

33rd Annual Conference

The  
American Association  
for  
Public Opinion Research

June 1-4, 1978

The Hotel Roanoke, Roanoke, Va.



CONFERENCE PROGRAM  
AND  
ABSTRACTS

AAPOR OWES MUCH TO THE AGENCIES WHICH HAVE HELPED  
TO INSURE ITS FINANCIAL HEALTH BY GIVING CONTRIBUTIONS  
OF \$50 OR MORE DURING THE PAST YEAR.

AHF MARKETING RESEARCH, INC.

*New York, New York*

AMERICAN COUNCIL OF LIFE INSURANCE

*Washington, D.C.*

AXIOM MARKET RESEARCH BUREAU

*New York, New York*

BEHAVIORAL ANALYSIS, INC.

*Irvington, New York*

BELDEN ASSOCIATES

*Dallas, Texas*

BEST FOODS

*Englewood Cliffs, New Jersey*

BURGI INTERNATIONAL, INC.

*New York, New York*

CHESEBROUGH-POND'S, INC.

*Greenwich, Connecticut*

CHILD RESEARCH SERVICE, INC.

*New York, New York*

CHILTON RESEARCH SERVICES

*Radnor, Pennsylvania*

CONSENSUS, INC.

*New York, New York*

CROP INC.

*Montreal, Quebec*

CROSSLEY SURVEYS, INC.

*New York, New York*

DANCER FITZGERALD SAMPLE

*New York, New York*

DECISION MARKETING RESEARCH LIMITED

*Toronto, Ontario*

DEKADT MARKETING AND RESEARCH INC.

*Greenwich, Connecticut*

FIELD RESEARCH CORPORATION

*San Francisco, California*

THE GALLUP ORGANIZATION INC.

*Princeton, New Jersey*

HILL AND KNOWLTON, INC.

*New York, New York*

HOLLANDER, COHEN ASSOCIATES, INC.

*Baltimore, Maryland*

KAPULER & ASSOCIATES, INC.  
*Chicago, Illinois*

BABETTE KASS CREATIVE RESEARCH  
*Southbury, Connecticut*

LEVER BROTHERS COMPANY  
*New York, New York*

THOMAS J. LIPTON, INC.  
*Englewood Cliffs, New Jersey*

ERIC MARDER ASSOCIATES, INC.  
*New York, New York*

MARKETMATH, INC.  
*New York, New York*

MONROE MENDELSON RESEARCH  
*New York, New York*

MPI SENSORY TESTING  
*New York, New York*

NATIONAL ANALYSTS  
*Philadelphia, Pennsylvania*

NATIONAL OPINION RESEARCH CENTER  
*Chicago, Illinois*

OXTOBY-SMITH INC.  
*New York, New York*

STANLEY PETERFREUND ASSOCIATES, INC.  
*Englewood Cliffs, New Jersey*

JIM RANCHINO AND ASSOCIATES, INC.  
*Arkadelphia, Arkansas*

RESPONSE ANALYSIS CORPORATION  
*Princeton, New Jersey*

THE ROPER ORGANIZATION INC.  
*New York, New York*

T. J. ROSS & ASSOCIATES, INC.  
*New York, New York*

TRENDEX INC.  
*Westport, Connecticut*

WESTAT, INC.  
*Rockville, Maryland*

YANKELOVICH SKELLY & WHITE, INC.  
*New York, New York*

ZIFF-DAVIS PUBLISHING CO.  
*New York, New York*





## COMMITTEES

### PROGRAM COMMITTEE

Chair: John Colombotos

Co-Chair: Seymour Sudman

Kurt Back	Corrine Kirchner
John Curry	Robert Lee
Ray Fink	Donald Payne
Robert Groves	Michael Rappeport
Gloria Hamilton	Howard Schuman
Matt Hauck	William Spinrad
Leif Holbaek-Hanssen, WAPOR	Eve Weinberg
Donald Hughes	Charles Wright
Charles Kadushin	Pearl Zinner

### AAPOR AWARD COMMITTEE

Chair: Hope Lunin Klapper

Jack Elinson	Herbert Krugman
Mervin Field	Robert Lee
Albert Gollin	Franco Nicosia
	Laure Sharp

### STUDENT AWARD COMMITTEE

Chair: Barry Cook

Ronald Milavsky	Mady Wechsler Segal
Richard Ritti	Peter Tuckel

### ABSTRACTS COMMITTEE

Editor: Michael Rappeport

Sponsors: Ronald Gatty

### SITE SELECTION

Joseph Klapper



1

33RD ANNUAL CONFERENCE  
AMERICAN ASSOCIATION FOR PUBLIC OPINION RESEARCH  
AND  
WORLD ASSOCIATION FOR PUBLIC OPINION RESEARCH

The Hotel Roanoke - Roanoke, Virginia  
June 1 through June 4, 1978

THURSDAY

JUNE 1

3:00-9:00  
Main Lobby

REGISTRATION

2:00-6:00  
Cavalier Room

MEETING OF OLD AND NEW EXECUTIVE  
COUNCILS

6:00-8:30

DINNER - See meal ticket for location

9:00-10:30  
Shenandoah Room

FIRST PLENARY SESSION: POLICY-  
VS. DISCIPLINE-ORIENTED RESEARCH

Chair: JACK ELINSON, National Center  
for Health Statistics and  
Columbia University

JAMES COLEMAN, University of Chicago  
*Research in Education*

ELIHU KATZ, Hebrew University of Jeru-  
salem

*The Royal Commission on the BBC*

10:30-  
Pine Room  
Writing Room  
Terrace Room

GET-TOGETHER PARTY - DUTCH TREAT

FRIDAY

7:00-9:45  
Ballroom9:30-11:00  
Shenandoah Room9:30-11:00  
Cavalier-Pocohontas  
Rooms11:00-12:30  
Shenandoah Room

JUNE 2

BREAKFAST

QUESTIONNAIRE WORDING AND DESIGN

Chair: Eve Weinberg, Policy Research  
Corp.NORMAN BRADBURN and CARRIE MILES,  
National Opinion Research Center  
*Vague Quantifiers*HOWARD SCHUMAN and STANLEY PRESSER,  
Survey Research Center  
*New Wine in Old Bottles: Open vs.  
Closed Questions*GEORGE BISHOP, ALFRED TUCHFARBER, and  
ROBERT OLDENDICK, University of  
Cincinnati*Question Wording Artifacts in the  
American National Election Surveys*NAOMI ROTHWELL, U.S. Bureau of the  
Census  
*Studies of Census Mail Questionnaires*WAPOR  
HAPPINESS, APATHY, AND PROTESTChair: Leif Holbaek-Hanssen, Norges  
MarkedsdataELISABETH NOELLE-NEUMANN, Institute für  
Demoskopie  
*Public Policy and Happiness*SURVEY RESEARCH AND THE U.S.  
CENSUS BUREAUChair: CHARLES COWAN, U.S. Bureau of  
the CensusHENRY WOLTMAN and CARY ISAKI, U.S.  
Bureau of the Census  
*Sample Design and Measurement Error  
Research for the 1976 Registration  
and Voting Survey*THERESA DeMAIO, U.S. Bureau of the Census  
*Refusals: Who, Where, and Why*JEFFREY MOORE, U.S. Bureau of the Census  
*Evaluation of the Census Bureau's  
Public Information Efforts*

Discussant: WARREN MITOFSKY, CBS News



## FRIDAY

11:00-12:30	DISCUSSION GROUPS to be continued informally over lunch
Parlor A	POLITICAL CAMPAIGNING AND POLLING: LOOKING FORWARD TO THE 1980's  GARY NORDLINGER, Nordlinger Associates TOM MANN, Democratic Study Group LANCE TARRANCE, Tarrance Associates
Parlor C	HEALTH INDICES -- AN INDEX OF GENERAL WELL-BEING  HAROLD DUPUY, National Center for Health Statistics
Parlor D	INTERVIEWING RESPONDENTS WITH COMMUNICATION HANDICAPS  SANDY BERRY, Rand Corporation
Writing Room	ORGANIZATIONAL GATEKEEPERS: PROBLEMS OF ACCESS TO RESPONDENTS  THERESA ROGERS and LAURIE BAUMAN, Columbia University
Cavalier Room	IMPACTS OF COMMITTED MINORITIES -- ERA AND GUN CONTROL  MICHAEL RAPPEPORT, RL Associates
Pine Room	LIFE STYLES IN THE UNITED STATES  WILLIAM WELLS, Needham, Harper & Steers
12:30-1:45 Ballroom	LUNCH

FRIDAY

2:00-3:30  
Shenandoah Room

PHYSICAL DISABILITIES AND SOCIAL  
HANDICAPS: SURVEY CONTRIBUTIONS  
TO EMERGING PUBLIC AWARENESS

Chair: CORINNE KIRCHNER, American Founda-  
tion for the\*Blind and Columbia  
School of Public Health

HOWARD FREEMAN, University of California,  
Los Angeles

WILLIAM NICHOLLS and J. MERRILL SHANKS,  
University of California, Berkeley  
*A Large-Scale Telephone Survey to  
Estimate the Disabled in California:  
A First Report*

MARVIN BERKOWITZ, American Foundation  
for the Blind  
*Perceptions of Well-Being and Related  
Issues in a National Sample of Read-  
ing-Impaired Persons*

JoANNE EARP and NANCY McCHAREN, Univer-  
sity of North Carolina at Chapel Hill  
*Towards a Model of Factors Influenc-  
ing the Hiring of Women with a History  
of Breast Cancer*

Discussants: LAWRENCE HABER, U.S. De-  
partment of Commerce  
EUNICE FIORITO, U.S. De-  
partment of Health, Edu-  
cation and Welfare

2:00-3:30  
Cavalier-Pocohontas  
Rooms

PUBLIC OPINION AND THE ARTS  
(JOINT AAPOR-WAPOR SESSION)

Chair: MATT HAUCK, Survey Research  
Consultant

SAM BOOK, S.H. Book Research Consulting  
and York University  
*Arts Audience Surveys in Ontario: An  
Economic Assessment*

GEORGE MIAOULIS, Wright State University  
DAVID LLOYD, University of New Hampshire  
*Contribution of Survey Research to the  
Arts in a Rural Environment*

DAVID CWI, The Johns Hopkins University  
*Policy Implications of Current Studies  
of the Audience for the Arts*

FRIDAY

3:30-5:00  
Shenandoah Room

CONSUMERISM AND THE PUBLIC  
INTEREST

Chair: LORNA OPATOW, Opatow Associates

CYNTHIA THOMAS, Mathematica Policy  
Research

*Apolitical Politics: The Growth of  
Neighborhood Movements*

RICHARD CURTIN, University of Michigan  
*The Use and Abuse of Consumer Surveys  
as Public Policy Guidelines*

LLOYD NEWMAN, Manning, Selvage & Lee  
*The Corporation and the Consumer --  
Cooperation or Conflict?*

Discussant: MICHAEL DENNEY, Massachu-  
setts Institute of Tech-  
nology

3:30-5:00  
Pine Room

RESEARCH AND PUBLIC POLICY

Chair: WILLIAM SPINRAD, Adelphi Univer-  
sity

CAROL WEISS, Columbia University  
*The Many Meanings of Research Utili-  
zation*

JAE-WON LEE, Cleveland State University  
*Use of Survey in Legal Policy-Making*

EMANUEL DEMBY, MPI Marketing Research  
*Exploring Top Management*

MARIE CRANE, University of Michigan  
*Student Award Paper*

3:30-5:00  
Cavalier-Pocohontas  
Rooms

CROSS-NATIONAL RESEARCH OF ELITES

Chair: CHARLES KADUSHIN, Columbia  
University

JOHN CLEMENS, Marplan Europe  
*Are Elites Elite?*

HANS KEPPLINGER, Universitat Mainz,  
Germany

*Perceptions of Social Problems by  
Local Elites and Workers in West  
Germany and Lebanon*

PIERRE BIRNBAUM, Universite de Paris  
*The High Civil Servants in France:  
Their Function in the Horizontal In-  
tegration of Ruling Elites under the  
Fifth Republic*

FRIDAY

3:30-5:00

CROSS-NATIONAL RESEARCH OF ELITES  
(continued)

GWEN MOORE, Ithaca, New York

JOHN HIGLEY, Australian National University

*Ruling Central Circles in Australia  
and the United States: A Comparison*

Discussant: BODGAN DENITCH, CUNY Graduate Center

5:30-6:30

Pine Room

INVITATION RECEPTION FOR NEW  
ATTENDEES

7:00-8:30

Ballroom

DINNER

9:00-10:30

Shenandoah Room

SECOND PLENARY SESSION: PUBLIC  
OPINION RESEARCH AND PERSONAL  
PRIVACY

Chair: SEYMOUR SUDMAN, University of  
Illinois at Urbana-Champaign

DAVID LINOWES, University of Illinois  
at Urbana-Champaign and U.S. Privacy  
Protection Study Commission

MICHAEL BAKER, Columbia University and  
National Bureau of Standards



SATURDAY

JUNE 3

7:00-9:45  
Ballroom

BREAKFAST

8:00-9:00  
Pocohontas RoomGENERAL MEETING OF LOCAL CHAPTERS  
Chair: BILL NICHOLS8:00-9:00  
Cavalier RoomMEETING OF PROPOSED NEW YORK  
CHAPTER8:00-9:00  
Parlor D

POQ EDITORIAL BOARD MEETING

9:00-10:30  
Cavalier-Pocohontas  
Rooms

THE STUDY OF RARE POPULATIONS

Chair: KURT BACK, Duke University

ERIC WISH, LEE ROBINS, JOHN HELZER,  
MICHI HESSELBROCK, DARLENE DAVIS,  
Washington University School of Medicine  
*Monday Morning Quarterbacking on Limiting  
Callbacks: Evidence from a Panel  
Study of Veterans*MICHAEL WELCH, Florida Atlantic Univer-  
sity*Problems in the Secondary Analysis of  
Data on "Rare" Populations: A Summary  
and Some Suggestions*GEORGE ROTHBART, ROBERT LAUFER, MICHELE  
FINE, Center for Policy Research  
*The Vietnam Veteran*Discussant: CELIA HOMANS, National  
Opinion Research Center9:00-10:30  
Shenandoah RoomIMPACT OF MASS MEDIA ON PUBLIC  
OPINION AND PUBLIC POLICYChair: SIDNEY KRAUS, Cleveland State  
UniversityDONALD CUNDY and JOHN HAVICK, Georgia  
Institute of Technology  
*Voting, Rational/Irrational Man, and  
the 1976 Presidential Debates*MARK LEVY, State University of New York,  
Albany  
*The "Active" Audience Considered: The  
Case of Television News*

SATURDAY

9:00-10:30

IMPACT OF MASS MEDIA ON PUBLIC  
OPINION AND PUBLIC POLICY  
(continued)

DAVID WEAVER, Indiana University  
MAXWELL McCOMBS, Syracuse University  
*Voters' Need for Orientation and  
Choice of Candidate: The Role of  
the Mass Media in Electoral Decision-  
Making*

RONALD FRANK, The Wharton School  
MARSHALL GREENBERG, National Analysts  
*Television Looks at the People*

11:00-12:30

Cavalier-Pocohontas  
Rooms

RESEARCHING THE INTERACTION BE-  
TWEEN INTERVIEWER AND RESPONDENT

Chair: OWEN THORBERRY, National Center  
for Health Statistics

JEFF SOBAL, Gettysburg College  
*What Should We Say After We Say  
"Hello"?: Disclosing Information  
in Interview Introductions*

GEORGE MIAOULIS, Wright State University  
MARVIN BAIMAN, R.M. Bruskin Associates  
*Respondents' Reactions to the Inter-  
viewing Process*

ELEANOR SINGER, Columbia University  
LUANE KOHNKE-AGUIRRE, National Opinion  
Research Center  
*The Effect of Interviewer Expecta-  
tions: A Replication and Extension*

Discussants: LOIS OKSENBURG, N.C. Health  
Services Research

CHARLES PALIT, University  
of Wisconsin

11:00-12:30

Shenandoah Room

PANEL DISCUSSION  
SURVEY RESEARCH: THE EARLY YEARS

Chair: JEAN CONVERSE, Survey Research  
Center

PAUL SHEATSLEY, National Opinion  
Research Center

DON CAHALAN, University of California,  
Berkeley

SYDNEY ROSLOW, Florida International  
University

JOSEPH BELDEN, Belden Associates



## SATURDAY

- 11:00-12:30 DISCUSSION GROUPS to be continued  
informally over lunch
- Parlor A PUBLIC OPINION RESEARCH AND THE DECLIN-  
ING ELECTORATE  
CURTIS GANS, Committee for the Study  
of the American Electorate
- Parlor C THE ORIGINS AND CAREERS OF SURVEY  
RESEARCHERS  
ALBERT GOLLIN, Newspaper Advertising  
Bureau
- Parlor D SELF/OTHER REPORTS: HOW ADOLESCENTS AND  
PARENTS SEE EACH OTHER  
DOROTHY JESSOP, Columbia University  
DONALD CUNDY, Louisiana State Univer-  
sity
- Writing Room TRACING CAUSES AND SPECIFIC EFFECTS IN  
THE MASS MEDIA ATTITUDE LINK  
CLARK LEAVITT, Ohio State University
- Cavalier Room THE RESEARCHER AS MANAGER  
ALAN KOTOK, U.S. International Commu-  
nication Agency  
HENRY SCHAFFER, American Broadcasting  
Company
- Pine Room LIFE STYLES IN THE UNITED STATES  
WILLIAM WELLS, Needham, Harper & Steers
- 12:30-1:45  
Ballroom LUNCH

## SATURDAY

2:00-3:30  
Cavalier-Pocohontas  
Rooms

**SURVEY RESEARCH IN INDUSTRIAL  
SETTINGS**

**Chair: STAN PETERFREUND, Stan  
Peterfreund Associates**

**FRED GOLDNER, Queens College and  
Health & Hospitals Corp**  
*Survey Research as Managerial/Employee  
Weapons*

**DAVID SEGAL, BARBARA ANN LYNCH,  
JOHN LAIR, University of Maryland**  
*Job Satisfaction and Evaluations of  
the Work Environment in the U.S. Army*

**GARY SCHMERMUND, American Telephone &  
Telegraph Company**  
*Employee Communication Research in  
the Bell System*

2:00-3:30  
Shenandoah Room

**RECENT RESEARCH ON TELEPHONE  
SURVEY METHODOLOGY**

**Chair: ROBERT GROVES, University of  
Michigan**

**DENNIS BENSON, Appropriate Solutions, Inc.  
JOHN ALLEN, Epilepsy Association of  
Franklin County, Ohio**  
*Determining Prevalence of Developmental  
Disabilities over the Telephone*

**MICHAEL O'NEIL, University of Michigan**  
*Estimating the Nonresponse Bias due to  
Refusals in Telephone Surveys*

**GIDEON VIGDERHOUS, Bell Canada**  
*Optimizing the Time Schedules and  
Response Rates in Telephone Interviews*

**Discussant: ANITRA RUSTEMEYER, U.S.  
Bureau of the Census**

3:30-5:00  
Cavalier-Pocohontas  
Rooms

**AAPOR BUSINESS MEETING**

5:00-6:00  
Writing Room

**WAPOR BUSINESS MEETING**



## SATURDAY

7:00-8:30  
Shenandoah Room

PRE-BANQUET DUTCH TREAT COCKTAIL  
PARTY

8:30  
Ballroom

BANQUET

Presiding: REUBEN COHEN, Vice President  
and President-Elect

Remarks: HOPE LUNIN KLAPPER, President

Presentation of AAPOR STUDENT AWARD

Presentation of AAPOR AWARD

After Banquet  
Pine Room  
Writing Room  
Terrace Room

PRESIDENT'S DUTCH-TREAT PARTY





## 1978 AAPOR STUDENT AWARD COMPETITION WINNERS

The best of current papers being done by students at universities in the field of survey research.

### WINNER: HELEN S. DINERMAN PRIZE

MS. MARIE CRANE, University of Michigan

*What Does What People Say Have to Do with What They Do? A field experiment examining the elusive attitude-behavior relationship.*

*The measurement of attitudes is a mainstay of research in the social sciences, motivating high-powered survey research units utilizing millions of dollars. Most of this research is conducted under the assumption that attitudes are consistent with and predict behavior. It is therefore disconcerting and somewhat embarrassing that empirical investigations of the relationship between attitudes and behaviors have produced at best only a tenuous connection. The inability of social science researchers to empirically verify such an important and often-used theoretical concept as the relation between attitudes and behaviors has led to a number of suggestions to reduce this academic cognitive dissonance.*

*Some claim that the lack of a demonstrable attitude-behavior (A-B) relationship may be attributed to poor or insufficient measurement of attitudes (Schuman and Johnson, 1976). Suggestions for modifications of attitudinal measures includes proposals to: (1) measure not just direction but also intensity of attitudes (Schuman and Johnson, 1976); (2) measure the centrality of attitudes (Schuman and Johnson, 1976); (3) measure attitudes at the level of specificity approximating the level of the behavioral measure (Dollard, 1949; DeFleur and Westie, 1963; Fishbein and Ajzen, 1975); and (4) measure "behavioral intention" (Fishbein and Ajzen, 1975).*

### SECOND PRIZE: MR. MICHAEL CAROZZA, University of Kentucky *The Effects of an Interview on Public Television Viewing*

### HONORABLE MENTION: MR. JEFF SOBAL, University of Pennsylvania *What Should We Say After We Say "Hello"?: Disclosing Information in Interview Introductions*





SUNDAY

JUNE 4

7:00-9:45  
Ballroom

BREAKFAST

9:30-11:00  
Cavalier-Pocohontas  
RoomsA DIDACTIC SESSION ON SECONDARY  
ANALYSIS OF COHORT DATA

PHIL CONVERSE, Survey Research Center

9:30-11:00  
Shenandoah Room

NEW TECHNOLOGIES IN MASS MEDIA

Chair: HERBERT KRUGMAN, General Elec-  
tric CompanyANTHONY SMITH, German Marshall Fund  
*New Technology and the Mass Audience:  
An Historical Overview*F. KENNETH EDWARDS, University of  
Alabama  
*British Electronic News Delivery  
Invades Europe*MELVIN GOLDBERG, American Broadcasting  
Companies, Inc.  
*New Technologies and Mass Media*Discussant: ALBERT GOLLIN, Newspaper  
Advertising Bureau, Inc.11:00-12:30  
Shenandoah RoomTHE SOCIAL IMPACT OF ENVIRON-  
MENTAL POLICIESChair: SAM KLAUSNER, Center for Research  
on Acts of ManSALLY COOK LOPREATO, University of Texas,  
Austin  
*Public Opinion Research on Attitudes  
Toward Energy Resource Development and  
Use: The Local Perspective*HERSCHEL SHOSTEK, Herschel Shostek  
Associates  
*Attitudinal Data to Plan Electric  
Conservation Policy: Case Studies  
from the Rural Electric Co-ops*DAVID SILLS, Social Science Research  
Council  
*Approaches to Studying the Social  
Costs of Energy Systems*SANDY WALKINGTON, Tulane University  
*Population Ecology Implications of  
the Energy Crisis*

SUNDAY

11:00-12:30

THE SOCIAL IMPACT OF ENVIRONMENTAL POLICIES  
(continued)

SEYMOUR WARKOV and JAMES DeFRONZO,  
University of Connecticut  
*Public Appraisals of Electric Utility  
Performance*

11:00-12:30

Cavalier-Pocohontas  
Rooms

AUTOMATING THE SURVEY PROCESS

Chair: DONALD PAYNE, Oxtoby-Smith, Inc.

STARR ROXANNE HILTZ, Upsala College  
*Using Computerized Conferencing to  
Conduct Opinion Research*

D. EDWIN LEBBY, Chilton Research Services  
*On-Line, Inter-Active Interviewing --  
New Dimensions in Survey Research*

THOMAS MINDRUM, Tele-Research, Inc.  
*Applications of Scanner Data to  
Supermarket Sales Audits*

12:30

LUNCH - See meal ticket for location



## VAGUE QUANTIFIERS

Norman M. Bradburn and Carrie Miles  
National Opinion Research Center/University of Chicago

In surveys we frequently ask respondents to make judgments about "how much," "how often," "how strongly," and the like. Responses are most often made in terms of vague quantifiers such as "very," "pretty," or "not too" often, strongly, or much. We know little about the characteristics of such quantifying terms.

This paper reviews several theoretical approaches to the problem of quantifying meaning based on studies from experimental psychology and from philosophical investigations. It also reports data from a pilot study that tries to make more precise quantitative estimates for three common vague quantifiers.

## NEW WINE IN OLD BOTTLES: OPEN VERSUS CLOSED QUESTIONS

Howard Schuman and Stanley Presser  
Survey Research Center, University of Michigan

The issues of whether and when to use "open" as against "closed" questions are among the hoariest in survey research. Despite ancient battles between proponents of the two forms, as well as endless textbook discussions, there has been very little research that attempts to determine whether the two forms yield basically different results in studies of complex attitudes.

We have carried out three split-ballot experiments, as well as several supplementary studies, in an effort to throw some new light on these issues. Initial results present a mixed picture: if a closed question is very carefully constructed to reflect the most frequent spontaneous responses, then the differences in form seem to be small in terms of bivariate analysis, though they are large at the level of univariate percentages. Where differences do occur, which form leads to more solid conclusions is still uncertain and much in need of innovative research.

QUESTION WORDING ARTIFACTS IN THE AMERICAN  
NATIONAL ELECTION SURVEYS

George F. Bishop, Alfred J. Tuchfarber, Robert W. Oldendick  
University of Cincinnati

This report, based on a current NSF-funded project, describes the nature and consequences of a number of changes in question wording and format that have occurred in the biennial national election studies conducted by the Survey Research Center and the Center for Political Studies at the University of Michigan. Among the changes to be discussed are: (a) variations in response format -- e.g., Likert agree-disagree vs. forced-choice vs. multi-point scale forms; (b) differences in the type of opinion filter questions; and (c) the use of explicit vs. volunteered "middle" alternatives. The paper highlights the effects of these changes on marginal distributions, particularly their variability, and the magnitude of inter-item correlations, especially as they have affected inferences about the growth of political sophistication in the American electorate over the past two decades.

The report also spells out the implications of the findings for secondary analysis of the Michigan surveys, social indicators research, and the construction of survey questions -- calling for a return to the "split-ballot" experiments of the 1940's and early 1950's, some of which has already been started by Schuman and his associates at the Institute for Social Research.

STUDIES OF CENSUS MAIL QUESTIONNAIRES

Naomi D. Rothwell  
U.S. Bureau of the Census

The research described here represented an initial effort by the Bureau of the Census to employ Classroom experiments employed in a study of alternative designs of a self-administered questionnaire for use in decennial censuses of Population and Housing.

No one of the following three kinds of investigation is original or noteworthy by itself. What is unusual is the combination of methods in a single program such that results from one kind of study explain and reinforce results from others:

- a. Experiments: Twenty or more persons assembled in groups fill alternative versions of census-like forms under uniform and controlled conditions. The purpose is to compare particular questionnaire variants by statistical analysis of results.
- b. Observation: One observer watches and listens to one subject as he attempts to fill a form, helps when necessary, and discusses the form afterwards. The objective

is to learn how people fill forms, what difficulties and misunderstandings they have, and what are the reasons for any difficulties or misunderstandings.

- c. 1970 Census Results: Data obtained from a sample of forms mailed back in the 1970 Census were used to see whether the errors made in filling standard census questionnaires by experimental subjects resembled those made by respondents in the Census.

The features studied at the beginning of the decade included: question wording, question placement, placement of instructions, and selective use of red colored print.

Based on the methods employed in the initial demonstration project, but lacking data from a census for comparison, methodologically less rigorous experiments were begun late in 1977. The features studied included alternative design -- columnar versus linear format; content; question wording; and use of color shaded areas.

#### PUBLIC POLICY AND HAPPINESS

Elisabeth Noelle-Neumann  
Institut für Demoskopie

The subject of the studies depicted in this contribution is psychological well-being. The author terms this field underdeveloped, and argues that policy makers largely failed to assign the task of investigating the circumstances that influence and favor psychological well-being to social research.

The first part of the paper describes the instrument which -- not exclusively but mainly -- is used to measure psychological well-being: facial expressions, posture, gestures. This return to an earlier psychological approach is substantiated with the help of latest research results (e.g., Ekman/Friesen/Ellsworth, 1972) which show that the physiognomical indications of happiness and grief are understood universally, panculturally and that, furthermore, they include the possibility of being used as nonverbal communication in survey research, as unobtrusive measures in the case of both surveys in one country and in international comparative research. Problems arising with the application of this measuring method are discussed by means of data from surveys by the Institut für Demoskopie Allensbach, which has been working with this instrument for six years. Furthermore, the results of a Gallup world survey about "Human Needs and Satisfaction," conducted in 60 countries in 1975/76, are also taken into account. Upon the request of the author, the measurement of happiness with the help of physiognomical indicators had been included in this survey.

The second part of the paper demonstrates the physiognomical instrument and its application. Simultaneously, it tries to



make a contribution to gaining knowledge of the factors that influence psychological well-being. These factors are shown to be the individual's conviction that life is meaningful, the pleasure one finds in one's work, degrees of freedom to make decisions at one's job, but not the extent of leisure time, for instance. Positive correlations between book-reading and psychological well-being stand out as do negative correlations in the case of hour-long TV watching every day.

A particular pattern is striking. Young people who are happy according to their physiognomical criteria and those who are unhappy differ much less in their ways and circumstances of living than older people. With growing age, the difference between people that look happy and those that look unhappy is thus also growing. This is construed as the indication of an interaction. The pattern can, conversely, also serve as an indication of an interaction where such an interaction is not expected.

SAMPLE DESIGN AND MEASUREMENT ERROR RESEARCH  
FOR THE 1976 REGISTRATION AND VOTING SURVEY

Henry Woltman and Cary Isaki  
U.S. Bureau of the Census

As part of 1976 Registration and Voting Survey conducted by the Census Bureau, two research studies were conducted. Since the collection of voting information by household survey techniques has invariably resulted in estimates of the number of voters (based on persons reported as voting on the survey questionnaire) which are somewhat higher than the official number of votes cast in a particular election, one study was directed toward validation of the survey responses for voting participation using the voting and registration lists compiled in each jurisdiction.

The objectives of the validation study were (1) to determine the extent of overreporting of voting participation among minority persons as compared to nonminority persons; and (2) to evaluate the cost efficiency of using an alternative estimator which makes use of the results of the validation procedure to adjust the sample survey estimates.

The second research project was concerned with the sampling efficiency of a two-frame sample design. A two-frame sample design methodology was applied to 12 counties within the RAV survey by utilizing a subsample of the households in a household survey selected from a frame with purported complete coverage and a sample of households via county registration lists. The main goal of the research was to estimate sampling variance and cost parameters toward comparing alternative survey methodologies.

REFUSALS: WHO, WHERE, AND WHY

Theresa DeMaio  
U.S. Bureau of the Census

Results of recent Census Bureau effort to investigate refusal patterns are presented in this paper. Sources include data from several of the Bureau's continuing surveys, as well as from a project which collected specific information about refusals on the Current Population Survey. Major issues which are addressed include the following: (1) The effect of the implementation of the Privacy Act of 1974 on the trend of increasing refusals; (2) Characteristics of respondents who refuse to be interviewed (i.e., age, sex, income, geographic location); (3) Differences between characteristics of respondents who refuse on the initial contact of a panel survey and those who refuse farther along in the survey; (4) Characteristics of refusals which followup attempts are able to complete; (5) Reasons given by respondents at the time of refusal.

## EVALUATION OF THE CENSUS BUREAU'S PUBLIC INFORMATION EFFORTS

Jeffrey C. Moore  
U.S. Bureau of the Census

In order to promote cooperation with the census among the general public, the Census Bureau traditionally undertakes a public information campaign, which largely takes place in the two or three weeks surrounding Census Day. Since the Bureau is not authorized to purchase advertising space or time, reliance must be placed on public service announcements, news stories, and the efforts of Bureau staff in distributing pamphlets and handbills in order to get the census message to the public. Such campaigns have two basic purposes: (a) to inform people that a census is to take place; and (b) to persuade them of the importance of full and prompt cooperation.

Small-scale sample surveys were conducted following recent census pretests in Camden, New Jersey and Oakland, California, in order to evaluate the effectiveness of the Bureau's public information efforts. The survey instruments used in the two sites were very similar in design and purpose. In each case, the major purpose was to determine the effectiveness of the various channels of information along two dimensions: (a) penetration or exposure; and (b) the relationship of exposure and cooperation with the census. Secondary goals of the research were to determine (a) the extent and timing of respondents' exposure to the campaign; (b) the level of knowledge among the general public of basic facts about the census; (c) people's attitudes toward the census and the Census Bureau; and (d) the relationship between these variables and cooperation with the census.

This paper discusses the results of each survey separately, and provides a basis for comparison of the relative effectiveness of the campaigns in the two different cities.

A LARGE-SCALE TELEPHONE SURVEY TO ESTIMATE  
THE DISABLED IN CALIFORNIA: A FIRST REPORT

Howard E. Freeman, Los Angeles  
William L. Nicholls and J. Merrill Shanks, Berkeley  
University of California

The California Disability Survey is being conducted by the Institute for Social Science Research at the University of California at Los Angeles and the Survey Research Center, University of California at Berkeley for the California State Department of Rehabilitation. Its purpose is to estimate the number and characteristics of disabled persons in the civilian household population of California and in each of twenty-six rehabilitation districts within the state.



The telephone interview sample of 30,000 households was drawn by random digit dialing Waksberg cluster methods, and the interviews are being conducted with computer-assisted telephone interviewing (CATI). Generation of Waksberg's secondary numbers, sample control, and the callback scheduling of interviews, branching for contingency questions, transfers to Spanish-speaking interviews and to supervisors, callback standards, coding, cleaning, and certification were all controlled by an integrated set of computer programs.

This first report on the survey will review the study objectives, survey measurement of disability, key decisions in designing a large-scale disability survey, and procedures for assessing non-telephone household bias. Since the study will be in the field most of the spring, only first results may be available at the time of presentation. These can be compared, however, with previous national studies conducted by the Social Security Administration.

PERCEPTIONS OF WELL-BEING AND RELATED ISSUES  
IN A NATIONAL SAMPLE OF READING-IMPAIRED PERSONS

Marvin Berkowitz  
American Foundation for the Blind

This paper examines the perceptions of well-being of a sample of 2000 Americans over the age of six years who were identified as having severe reading problems. It explores how this group, or proxy respondents in the same household, viewed the most positive and negative aspects of their lives. These perceptions are correlated with demographic variables and factors like independence, mobility, interests, and use of rehabilitation services and compared with national indicators of life quality in the American population as a whole.

The sample was drawn from the results of a telephone screening in 1977 of 210,000 households in the United States. The data may be thought to reflect the views of a rare population of 2.5 million persons -- roughly 1 in 100 Americans -- who reported visual impairments severe enough to cause disabilities in reading normal print (1.7 million), physical limitations in holding or turning pages of a book (.32 million), or learning problems in letter reversal, following along a line, or concentration (.25 million). Roughly 50% of the target population is above age 65, 40% in the working ages of 17 to 65, and 10% in the group 6 to 17 years old.

The research draws attention to the difficulties of interpreting the responses of well-being as an indicator of the acceptance of a loss of a physical capability. It also probes the issue of the difference between one's personal sense of well-being and one's well-being as perceived by a close household member, bringing to light the need to view disabilities in terms of their impact on the family unit. Our expectation is that the findings constitute limited but important record of well-being infrequently researched in a rare population group.

TOWARDS A MODEL OF FACTORS INFLUENCING THE HIRING  
OF WOMEN WITH A HISTORY OF BREAST CANCER

Jo Anne L. Earp and Nancy McCharen  
University of North Carolina at Chapel Hill

To identify those factors which influence employers' decision to hire women with a history of breast cancer, a random sample of personnel directors from an industrialized North Carolina county was surveyed. A 78% response rate to a mailed questionnaire was achieved. Two-thirds of the respondents were from industrial companies ranging in size from 25 to 5000 employees; the other one-third were from service agencies. A majority of the sample had some personal experience with breast cancer patients, while half had employees leave work for a mastectomy.

A theoretical model of factors influencing the decision to hire was developed. Five factors explained 69% of the observed variance in hiring practices: size of company, level of sick leave benefits, company involvement in payment of employees' medical insurance premiums, employers' education, and experience with women who had had breast cancer. Level of knowledge about the disease was not a predictor of the hiring decision. None of the companies had an explicit hiring policy for cancer patients and few reported that the final decision was made by a medical practitioner. Regardless of who made that decision, the influence of non-medical factors such as the liberality of sick leave benefits was quite strong in determining whether former breast cancer patients were actually hired.

It was concluded that: (a) personal experience with cancer by those hiring; (b) subjective prognosis of applicants' likelihood of future illness; and (c) possible economic ramifications for the company are economically unsound, as well as discriminatory, reasons for employment selection. Medical capability for adequately performing a job should be judged by objective medical criteria and a person's current physical condition.

ARTS AUDIENCE SURVEYS IN ONTARIO: AN ECONOMIC ASSESSMENT

Sam H. Book

S. H. Book Research Consulting and York University

Surveys of performing arts audiences in Ontario, Canada, are briefly reviewed in the light of two empirical objectives: (1) developing a generalized data base on the performing arts; and (2) testing economic hypotheses relevant to arts institutions and audiences. A matrix of survey methodology and empirical results is presented, based on the author's study, The Audience for the Performing Arts in Ontario (with Steven Globberman).



Primary thesis of this paper is that while the development of statistical profiles of arts audiences, performing companies, and artistic output has progressed rapidly during the past decade, the use of survey-based data for the purpose of economic analysis has advanced only slightly since Baumol and Bowen's pioneering work. Hypotheses involving the price-elasticity of demand for tickets to performing arts events will be used to illustrate the problems and possibilities of empirical research in the arts. Two such hypotheses are: (1) Price-elasticity of demand for tickets is less than one if the price concept is narrowly defined; (2) Demand is price elastic (greater than one) if the price concept is broadened to include associated costs of attendance.

A brief additional discussion will deal with the use of multiple-regression techniques to isolate the impact of individual demographic factors on responses to price and cost.

#### CONTRIBUTION OF SURVEY RESEARCH TO THE ARTS IN A RURAL ENVIRONMENT

George Miaoulis and David Lloyd  
Wright State University and University of New Hampshire

The Monadnock region of New Hampshire is the southwest portion of the state, bordered by Vermont and Massachusetts. It is a rural area rich in artistic and cultural activities. The Committee on the Arts of the Monadnock region received a grant from the New Hampshire Commission on the Arts and the National Endowment for the Arts to assess the attitudes of residents towards artistic and cultural programs, arts education, and public funding of the arts, and to examine their participation in these activities. The results of this study provide the arts community with the information needed to manage its programmatic, educational, and fund-raising activities.

This paper presents a case study of the contribution of survey research to effective arts management in the Monadnock region. A variety of examples of survey findings, the programs developed, and their impact will be presented, including: (1) a corporate "in-house" arts program; (2) a legislative bill for state funding; (3) improving relations with the business community; (4) membership and funding campaigns; (5) design of arts programs for specific audience groups -- children, non-participants, etc.

This research and its use in the Monadnock region provides managerial insights for survey researchers and managers of arts and service organizations.

POLICY IMPLICATIONS OF CURRENT STUDIES  
OF THE AUDIENCE FOR THE ARTS

David Cwi

The Johns Hopkins University

In recent years there have been hundreds of studies of arts audiences, the vast preponderance conducted by arts institutions seeking to identify audience characteristics and interests. Studies by arts groups have identified misperceptions regarding the financing of the arts, established that the arts have positive economic effects, and discovered that the public at large takes a positive attitude toward the general area of culture and the arts as well as toward the creative use of leisure time.

Of particular interest are recent opinion studies conducted for the Associated Councils of the Arts by Lou Harris and Associates, for the Ford Foundation by Eric Marder Associates, and for the National Endowment for the Arts. These studies have sought a variety of information regarding attitudes, preferences, and attendance at cultural activities. The studies are examined for their policy utility. It is found that internal consistency and external validity checks suggest that reported opinions on the arts are subject to respondent bias; that little attention has been devoted to gathering multi-dimensional data on public preferences sufficient to establish priorities, goals, or evaluate public programs. Data is strongest in evaluating the effect of life-style, program pricing, and related issues on future demand for selected activities.

APOLITICAL POLITICS: THE GROWTH OF NEIGHBORHOOD MOVEMENTS

Cynthia Thomas

Mathematica Policy Research

There has been a resurgent interest in neighborhoods, following the mixed successes of the federal programs of the '60's and early '70's including Urban Renewal, Community Action Programs, Model Cities, and Community Block Grants, all of which have included some level of neighborhood involvement in policy making. All of these programs have focused on standard service delivery problems and, in effect, have used neighborhoods as auxiliary governmental units. The new neighborhood groups are more likely to be independent from governmental agencies and to focus on issues related to the consequences of urban growth and the environment.

Neighborhood groups in ten rapidly growing states in the West and South have been contacted to determine their objectives, level of bureaucratization, and political activities, within the framework of collective group theory. Results suggest that there are indeed new trends in neighborhood activities which have the potential for producing significant changes in the urban environment.



THE USE AND ABUSE OF CONSUMER SURVEYS  
AS PUBLIC POLICY GUIDELINES

Richard T. Curtin  
University of Michigan

Population sample surveys are now used widely to influence decision makers as well as the general public on matters of consumer policy. This paper argues that survey research is an effective and sensitive tool for developing guidelines for public policy, but that, all too often, misleading wording and interpretation of questionnaire items distorts survey findings. These issues are especially important for research on consumerism. Consumerism is like apple pie, the flag, and motherhood -- voiced disagreement usually goes against social orthodoxy and personal interest. Thus, the question "Do you favor or oppose the establishment of a consumer protection agency?" presents no real alternative to the respondent. Rather than locating public policy preferences in the context of potential benefits and costs from particular aspects of consumer protection legislation, such questions may merely reflect superficial social values. Moreover, since public policy initiatives are characterized by a process of development and change over time, it is crucial to determine how sensitive citizen preferences are to changing circumstances and new information.

Data are drawn from a nationwide representative sample conducted in August-September 1977 by the Survey Research Center and detail recent changes in the area of consumer credit, including credit use and awareness of credit terms, problems with creditors and billing errors, awareness of current legal requirements, and their preferences for changes in these regulations.

THE CORPORATION AND THE CONSUMER -- COOPERATION OR CONFLICT?

Lloyd N. Newman  
Manning, Selvage & Lee, Inc.

The public's perception of business appears to be cyclical. Recent surveys indicate that the general public's fear of "big business" is lessening. But the successful fight against the proposed federal consumer agency may have increased motivation of activist-consumerists and they, in turn, may be able to regenerate general distrust of business, particularly if business continues to show a "fight" mentality.

New laws, increased media emphasis on investigative reporting, and rising information expectations provide consumers with great access to corporate data. Whether or not supplied directly by companies, almost any type of information can be obtained. The harder companies fight to maintain confidentiality, the more users of the information will find "sinister" implications when they finally get it, communicating these implications with appropriate overemphasis to the general public.



Enlightened corporations are now cooperating with consumer groups rather than confronting them. They are not, however, surrendering their right and obligation to publicly oppose consumer groups when they are wrong. But, by being part of the process wherein information flows from the business to activist-consumers to the general public, companies improve the opportunity for their stories to be properly told.

### THE MANY MEANINGS OF RESEARCH UTILIZATION

Carol H. Weiss  
Columbia University

Given the upsurge of concern about whether social research intended to influence policy is actually "used," it becomes important to understand what "using research" means and how it occurs. From a review of the literature, seven different meanings of "research utilization" can be extracted:

- (1) The knowledge-driven model. Basic research to applied research to development to application.
- (2) Decision-driven model. Pending decision to identification of missing knowledge to research to decision.
- (3) Interactive model, drawing on the knowledge and judgment of policy makers, administrators, practitioners, substantive experts, and social researchers in interaction.
- (4) Political model. Research "used" to support policy actors' pre-existing positions; research as ammunition.
- (5) Research as tactics. Not the substantive findings but the fact that research is being done is "used," e.g., to delay action, to satisfy constituent demands.
- (6) Enlightenment model. Not specific findings but research generalizations, concepts, perspectives, ideas, diffuse indirectly and circuitously to policy makers and alter their perception of problems, priorities, and potential actions.
- (7) Research as part of the intellectual enterprise of the society. Research and policy both respond to changing fashions in social thought, influencing and being influenced.

Experience suggests that enlightenment has been the predominant mode by which social research has affected public policy. Over time social research has had powerful indirect effects in some fields, but "enlightenment" is inefficient, slow, dispenses invalid and out-of-date concepts as well as valid generalizations, is open to distortion and oversimplification. Ways of improving the enlightenment process remain to be discovered.

## USE OF SURVEY IN LEGAL POLICY-MAKING

Jae-won Lee  
Cleveland State University

The foremost question in the history of Supreme Court decisions on obscenity has been one of defining the concept of obscenity and operationalizing the definition. The Miller case (1973) reestablished the concept of "contemporary community standards" as the primary yardstick for measuring what constitutes obscenity. But small juries have been burdened to decipher "contemporary community standards" objectively and responsibly.

In 1977, a pioneering attempt to apply survey methods to the problem of assessing community standards on obscenity was made in the City of Cleveland. This particular attempt to use survey methods in legal decision-making raised the following questions, some of which could have been problems with any other attempt to apply public opinion survey to governmental decision-making:

- (1) Interpretation of survey results by lay jury, the trier of facts, may not result in a legalistically precise consensus.
- (2) The longevity of survey data is in question. How contemporary is "contemporary"?
- (3) In an urban area, what is the most appropriate "community" unit -- the city itself, the metropolitan area, or the state?
- (4) Is it ideal or desirable to impose the opinion of the "average person" on an issue like obscenity that undergoes continuous change?
- (5) Because responses to a survey are largely a function of the questions asked, specificity in the phrasing of questions is problematic, especially on questions involving obscene materials.

### EXPLORING TOP MANAGEMENT

Emanuel H. Demby  
MPI Marketing Research, Inc.

Top management of major corporations are exposed to a broad range of data and information provided by individual specialists in business and related spheres; reports from colleagues and news and reports in the media. In how they ration their time and use information sources, top management may differ from the rest of the population. Based on in-depth interviews with top management executives, the study shows that many of the people written about in the media are people that they know personally. Though concerned about many matters that also concern the average man, the things they are most

interested in are matters which also concern their business. Paper people are interested in pollution; insurance companies investing in energy are concerned about energy; etc. They read business publications selectively; news magazines from cover to cover.

#### ARE ELITES ELITE?

John Clemens  
Marplan Europe

Marplan in Europe regularly conducts studies of the political, social, and economic views of elites -- plus their ratings of many national and multi-national business enterprises. The key elites studied are Government, Civil Service, Business, Finance, Media, Consumerist, and Trade Unionist. A general public sample is always taken coincidentally with the elite studies.

The author will show that on many topics ranging from predictions of inflationary levels through economic expectation to knowledge of corporate levels of profitability, the elites differ as much between themselves as they do from the general public. Particular note will be paid to the accuracy of the Trade Union elite predictions of 1974-1975 inflation levels compared with business and financial elites -- and the current level of U.K. economic optimism amongst Trade Union elites compared with the pessimism of business and financial leaders. Who will be right this time?

The key argument advanced will be, however, that elites have only very limited expertise in very limited areas. Outside these areas they demonstrate little more skill or knowledge than the "man (or person) in the street."

#### PERCEPTIONS OF SOCIAL PROBLEMS BY LOCAL ELITES AND WORKERS IN WEST GERMANY AND LEBANON

Hans Mathias Kepplinger  
Universitat Mainz, Germany

- (1) Local elites' media preferences in West Germany and Lebanon are more similar to each other than to workers in the city.
- (2) Local elites and workers use mass media as their main sources of information about social problems, all the more the further away the problems are.
- (3) Local newspapers mainly present those local issues as problems which the elites see as problems.
- (4) Local elites have completely wrong ideas of what workers see as local problems.



- (5) Workers know very well what the elite see as local problems because they use the local newspapers as indicators.
- (6) Local elites and workers differ in their perceptions of social problems in Lebanon less than in West Germany.
- (7) Local elites in West Germany and Lebanon and workers in the two countries differ in their perception of social problems all the more the further away the problems are.

Conclusions: Local elites and workers in the two countries have similar perceptions of local problems which need less international consensus, and different perceptions of national and international problems which need more international consensus in order to solve them. One reason may be the lack of personal experience and different presentations of national and international problems in the mass media as main sources of information.

THE HIGH CIVIL SERVANTS IN FRANCE: THEIR FUNCTION  
IN THE HORIZONTAL INTEGRATION OF RULING ELITES UNDER  
THE FIFTH REPUBLIC

Pierre Birnbaum  
Universite de Paris

The Gaullist republic is well-known as being the "Republique des fonctionnaires." Contrary to American, English, or Italian practice, high civil servants in France are linked to nearly every kind of power. They are able to influence and coopt other ruling elites: business and mass media elites, as well as political elites such as parliament, government, political parties, and big-city politicians. Nevertheless, it is still wrong to assert that France is ruled by its Administration. It is as wrong as to say that the State is just an agent of business. Between the State and business elites, there is only a kind of division of labor. By virtue of their selected social origins as well as through their own professional mobility, the French high civil servants strengthen the functional integration of the ruling class. The State becomes vertically integrated but loses more and more of its functional autonomy.

This paper will be based on recent empirical data.

RULING CENTRAL CIRCLES IN AUSTRALIA  
AND THE UNITED STATES: A COMPARISON

Gwen Moore, Ithaca, New York

John Higley, Australian National University

Both Australia and the United States have a large circle of elites who regularly interact with one another in pursuit of the daily business of their respective countries. But the Australian central circle appears to be larger and more closely connected with one another than the American counterpart. Each country also has smaller circles, usually formed around contemporary issues. These smaller circles are connected, however, to the larger one. Various factors correlated with membership in each country's central ruling circle are examined and discussed. Some speculation is offered as to the meaning of some differences in circle composition and size between the two countries.

The study is based on interviews with elites in Australia and the United States.

MONDAY MORNING QUARTERBACKING ON LIMITING CALLBACKS:  
EVIDENCE FROM A PANEL STUDY OF VETERANS

E.D. Wish, L.N. Robins, J.E. Helzer, M. Hesselbrock, D.H. Davis  
Washington University School of Medicine

The increasing difficulties in achieving high interview completion rates have led to considerable disillusionment about the effectiveness of survey procedures. If high recovery rates are necessary but prohibitively expensive, surveys become an unattractive solution to research problems. We had felt high recovery rates to be especially important for our two followups of Vietnam veterans because we were studying a strongly disapproved and illicit behavior, heroin addiction. Had we failed to reach a substantial proportion of our target sample, our findings would have been suspect, since the missed cases might have contained a large proportion of the sample's addicts. The high completion rates achieved (96% in 1972, 94% in 1974) were largely due to the NORC interviewers' taking all possible measures to contact the men. Interviews were sometimes obtained only after a large number of mailings, phone calls, and visits by the interviewer. Since interviewers recorded each effort made to obtain an interview, we were able to evaluate whether the effort expended was worthwhile. The number of visits required to interview the 571 veterans in 1974 remained very similar to what it had been in 1972 (64% were interviewed during the first visit in 1972, 63% in 1974). The proportion interviewed at each subsequent visit also differed by not more than 1%. The occurrence of deviant behavior prior to interview was associated with an increase in the number of visits required to obtain the interview. However, by a variety of criteria -- obtaining an unbiased sample in terms of deviance and psychological problems; estimating heroin use and addiction; or obtaining a high proportion of the heroin users and addicts available to maximum efforts of recovery -- limiting interviewing to not more than four visits would have reduced costs with minimum loss or bias in information.

THE VIETNAM VETERAN

George Rothbart, Robert Laufer, Michele Fine  
Center for Policy Research



PROBLEMS IN THE SECONDARY ANALYSIS OF DATA ON "RARE"  
POPULATIONS: A SUMMARY AND SOME SUGGESTIONS

Michael R. Welch  
Florida Atlantic University

The literature (primarily Hyman, 1973; Reed, 1975, and to a limited extent, Greeley, 1974) on studying statistically "rare" populations by secondary analysis is reviewed and a summary of problems encountered by researchers using this technique is presented.

Central problems confronting secondary analysts working with rare populations are: (1) discovering a sufficient number of surveys that contain comparable items for pooling; (2) determining the representativeness of the "target" group in the pooled sample; (3) assessing the probability that nonmembers of the "target" group have been classified erroneously as members; and (4) limiting analyses to simple bivariate relationships, because complex multivariate controls (such as the use of age cohorts) are likely to produce tables with a large number of empty cells. Three recent studies that illustrate these problems and some solutions are discussed.

THE "ACTIVE" AUDIENCE CONSIDERED: THE CASE OF  
TELEVISION NEWS

Mark R. Levy  
State University of New York, Albany

The concept of an "active" mass media audience, which has been largely ignored as a variable in the literature, is examined through a study of people who watch television news. The theoretical and empirical status of the term "active" is discussed and three aspects of "activity" delineated: selectivity in exposure-seeking, the importance of exposure to audience members, and the attentiveness of audiences during exposure. Indicators of each aspect are developed.

Based on in-person interviews with a random sample of 240 adults living in Albany County, New York, data are presented suggesting that most television news viewers do not meet the criteria of an "active" audience and that differing degrees of "activity" are associated with certain social characteristics of viewers. It is suggested that "activity" in general be conceptualized as a continuum, reflecting a range in the quality of interactions between audiences and media; and that differential audience "activity" might have important consequences for certain mass media effects.

VOTING, RATIONAL/IRRATIONAL MAN, AND THE  
1976 PRESIDENTIAL DEBATES

Donald Cundy and John Havick  
Georgia Institute of Technology



VOTERS' NEED FOR ORIENTATION AND CHOICE OF CANDIDATE:  
THE ROLE OF THE MASS MEDIA IN ELECTORAL DECISION-MAKING

David Weaver and Maxwell McCombs  
Indiana University and Syracuse University

Using data collected in a year-long study of the 1976 presidential election from voter panels in New Hampshire, Indiana, and Illinois, this paper examines the effect of differing levels of voter need for orientation (political interest and uncertainty) on the perceived importance of issues, candidate images, and political party identification in voter decision-making.

These data indicate that those voters with a high level of need for orientation perceive candidate issue stands as more important in deciding which candidate to vote for than political party identification or candidate image. There is a substantial positive correlation between need for orientation and the perceived importance of issue stands, and a substantial negative correlation between need for orientation and the perceived importance of political party identification.

Taken with findings of previous studies which suggest that high levels of need for orientation are associated with high levels of newspaper and television use for political information, and high levels of agreement with these media as to what issues are important (agenda-setting), these latest findings suggest that newspapers (and to a lesser extent, television) may have an important impact on a presidential election by emphasizing some issues and downplaying others -- by helping to set the agenda of issues for a campaign.

TELEVISION LOOKS AT THE PEOPLE

Ronald E. Frank and Marshall G. Greenberg  
The Wharton School and National Analysts

It is the authors' contention that audience segmentation data should constitute one of the primary information requirements for the formulation and evaluation of both public and commercial television programming policies. Their paper reports the highlights of the results from a national survey designed to provide this type of data. The study examines the detailed interests and needs of the American public and their relationship to both public and commercial television viewing, as well as other media behavior such as that related to magazines, radio, and newspapers.

In addition to reporting their findings, their paper also discusses the role of this type of data in policy formulation and evaluation for both public and commercial television.



WHAT SHOULD WE SAY AFTER WE SAY "HELLO"?:  
DISCLOSING INFORMATION IN INTERVIEW INTRODUCTIONS

Jeff Sobal  
Gettysburg College

Varying amounts of information about the interviewer, interview, and the research can be provided to potential respondents during the interview introduction. Traditionalists take a methodological stance in stating that as little as possible should be disclosed, while their critics argue from an ethical viewpoint for fuller disclosure of information. This exploratory study of the topic consisted of two field experiments. The first suggests that a fuller introduction may produce slight benefits in terms of rapport, cooperation, and commitment with no effect upon bias. A second experiment assessed the costs of fuller disclosure in terms of refusals. It found that there was no effect except for disclosing the length of time that the interview would last. Telling potential respondents that the interview would last longer resulted in more refusals.

RESPONDENTS' REACTIONS TO THE INTERVIEWING PROCESS

George Miaoulis and Marvin Baiman  
Wright State University and R. M. Bruskin Associates

Boyd and Westfall so clearly point out that the interviewer "counts on the natural politeness and good nature of most people to gain their cooperation." As researchers we need to continually evaluate the impact of survey research procedures and practices if we are to have the benefits of the respondent's natural politeness and good nature.

This paper will report the findings of national studies which examined respondents' reactions to the interviewing process including: incidence and frequency of being interviewed, interview length and reactions, survey methods, topics discussed, and refusal rates on questionnaire content. Two methodological research studies of 2,500 in-home personal interviews were conducted with adults nationwide by Bruskin Associates, Inc., in November 1976 and February 1977. Some findings of these studies are:

- 28% of respondents reported being interviewed some time during their life
- 13% reported being interviewed in the past 12 months
- 40% reported being interviewed more than once in the past 12 months
- 68% had a favorable reaction to the experience
- 14% reported refusal to answer specific questions

This research provides some insights into current practice and suggests areas for further research.



THE EFFECT OF INTERVIEWER EXPECTATIONS:  
A REPLICATION AND EXTENSION

Eleanor Singer and Luane Kohnke-Aguirre  
Columbia University and National Opinion Research Center

A recent nationwide study of the effect of informed consent procedures in surveys provided an opportunity to examine the effect of interviewer expectations. Major findings can be summarized as follows:

- (1) Expectations concerning the general difficulty of the survey had no effect on the overall response rate attained by each interviewer.
- (2) Interviewers who expected less difficulty with the survey obtained lower item nonresponse rates, and higher estimates of sensitive behavior, than interviewers expecting greater difficulty. Differences in the percentage of respondents acknowledging various kinds of sensitive behavior averaged about 8 percent, compared with 10 percent in an earlier study by Sudman, et al.
- (3) Interviewers who expected less difficulty with a particular section of the questionnaire obtained lower item nonresponse rates, and higher estimates of behavior, on questions falling within that section than interviewers expecting greater difficulty.
- (4) The effects of interviewer expectations concerning the three experimental variables in the study -- giving information about content ahead of time, assuring confidentiality of response, and requesting a signature to document consent -- were for the most part unremarkable. The clearest effect was related to the request for a signature, but the pattern of results suggests that expectations about the difficulty caused by such a request are analogous to expectations of general difficulty with the survey, so that optimistic interviewers attained higher response rates in all three signature conditions, and pessimistic interviewers obtained lower response rates in all three conditions.
- (5) Interviewer expectations appear to be affected by two characteristics of respondents, among those we examined. The older the people interviewed, the greater the effect imputed to an assurance of confidentiality; and the smaller the place, the greater the (negative) effect imputed to the request for a signature.



## SURVEY RESEARCH AS MANAGERIAL/EMPLOYEE WEAPONS

Fred H. Goldner  
Queens College and Health & Hospitals Corp.

Survey research within organizations differs from all other survey research. Internal surveys become political as well as administrative tools. They are sponsored by those who have control over the jobs and careers of the respondents. When used on an internal comparative basis among units of the organization, they become a control device over those who head the units, thus providing some power to lower participants. The release of their findings becomes a power issue.

These political and power issues become entangled with attempts to use them as management tools. To be at all effective they must be considerably more sophisticated than surveys done among the general public.

JOB SATISFACTION AND EVALUATIONS OF THE  
WORK ENVIRONMENT IN THE U.S. ARMY

David R. Segal, Barbara Ann Lynch, John D. Blair  
University of Maryland

Surveys of American soldiers in World War II, conducted by Samuel A. Stouffer and his associates, are compared with a survey conducted in the Army in 1973, to determine stability or change in soldiers' evaluations of the Army as an employer.

In contrast to his counterpart in 1943, the soldier of the 1970's is shown to be significantly more negative in such factors as job satisfaction, job interest, perceived job worth, and willingness to change jobs. Indeed, the average soldier of 1973 is shown to be very similar in these attitudes to the A.W.O.L. soldier of 1943.

Orientations toward the Army became more negative in the World War II Army between 1943 and the post-hostility period in 1945. The soldier of 1973 is much more like his 1945 than his 1943 counterpart. These findings raise questions about the ability of the armed services to maintain high satisfaction, morale, and esprit de corps in a large force in a peacetime environment.



## EMPLOYEE COMMUNICATION RESEARCH IN THE BELL SYSTEM

Gary L. Schmermund  
American Telephone & Telegraph Company

The American Telephone & Telegraph Company and the 23 Associated Companies that comprise the Bell System employed 946,100 people in 1977. Substantial resources must be devoted to keeping these employees informed, not only about matters affecting the daily conduct of business but also about the major public issues affecting the Bell System and the telecommunications industry.

Employee communication research, which is closely tied in to planning, plays an important role in the Bell System's communication effort. It provides management information on the efficiency and impact of formal employee information activities and provides an on-going monitoring of the overall communication process.

Bell System employee communication research is basically of two kinds: effectiveness studies of specific media and programs, and tracking studies. This presentation focuses on tracking studies; in particular, on the Employee Communications Study (ECS). The ECS is an annual, national research program that in 1978 surveyed the perceptions of over 80,000 employees. The purpose of the study is to provide management a means of evaluating the overall climate of "openness," horizontal and vertical communication channels, satisfaction with company-provided information on a broad array of matters, as well as information on employee viewpoints vis-a-vis many corporate matters that directly or indirectly reflect the effectiveness of communication. The study is particularly useful in identifying blockages in the communication process.

## DETERMINING PREVALENCE OF DEVELOPMENTAL DISABILITIES OVER THE TELEPHONE

Dennis K. Benson and John R. Allen  
Appropriate Solutions, Inc. and Epilepsy Assn. of  
Franklin County (Ohio)

The identification and study of rare populations using general population surveys is expensive and time-consuming. The results of a statewide general population survey in Ohio show that such a study can produce some very useful and valuable payoffs. The Ohio Developmental Disabilities Planning Council funded a project to determine the prevalence rates of developmental disabilities (epilepsy, mental retardation, autism, and cerebral palsy) in the State of Ohio.

Over 5000 telephone interviews were completed across the state using a random digit dial sample. The survey identified both developmental disabilities, and other limiting and handicapping conditions, providing a comprehensive profile of physical disabilities in the state.



Although a number of problems were encountered (including the Blizzard of '78), the project was enormously successful in collecting valuable information about disabilities. It has been concluded that the techniques used were cost-effective given the alternatives. The end product was a data set that allows some rich comparisons among people with various handicapping conditions plus statistically valid comparisons with people having no limiting conditions.

#### ESTIMATING THE NONRESPONSE BIAS DUE TO REFUSALS IN TELEPHONE SURVEYS

Michael J. O'Neil  
University of Michigan

Beliefs about adequate response rates in survey research have traditionally been based more on investigators' gut feelings and untested rules-of-thumb than on either firm theoretical or empirical grounding. Other than strategies for minimizing nonresponse, most proposals for dealing with the problem have involved one of a variety of trend projection and weighting schemes. While they differ in the particular assumptions they make, all of these approaches require assumptions about the characteristics of nonrespondents. Precise estimates require that we base such assumptions on hard empirical evidence which distinguishes respondents who are never reached from those who explicitly refuse to be interviewed, different modes of administration, and other conditions.

This paper attempts to aid the process of accumulating the necessary information from which more informed judgments can be made about the effects of nonresponse under different conditions. Two measures, which permit quantifiable nonsubjective assessment of the effects of nonresponse on sample estimates, are introduced and are used to examine the effects of respondent refusals in a random-digit dialed general population telephone survey of over 1200 households as the response rate is increased from 74.5% to 86.8%. By applying these measures under a wide range of conditions, the adequacy of various response rates may be assessed and more rational decisions made about the costs and benefits of devoting extraordinary resources to minimizing nonresponse.



OPTIMIZING THE TIME SCHEDULES AND RESPONSE RATES  
IN TELEPHONE INTERVIEWS

Gideon Vigderhous  
Bell Canada

A fundamental issue in social surveys is how to maximize response rates. One approach that could be taken toward achieving this goal is to optimize interviewing schedules in social surveys. The purpose of this paper is to provide survey analysts with data which could assist them in optimizing telephone interviews; in particular, the following issues are discussed:

- (1) What are the various forms of nonresponse or temporary nonresponse that are found in telephone interviews?
- (2) What are the "best" (highest probability of finding someone at home) hours (or hour) of the day to conduct telephone interviews?
- (3) What is the "best" day of the week to conduct telephone interviews?
- (4) How many callbacks should be made before concluding that certain individuals are nonrespondents?
- (5) What is the trade-off between the hour of the day and the day of the week and month of the year in optimizing telephone interviews?

The findings of this study are based on analysis of data which reports the outcome of telephone interviews by hour of the day, day of the week and month for the period August to November 1977. The data were analyzed by log linear model and trade-off analysis (conjoint measurement-MONANOVA).





NEW TECHNOLOGY AND THE MASS AUDIENCE:  
AN HISTORICAL OVERVIEW

Anthony Smith  
German Marshall Fund

In the earliest organized audience communication processes, investment and information collection were concentrated at the center, remote from the audience itself. In the Church and the theater, for example, the "information" was held at a central point and controlled at or near that point. In later communication systems, such as the cinema, the central investment began to spread; professional distributors were required, who were independent from the message-makers themselves. In the case of the mass newspaper developing from the mid-19th century onwards, the investment was even further spread -- news agencies, wholesalers, distributors, and other institutions being required to undertake investment alongside the central medium. In the case of electronic media in the 20th century, the investment is spread into the homes of the audience itself and today the bulk of the investment in television is held by the viewers. In the late 20th century, this process is being taken a great deal further in that the printed word will begin to be disseminated to readers by electronic means. The central investment entailed in owning a newspaper is dropping rapidly (although its asset value is growing); at the same time the reader requires to make a larger investment in terminal and decoding equipment. Information systems in the last decades of this century are becoming increasingly the property of their audiences.

This argument has very important social implications. The less of the investment in the hands of the audience, the more can the owner of the medium control the content; the more it passes into the hands of the audience, the more the audience tends to control the content. Radio and television have had to be built upon entertainment, with information and education being squeezed into the schedules. The smaller and more remote the audience of the newspaper, the higher its information content. This set of observations leads automatically to speculation concerning the nature of the controls on content and the pressures upon newspaper publishers in the period of what one might begin to call "post-mass" society.



## BRITISH ELECTRONIC NEWS DELIVERY INVADES EUROPE

F. Kenneth Edwards  
University of Alabama

Teletext, electronic delivery of "printed" information, is now fully operational on home television screens in Great Britain and is being developed experimentally in Germany, Australia, France, Switzerland, and Scandinavian nations. Television and newspaper organizations are fiercely striving for government approval for their control over teletext in both Germany and Australia.

CEEFAX and ORACLE are British teletext systems which broadcast information on two lines of a 625-line conventional British TV screen. ORACLE sells advertising, but CEEFAX, BBC developed, does not. VIEWDATA is a phone-connected compatible system operated by the British Post Office. CEEFAX and ORACLE presently offer a maximum of 800 pages of information, which is indexed by subject matter and can be called up at any time by a TV viewer. VIEWDATA will offer virtually unlimited information when fully operational.

British newspapers and newspaper organizations fear teletext will be highly damaging to their classified advertising revenues. Both British and American TV executives fear teletext viewers will switch from conventional TV to teletext for news bulletins, sports scores, or news flashes when TV commercials come on.

American TV and newspaper companies are showing great interest in teletext as a possible competitor or as their own supplementary service. The absence of U.S. government sanction and approved specifications are now the only retarding factors in American development but one U.S. company has already developed a broadcast system, at least one TV station has applied for a license, and the British Post Office set up a New York sales office for its VIEWDATA system in March. When legal obstacles will end is still unknown as the FCC knows little about teletext as yet. Possibilities for developing advertising in large volume by teletext appear to be much better in the U.S. than in Great Britain.

## NEW TECHNOLOGIES AND MASS MEDIA

Melvin A. Goldberg  
American Broadcasting Companies, Inc.

The technological progress of the past few years has brought many new developments to public attention. Some have resulted in consumer products like VTR, video discs, and TV games. The near-term effect on commercial television has been slim to none. The long-term effect probably will be slight, particularly for video discs which will, more than likely, be used as instructional aids. Their relative high cost and lack of



standardization probably will impede wide acceptance initially. As for VTR's, the need to record programs is minimal when you consider that the 46% of the nation's households that already have at least two TV sets would be the most likely prospects.

The impact of other innovations will be greater: such developments as UHF technology, which could expand the number of TV stations in the U.S., and satellites and fiber-optics which provide more efficient and economic distribution of electronic signals, not only in the U.S., but the world.

The increased facilities will lead to greater specialization among media and increased fractionalization of audiences, as well as readers. These technological developments plus increased use of the computer will have an impact on all the media as we know it today, not only television. With magazines and newspapers turning to the computer for composition, operations and distribution of their editorial content, the lines of distinction between the print media and broadcast will become slightly blurred at times.

And with the increased use of the airwaves for electronic communications, there will be greater temptation for government supervision and possible encroachment on the traditional rights of the press. The press, broadcast and print, will have to maintain a continuing vigilance.

PUBLIC OPINION RESEARCH ON ATTITUDES TOWARD  
ENERGY RESOURCE DEVELOPMENT AND USE: THE LOCAL PERSPECTIVE

Sally Cook Lopreato  
University of Texas, Austin

Many small communities throughout the country are being, or will soon be, impacted by the mining of energy resources or the construction of power plants for the use of those resources. Two surveys have been conducted in Texas to help ascertain citizen attitudes toward such energy developments -- one survey concerned the development of geopressured-geothermal reservoirs along the Gulf Coast, the other concerned the mining and use of lignite deposits. Results from these surveys are examined and compared with similar surveys in other states. The Texas surveys reveal high favorability for energy developments. Respondents also were aware of some potential growth-related community problems and were unsure whether their area had the resources and expertise to resolve them. At the same time, citizens seemed disinclined to turn over local affairs to specialists. These and other data are used to highlight problems of using surveys as a tool for energy planning, and some basic issues concerning citizen information and participation are discussed.



ATTITUDINAL DATA TO PLAN ELECTRIC CONSERVATION POLICY  
CASE STUDIES FROM THE RURAL ELECTRIC CO-OPS

Herschel Shosteck  
Herschel Shosteck Associates

Illustrative data are drawn from a continuing series of research studies sponsored by the National Rural Electric Cooperative Association. These studies are designed to determine how rural electric co-ops can reduce electric use during "peak load" periods.

The research documents a substantial potential for reducing peak load through "load management" of electric water heaters, air-conditioners, and space heaters.

Despite the potential, individual co-op members vary widely in their willingness to make reductions.

Individual willingness to reduce peak load consumption relates directly to satisfaction with the co-op's conservation efforts. In turn, such satisfaction is influenced by perceptions of

- the amount of conservation information distributed by the co-op,
- the relevance of such information in aiding individual consumers to reduce their electric bills,
- the access of individual members to co-op leaders, and
- a rate structure which rewards the individual consumer for conservation behavior.

APPROACHES TO STUDYING THE SOCIAL COSTS OF ENERGY SYSTEMS

David L. Sills  
Social Science Research Council

A methodology for analyzing the social and political risks of different energy systems is described. The methodology was developed as a by-product of the author's participation in the National Academy of Science's committee on nuclear and alternative energy systems (CONAES).

The methodology involves dividing each energy system by the various stages of the fuel cycle, vis., extraction, processing, transportation, generation, transmission, waste disposal, end use, and whole-systems risks. Using data derived from energy studies and reports of projected energy systems, the risk (that is to say, the unanticipated negative consequences) of each stage of the fuel cycle are summarized. Considered are seven sources of electricity (nuclear, solar thermal, hydroelectric, coal, oil, gas, and geothermal) and five non-electric sources (the direct use of coal, oil, and gas; solar heat and cooling, and conservation). The risks considered run the gamut from a lack of public support to the risk of thermo-nuclear war.



## POPULATION ECOLOGY IMPLICATIONS OF THE ENERGY CRISIS

Sandy Walkington  
Tulane University

A population ecology model is used to examine the effects of predicted world energy shortfalls on individual nations and on the relations between them. By taking nations as functional analogues of species, and the world economy as their niche, the effects of resource depletion can be seen as a lowering of the carrying capacity of the environment, thereby increasing competition between nations for the same scarce resources. According to evolutionary theory, nations will have to adapt to these new environmental conditions or be selected against. GNP per capita is a useful indicator of a nation's successful adaptation in a world economy niche. Constraints on energy supply, which is intimately linked to GNP, will profoundly affect a nation's ability to compete.

Undoubtedly there are both technical fixes (alternative energy sources) and social fixes (conservation), but both will take time to implement and population ecology theory further hypothesizes strong inertial forces (such as lack of information). These vary according to a nation's form of government, its historical expectations, etc.

Therefore one can look at the energy reserves and current consumption and production patterns of different nations and national groupings, and hypothesize what may happen to their competition coefficients in the event of a world energy crisis.

These ideas need to be clearly related to a perception of the world economic order, to understand the interdependent as well as competitive natures of nations' relationships. Supranational forces such as big corporations and international organizations also need to be incorporated, but this requires further research.

## PUBLIC APPRAISALS OF ELECTRIC UTILITY PERFORMANCE

Seymour Warkov and James Defronzo  
University of Connecticut

This paper relates public satisfaction with electric utility performance (satisfaction ratings) and perceptions of positive and negative dimensions of utility service (rising prices, reliability of service, etc.) to social, demographic, and other features of household electricity expenditures. The results are derived from a multivariate analysis of data gathered from a random sample of some 9500 Texas households during Winter 1977. A concluding section addresses some public policy implications of the foregoing analysis.



## USING COMPUTERIZED CONFERENCING TO CONDUCT OPINION RESEARCH

Starr Roxanne Hiltz  
Upsala College

Computerized conferencing is a combination communication-information system which can be utilized in opinion research for the collection, processing, and dissemination of information or opinions. For the administration of questionnaires, the potential advantages include:

- (1) Text processing features facilitate immediate changes in the wording and formatting during design and pretesting.
- (2) Anonymity can be provided to respondents for sensitive issues.
- (3) Very complex variations of the "split ballot" technique can be created by the computer.
- (4) A clarifying explanation for each question can be provided on request of the respondent.
- (5) Complex branching structures or sets of conditional items may easily be designed into the questionnaire.
- (6) Since the data are directly entered into a computer by the respondent, no further coding or keying is necessary.
- (7) Analysis and display routines can give immediate and constantly updated results to the analyst or client.

Currently these systems are experimental and the cost of terminals makes them most likely to be used for studies of elites and other small populations.

ON-LINE, INTER-ACTIVE INTERVIEWING --  
NEW DIMENSIONS IN SURVEY RESEARCH

D. Edwin Leiby  
Chilton Research Services

Although still in its infancy, the use of on-line, interactive technology in support of survey research has moved beyond the point of untried experimentation. After several years of development, many of the basic features of the system -- such as automatic question branching, on-line editing, built-in consistency checks, and randomization of item order -- are routinely included in research projects utilizing computer assistance. As the novelty of these features diminishes it is possible for practitioners to think about still other innovations that may be possible. As researchers free themselves from the restrictions imposed by the use of paper survey instruments, the use of on-line, inter-active interviewing will truly reflect new dimensions in survey research. The potential for more depth and greater quality of data is limited only by the researcher's creativity and ability to conceptualize within the framework of these new dimensions.

## APPLICATIONS OF SCANNER DATA TO SUPERMARKET SALES AUDITS

Thomas L. Mindrum  
Tele-Research, Inc.

The applications of scanner data -- i.e., item movement data collected from electronic scanning checkstands at supermarkets -- are presented from the standpoint of both manufacturers and retailers. Specific examples of store promotions, consumer promotions, and private label price testing are discussed.

The results of initial research with scanner data suggest that the speed and accuracy of the data, coupled with the ability of the system to relate item movement to the number of customer transactions, will revolutionize the field of supermarket sales auditing. Specifically, it is believed that promotion testing by manufacturers and private label testing by retailers will significantly change the marketing of supermarket products.









