

say that "I value honesty," the "I" is enough: I don't have to attach a "because" at the end. (33) Given the same circumstances, if everyone followed their conscience, they would all arrive at precisely the same conclusion. (34) It's a matter of provability: There's no way of demonstrably establishing moral premises; therefore, in that sense, they are not ultimate, not absolute. (35) If, in particular situations, moral principles conflict with one another, both alternatives must be wrong. This is the definition of tragedy.

NEWS, NOTES & COMMENT

Forthcoming Contributions

William Stephenson, "Sir Geoffrey Vickers and the Art of Judgment," *American Psychologist*. This short paper, which is to appear as a "Comment," proposes that the tacit dimension in policymaking, as discussed in Vickers' *The Art of Judgment*, is transformable to operant factor structure in Q methodology, as illustrated in terms of the 1980 Iranian crisis. Employing statements from Robert Shaplen's *New Yorker* article, Stephenson represents the views of Henry Kissinger, Ramsey Clark, Khomeini, Ghotbzadeh, the U.S. press, the Common Market, and the USSR among others (including his own), and shows them to revolve around three bipolar positions, one representing a distinctly moral sentiment. The study shows "how science can enter policy-making from the masses of subjectivity always in attendance," apart from the objective facts which mediate the situation.

Stephenson is also scheduled to contribute an article--"Perspectives in Psychology: Integration in Clinical Psychology"--to a special issue of *Psychological Record* dedicated to the late J.R. Kantor. On April 5, he was scheduled to address the Ethics Committee of the Association for Education in Journalism (meeting in Columbia MO) on concept formation, using as a focal point Freeman Dyson's views on nuclear weapons (*The New Yorker*, February 1984).

Sandy Lovie (Psychology, U Liverpool), "Spearman and Burt on the Discovery of Factor Analysis," *Association of Educational Psychologists Journal* [London]. Lovie is the British Psychological Society's archivist for the papers of Charles Spearman and Sir Cyril Burt, and in this carefully documented paper he advances the thesis "that Spearman discovered a particular form of factor analysis, that is, one that supported a specific theoretical position [general-factor, two-factor, or hierarchical factor analysis, which is hypothesis *confirming* in nature], and hence he has priority over Burt as the discoverer of this particular formulation, but that he did not discover the more general purpose and inductive [hypothesis *seeking*] versions of the technique," for which bouquets go to Burt or Maxwell Garnett. Throughout, Lovie takes issue with Charlotte Banks' defense of Burt as the originator of factor analysis, and shows in their exchange of letters how dependent Burt was on Spearman's formulations. Lovie notes that Spearman was as interested in substantive psychological issues as in statistical ones--a quite different picture from that presented by S.J. Gould (*The Mismeasure of Man*, Norton, 1981; cf. *OS*, January 1982, pp. 77-78)--but he indicates nothing of Spearman's concern with operancy as was outlined by William Stephenson in the first issue of this newsletter, and of which *Operant Subjectivity* is direct heir.

Greg Casey (Political Science, U Missouri), "Intensive Analysis of a 'Single' Issue: Attitudes on Abortion," *Micropolitics*. *Abstract*: The standard set of survey items tapping popular attitudes towards abortion have shown both disturbing context effects and frustrating tendencies to miss significant attitudinal dimensions of this "single" issue. Intensive analysis with Stephenson's Q methodology reveals three main outlooks on abortion: The well-known pro-Life and pro-Choice positions are identified as well as an intermediate (and heretofore invisible) outlook termed "Conscientious." This paper presents an empirical analysis of the internal structures of these three views and suggestions for drafting new survey items to tap popular feelings on the politics of abortion

better. Stephenson's Q method is seen as an inexpensive means of discovering popular attitudes on the "single" issue controversies now so commonplace in American politics.

Steven R. Brown (Political Science, Kent State U), "Q Methodology," in William D. Berry and Michael S. Lewis-Beck (Eds.), *New Directions in Social Science Research Methods*, Beverly Hills CA, Sage Publications, 1985. This chapter summarizes the principles and procedures of Q technique and its methodology, and demonstrates them in the context of two studies. The first, an examination of public reaction to the Israeli invasion of Lebanon, reveals three factors--pro-Israeli concern with security, pro-Arab frustration with U.S. support of Israel, and a conciliatory position which views the situation strategically within a broader balance-of-power framework. The second study illustrates the confirmatory capabilities of Q method in an examination of the agitator-administrator-theorist role typology advanced by Harold Lasswell and more recently by Alan Davies. The three postulated roles emerge as operant factors, and further, more intensive probes reveal some of the motivations underlying each. The substantive findings from the two studies provide a backdrop for elaborating on the inherent structure of concurrence, Q samples and their structure, general vs. singular vs. induced propositions, quantal units, operancy, judgmental rotation, and intensive analysis.

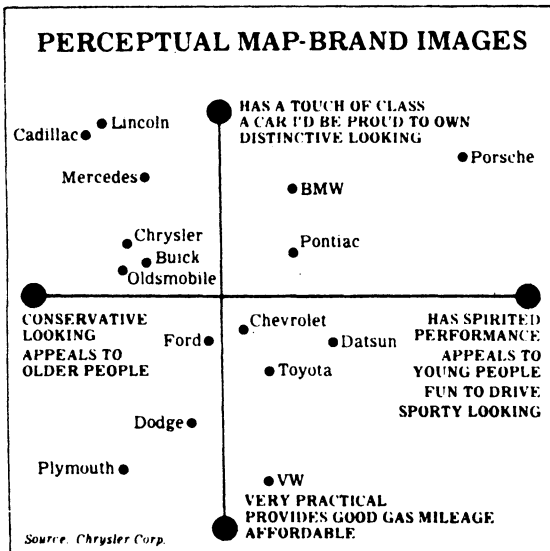
Bruce F. McKeown (Political Science, Seattle Pacific U), "Q Methodology in Political Psychology: Theory and Technique in Psychoanalytic Applications," *Political Psychology*. This is a revision of a paper which was presented at a meeting of the American Political Science Association in 1982 and abstracted in the April 1982 issue of *OS*: "... The paper presents a plea for and a justification of a return to political subjectivity (and the psychoanalytic paradigm) as the proper domain of political psychology and provides a defense of Q methodology (through illustrative case studies) as especially suited for the objective study of political subjectivity."

A thorough review of "the uses, reliability, and validity of surveys purporting to measure such sub-

jective phenomena as attitudes, opinions, beliefs, and preferences" is contained in a forthcoming 1088-page, two-volume set edited by Charles F. Turner (Center for Survey Research, U Massachusetts) and Elizabeth Martin (National Academy of Sciences), *Surveying Subjective Phenomena*, New York, Russell Sage Foundation (distributed by Basic Books), June 1984 (\$80 for the set). Volume 1 evaluates contemporary measurement programs and strategies for improving them; volume 2 carries papers exploring particular theoretical and empirical topics. The contents are based on a 1980 panel of social scientists and statisticians assembled by the National Academy of Sciences. A summary of a similar albeit smaller-scale effort is summarized in *OS*, July 1982, pp. 158-159, and once again, attentiveness to the principles and proven utility of Q methodology would repay instigators of enterprises such as the above.

Q Technique and Advertising

The accompanying brand image map appeared in the March 22, 1984, *Wall Street Journal* (John Koten, "Car Makers Use 'Image' Map as Tool to Position Products," p. 31) and shows affinities with Q factor analysis.



Produced by the Chrysler Corporation, the map is derived from surveys in which customers rank autos on a 10-point scale for qualities such as youthfulness, luxury, and practicality, resulting in "a mathematical score [probably a factor loading] for each model and plotted on a graph that shows broad criteria [operant factors] for evaluating customer appeal." Hence, Plymouth is viewed as practical though somewhat stodgy, and Chrysler as more luxurious but less so than Cadillac and Lincoln. Strategically, the map led Chrysler to the conclusion that Plymouth, Dodge, and Chrysler need a more youthful image, and that Plymouth and Dodge need to move upward on the luxury scale. The map is also used to plan images for future models so as to occupy currently unoccupied space, to be achieved by changes in styling, pricing, and advertising.

Steven Yarnell, "Frame Analysis," read at a meeting of the Advertising Research Foundation, Chicago, September 1983. By his own admission a quantitatively trained social scientist (Political Science, Ohio State U), Yarnell has put together under the rubric of "frame analysis" a set of qualitative procedures, including Q technique, which he says can yield more effective exploratory research, more effective large sample surveys, and more effective advertising. Frame analysis "is rooted in psycholinguistics, cognitive psychology and artificial intelligence," and it incorporates the contextual principle (meaning depends on context)--hence it involves the analysis of the consumer's (or voter's, or actor's, etc.) frame of reference: Phase I consists of interviews to generate "frame statements" (concourse), and Phase II consists of Q sorting. Previously working out of Columbus OH, Yarnell is now a New Jersey-based consultant and can be reached at 33 Harvey Avenue, Rochelle Park NJ 07662.

Nursing and Q Methodology

Karen E. Dennis (Nursing, U Maryland at Baltimore), "Application of Q Methodology to Research in Nursing Education," Second Annual Scientific Meeting of the Society for Research in Nursing Education, San Francisco, January 1984. *Abstract*: Q methodology, con-

cerned with the objective study of subjectivity, focuses on intraindividual significance rather than interindividual differences. Its numerical representations permit the investigator to quantify and statistically analyze a person's introspections, reflections, and projections, the study of which is elusive to other than qualitative methodologies. Germane to the study of self-involved domains, Q methodology is particularly appropriate for the study of opinions and attitudes, roles, culture, personality, decision making and values. The literature documents that Q sorts have been used to study nursing students' attitudes and opinions from the effect of a single class to the evaluation of an entire curriculum. While it is clear that Q methodology is a viable alternative for many of the areas of inquiry within nursing education research, what seems to be a lack of understanding of the methodology has resulted in its limited use by nurse researchers and has kept the potential of Q methodology from being fully realized. This paper emphasizes the utility of Q methodology in nursing education research and identifies a variety of problems for which this methodology would not only be appropriate but would be the method of choice. Its flexibility for obtaining subjective data, its applicability for use across settings, and its implementation which does not defy reliability and validity considerations are addressed, and important points central to the use of Q methodology in nursing education research are delineated.

Dennis also presented a paper on "Q Methodology in Nursing Research: Promise and Problems" at the Third Annual Research Conference of the Southern Council on Collegiate Education for Nursing, Baltimore MD, December 1983. In that paper, she summarized the main features of the methodology--statement selection, Q-sample structure, P sets, the operant nature of factors, and the doctrine of small numbers--and specified the advantages and disadvantages of Q in the study of phenomena of intrinsic interest to the nursing profession.

Margaret D. Zanicchia, "Utilizing Q-Sort to Identify Needs of High Risk Unwed Adolescent Patients,"

American Nurses' Association Council of Nurse Researchers, Minneapolis MN, September 1983. $N=15$ needs (family, career, love, marriage, information, etc.) were sorted in a preliminary study by 20 unwed adolescents in an effort to determine the relationship between need and selected outcomes following delivery. The results of the pilot study indicated the need for love and health care topped the list, with the need for marriage and for the ability to read being at the bottom. Zanicchia is chair of the Department of Nursing, Quinnipiac College, Mount Carmel Avenue, Hamden CT 06518.

Political Belief Systems

Pamela Johnston Conover (Political Science, U Kentucky) and Stanley Feldman, "How People Organize the Political World: A Schematic Model," *American Journal of Political Science*, 1984, 28, 95-126. *Abstract*: A schematic model of political belief systems based on recent research in social and cognitive psychology is developed. We show that schema theory has the ability to bridge the gaps among the major competing approaches to the study of mass belief systems as well as provide direction for new research on the structure and functioning of political beliefs. An initial test of the theory, done with Q methodology, is reported and the results provide consistent support for the general predictions of schema theory as applied to political beliefs.

Conover and Feldman are also the authors of two additional Q studies to appear in the near future: (1) "Group Identification, Values and the Organization of Political Beliefs," *American Politics Quarterly* (April 1984), revised from a paper presented at the Midwest Political Science Association convention, Chicago 1983, and previously abstracted in *OS*, July 1983, p. 139. (2) "The Structure of Issue Positions: Beyond Liberal-Conservative Constraint," *Micropolitics* (1984). *Abstract*: The vast majority of studies of the structure of political belief systems have relied on correlations between issue items as the basic indicator of structure or constraint. However, inter-item correlations are based on assumptions that

limit their ability to discover any pattern of issue structure that is shared by some segment of the sample as being replicable and relatively free of the subjectivity characterizing depth interviews. In an initial test of this methodology we found evidence of several patterns of issue structure that were often not explainable by a simple liberal-conservative dimension. And while inter-item correlations show little evidence of issue constraint, the use of Q methodology demonstrates that the respondents possess structures of issue positions relatively well explained by a few shared patterns.

The Factor Wheel Method

In the July 1978 issue of *OS*, James Creaser described his method of factor wheel rotation for use with Q technique. At the time, the program was restricted to the two-factor case, but rapid advances in computer technology in recent years has led to an updating and expansion of the system to include the multifactor situation. Readers familiar with the above article and desiring complete details of the process (including the FORTRAN program and sample output) may obtain them at no expense while supplies last by writing James W. Creaser, Student Counseling Service, University of Illinois at Chicago, Box 4348, Chicago IL 60680.

Laws in Q Methodology

William Stephenson has frequently referred to behavioral laws not as eternal verities, but as rules enabling the researcher to find his way about in reality--hence *James' Law* (that some factors are me, others mine only), *Taylor's Law* (that Q sorts will be consistent over time), *Freud's Law* (that factors tend to be defended), *Rogers' Law* (that self and ideal will be conjoined under adjusted conditions), *Peirce's Law* (that ideas grow continuously), and so forth, some or none of which may be operable in a given situation, but all of which alert us as to what to expect.

Stephenson has often cited Moritz Schlick (1882-1936) in support of his view, but until recently the precise source of Schlick's comment could not be lo-

cated. It is to be found as a citation by Richard B. Braithwaite in his *Scientific Explanation* (Cambridge University Press, 1953):

Philosophers who decline to class general hypotheses as propositions would prefer to consider them as 'rules'. "Laws of nature," writes Schlick, "...are directions, rules of procedure enabling the investigator to find his way about reality, to discover true propositions, to expect with assurance particular events." (p. 86)

The original upon which Braithwaite based his translation is cited in a footnote as from an article of Schlick's appearing in *Die Naturwissenschaften*, 1931, 19, p. 156, and reprinted in *Gesammelte Aufsätze, 1926-1936* (Vienna: Gerold, 1938), p. 68.

Peirce Edition Project

Sponsored by Indiana University-Purdue University at Indianapolis, the editors of the Peirce Edition Project are compiling the *Writings of Charles S. Peirce: A Chronological Edition*, volume 2 of which (covering the years 1867-1871) was published in March and includes five papers on semiotics; volume 3 (1872-1878) will take up the theme of pragmatism. Peirce is of course well known to Q methodologists for having advanced the theory of abduction, the logic of discovery, as elaborated in William Stephenson's "Scientific Creed--1961: Abductory Principles," *Psychological Record*, 1961, 11, 9-17. Volumes of the *Writings* are available from Indiana University Press: Vol. 1 (1857-1866, 738 pp.), \$32.50; vol. 2 (704 pp.), \$35.00. A detailed account of abduction is to be found in K.T. Fann's *Peirce's Theory of Abduction* (The Hague: Martinus Nijhof, 1970).

Ripe for Newton's Fifth Rule

In his "Why Did Van Gogh Cut Off His Ear?" (*Journal of Personality and Social Psychology*, 1981, 40, 1070-1077), William McKinley Runyan wonders how psychobiographers can select from a variety of proposed explanations of an historical event, e.g., Vincent Van

Gogh's cutting off of a part of his ear and his presentation of it to a prostitute. Various possibilities are abstracted from the existing (and primarily psychodynamic) literature: (a) Van Gogh was frustrated by the engagement of his brother Theo, to whom he was very attached; (b) he failed to establish a stable relationship with Gauguin, and the aggressive impulses aroused by these frustrations were turned against himself; (c) it was an act of symbolic self-castration deriving from homosexual impulses aroused by Gauguin; (d) in Van Gogh's Christ-identified imagination, the event became a symbolic repetition of the scene on Calvary; (e) he was showing sympathy with whores, whom he had previously referred to as being "like meat in a butcher shop"; (f) Van Gogh was caught up in the many Jack-the-Ripper emulations but, being masochistic rather than sadistic, mutilated himself for a prostitute rather than the reverse; (g) he had recently seen a bullfight, but cut off his own ear due to a confusion between the vanquished and vanquisher; and so forth. Some theories are more consistent with existing evidence than are others, as Runyan points out, and so the above, along with the many others tendered, could be Q sorted in terms of their plausibility in light of certain known historical facts and evidence (e.g., are there additional recorded events supporting the conjecture that Vincent was masochistic? that he was intrigued by bullfights? that Jack-the-Ripper, current in the news of the time, captured his attention? etc.)--to which could be added Q-sort renditions of specific theorists' views (e.g., as found in Lubin's psychobiography). An exercise such as this could assist Runyan et al. by revealing in factor terms the structural outline of current theorizing, and rendering bare those actual points of agreement and disagreement which provide the impetus for conjectures and refutations. (Runyan's paper also appears as a chapter in his *Life Histories and Psychobiography*, New York, Oxford University Press, 1982.)

Also of interest to Q methodology is Runyan's "In Defense of the Case Study Method," *American Journal of Orthopsychiatry*, 1982, 52, 440-446. The author

can be reached at 120 Haviland Hall, School of Social Welfare, University of California, Berkeley CA 94720.

Policy Sciences Summer Institute

In the context of pointing to connection between Q and the policy sciences, reference was made in the Foreword to the October 1983 issue of *OS* to the Third Policy Sciences Summer Institute, which has now been scheduled for June 20-22 at the Institute of Social and Behavioral Pathology, University of Chicago. The theme of the symposia will be "Security and Insecurity." Housing accommodations are available at a nominal cost (\$17 per night). Contact the coordinator: Dr. Lawrence Z. Freedman, Psychiatric Research Unit, 5741 S. Drexel Avenue, Chicago IL 60637 (312/753-2347).

Q BIBLIOGRAPHIC UPDATE (cont'd from front cover)

*Doctoral Dissertations**

- Carter, J.J. (1981) Voter images in the 1980 election: A panel study using Q-technique. University of Missouri-Columbia. (1982:43:250A)
- Castañeda de León, L. (1983) Correlacion entre privacion temprana y conducta asocial: Metodologia Q aplicada en la Clínica del Niño Sano del Hospital Roosevelt de Guatemala [Correlation between maternal deprivation and asocial behavior: Q methodology applied at the Healthy Child Clinic of the Roosevelt Hospital in Guatemala City]. University of San Carlos of Guatemala.
- Eberman, P.W. (1950) An application of Q-technique to one aspect of teaching competency. University of Chicago.
- Erb, E.D. (1961) A Q-sort study of attitudes and achievement. Oklahoma State University.

*Parenthetical information, where available, indicates year:volume:page of abstracts appearing in *Dissertation Abstracts International* and its predecessors.