presentation begins with attitudes toward self and others, toward racial issues, toward women and family living, and toward retirement. Subsequently treated are government spending, war and peace, and outlooks on personal finances and on the national economy. Tables are broken down by demographic variables including sex, race, age, and education.

The Election Sourcebook has data from the 14 American National Election Studies conducted by the Survey Research Center and the Center for Political Studies at Michigan during election years from 1952 to 1978. Prepared under the direction of Warren Miller, Arthur Miller, and Edward Schneider, it is based on the expansion of a 1970 idea for studying "who votes and for whom." In attempting to locate electoral behavior and specific elections in historical and demographic context, the report is broader but less deep than The American Voter (1960), whose tradition it continues. Chapters include the social characteristics of the electorate, partisanship, position on public policy issues, support of the political system, involvement and turnout, and, finally, the vote.

The NORC Compendium is based on questions found in the General Social Survey, since 1972 a longitudinal study of social indicators and attitudes. While

concentrating on the GSS years 1972-78, the Compendium includes other studies which have asked comparable questions since the 1930s. Trends in 238 attitudes, personal evaluations, and behaviors, and in 57 demographic items are shown in time series. Topics range alphabetically from opinions on Abortion to Work attitudes. In addition, there are six clusters of issues: satisfaction with life, attitudes toward racial integration of the schools, job characteristics, qualities of children, opinions on the effects of pornography, and images of foreign countries.The study includes a methodology for analyzing the trends in the time series and indicates the type of trend for each variable.

Individually and in the aggregate, these studies provide an overview of stability and change in social attitudes and behavior over the last generation. Each merits additional systematic study, but a few noteworthy points may be mentioned. For instance, the level of general happiness has declined slightly over time, so that today only one in three claims to be very happy. Half of all employed people work in white collar jobs, and a similar proportion of all employees are very satisfied with their work. Confidence in the President is low (13 percent) and falling. While only two percent have been robbed and seven percent burgled (unchanging figures since 1972), one in five has been threatened with a gun, and a similar number own hand guns. Another 30 percent have rifles. Newspaper readership on a daily basis has declined to about six people in 10 (57 percent in the Compendium; 73 percent in the Attitudes Sourcebook).

Approval for women working is high (72 percent) and growing. There is a higher rate of approval for abortion than in the 1960s, but in the 1970s it leveled off. Support for busing is limited (20 percent) but on the increase. In a paper on liberalism based on the GSS, Smith (1979) finds a general growth in liberal attitudes through the 1970s, with a slight leveling off later in the decade. (A similar rising and leveling trend appears in the research of Beniger et al. on abortion.)

In the aggregate the NORC results indicate that about 56 percent of all items have shown change over time, and 44 percent have been approximately stable. The most change is seen in social attitudes.

Methods

Statistical methods for analyzing trends made of a limited number of points over time are not necessarily familiar to potential users of these studies--e.g., to journalists, policy makers, and some social scientists. While apparently simple, the aggregation of survey data points into time series does not involve a simple analytic process. Many groupings of points move up and down over time, and in graphic presentation, may appear to have a slope or shape. But it is not clear when these are indications of random oscillation, a linear trend, or a cyclical trend. When does a pattern actually represent change and when is it merely perturbations around a horizontal line? The rather large proportion of stability found in the NORC analysis suggests that a null hypothesis of "no change" should be the initial assumption.

A simple approach for determining trends from multiple points is to regress against time (weighting by the square root of the sample size to compensate for different numbers of cases). If the slope is significant, then the

sign indicates the direction of the trend. If not, no change is indicated. A nonlinear fit, such as a quadratic, may also be tested.

The Compendium includes another procedure for patterning points as trends and applies it to each of the series in the study. Based on goodness of fit models, the procedure evaluates constancy, linear or nonlinear change, and indeterminate trends. The model determined for the series is stated at the bottom of each Compendium table. The Compendium and Taylor (1975) present somewhat unclear explanations of the procedures.

Questions and Concerns

The three reports provide valuable information for the sophisticated user, but each has its own problems. First, no explanation is given of why the Election Sourcebook does not begin with the 1948 Election Study. As variables in one sourcebook are sometimes excluded, sometimes included in the other, cross-references between the two would have greatly enhanced their complementarity. The Attitudes Sourcebook includes in the same time series studies such as Americans View Their Mental Health (1957), based on a sample of the entire population, and the Panel Study of Income Dynamics (1968-), based only on household heads. This shift lays interpretations open to question.

In addition, it would have been helpful if actual election results were included in the Election Sourcebook for comparison. For instance, the number and proportions of registered voters (the eligible electorate) and voter turnout could easily have been incorporated. (See Kelley and Mirer, 1974:584-5, and Tufte, 1977:310, on "overreporting" voting.) Validating census figures and Current Population Survey data would have been welcome complements to the survey items.

The sourcebooks fail to mention that the data may be obtained from ICPSR for secondary analysis. In particular, no mention is made that each year's election data and the individual social attitudes studies listed in the ICPSR Guide to Resources and Services are presently available for use. Somewhat minor but irritating is the bulky form of the sourcebooks, whose pages will tear easily. It would have been better to put them into standard size books, like the NORC study, perhaps at a lower cost.

As the sourcebooks mention, there is significant cost in retrieving information, and this should be a strong incentive for further study of both the material in the sourcebooks and the series items retrieved but not reported in the published volumes. A system of identification and retrieval of items should be developed for ICPSR, NORC, and Roper to assist in secondary research and to avoid the huge amount of time that went into producing the sourcebooks. It is also important to develop a series of articles which explain clearly the various methods of analyzing trends with limited numbers of points. The Compendium series and analytic model should of course be made widely available.

In sum, these books yield insights into social attitudes and behaviors based on a vast store of data. They begin to illuminate some significant social trends during the last 30 years. Over the next few years there will be other presentations of trend data, as well as additional information on methods for analysis, and they can build upon the successes and failings of these timely reports.

References

Beniger, James, Susan Watkins and Juan Ruz. "Trends in the Abortion Issue as Measured by Events, Media Coverage, and Public Opinion Indicators." Proceedings of the Social Statistics Section, American Statistical Association 13, 1978, 118-123.

Campbell, Angus, Philip E. Converse, Warren Miller, and Donald Stokes. The American Voter. New York: Wiley, 1960.

Converse, Philip E., Wendy J. Hoag, and William H. McGee. American Social Attitudes Data Sourcebook, 1947-1978. Cambridge: Harvard University Press, 1980. 441 pp. $20.

Davis, James A., et al. General Social Surveys, 1972-1978, Cumulative Codebook. National Opinion Research Center, 1978.

Davis, James A., ed. Studies of Social Change Since 1948. 2 vols. NORC Report 127A. Chicago, 1976.

Kelley, Stanley, and Than Mirer. "The Simple Act of Voting," American Political Science Review 68:2 (June 1974).

Miller, Warren, Arthur H. Miller, and Edward J. Schneider. American National Election Studies Data Sourcebook, 1952-78. Cambridge: Harvard University Press, 1980. 388 pp. $20.

Smith, Tom W., with Guy J. Rich. A Compendium of Trends on General Social Survey Questions. Chicago: NORC, 1980. NORC Report 129. 260 pp. $7.50.

Smith, Tom W. "General Liberalism and Social Change in Post World War II America a Summary of Trends." GSS Technical Report 16, Chicago, November 1979. "Happiness: Time Trends, Seasonal Variations, Inter-survey Differences and Other Mysteries." Social Psychology Quarterly 42 (March 1979). "Sex and the GSS." GSS Technical Report 17, Chicago, September 1979.

Taylor, D. Garth. "Procedures for Evaluating Trends in Qualitative Indicators." In Davis, 1976, v. 1.

Tufte, Edward. "Political Statistics for the United States: Observations on Some Major Data Sources." American Political Science Review 71 (March 1977).

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