News, Notes & Comment

Recent and Forthcoming Scholarship

The following two paragraphs are taken from chapter 2 of Jay Black and Jennings Bryant, *Introduction to Mass Communication* (3rd edition), Wm. C. Brown Publishers (1992):

> William Stephenson has proposed and empirically supported a mass communication theory based around concepts of pain and pleasure, work and play. Stephenson's play theory maintains that audiences, whenever they are given the chance, will manipulate their media to serve their own needs. However, Stephenson goes one step further in pointing out that when pursuing media in their daily lives, audiences are engaged in pleasurable, ritualistic, and self-serving activities that are essentially playlike in nature. Enjoyment and contentment are inherent in activities that allow freedom of choice rather than social control. According to play theory and psychological principles on which it is based, individuality is preferable to being forced to work and to conform to someone else's expectations.
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> Not all communication, however, is characterized by play and pleasure. Purposeful activities expected to elicit a specific reaction for us, according to Stephenson, have elements of work, pain, and social control. The distinction between play and pain rest not in the communication per se, nor in the motivations of the sources and gatekeepers, but rather in the minds and behaviors of the audiences. For example, while one student might enjoy reading a textbook for the acquisition of knowledge, another student may find the experience of studying an assignment psychologically painful. Thus, the psychological orientation of the consumer is critical in determining the extent to which one is able to enjoy media content.

Stuart Hill, *Democratic Values and Technological Choices* (Stanford, CA: Stanford University Press, 1992), 267 pp., $37.50 cloth. This volume, written by political scientist at the University of California at Davis, uses Q methodology throughout in developing and testing a theory of how citizens judge complex technologies, using the controversy over the

Diablo Canyon nuclear power plant as a test case. Most policy analyses focus on the perspectives of the knowledgeable elite, but Hill incorporates the views of the public and shows that they can provide "sophisticated, case-specific assessments that complement the general past-structured judgments of political veterans" (from the dust jacket).

The dust jacket also carries testimony from two readers, one by William Ascher of Duke University, who authored the article on "Subjectivity and the Policy Sciences" (*Operant Subjectivity,* April 1987):

> The methodology of assessing the utility of policy options that Hill develops is a tour de force of decision modeling and psychometrics. The meticulous analysis of the Diablo Canyon reactor issue provides a crucial confirmation for Hill's argument that a more complex understanding of citizen attitudes can be achieved and can make a difference in policy choice.

The second testimony is from George Downs of Princeton University: "No work in political science or sociology more ably explores the relationship between public opinion and technology, and no research speaks more directly to the potential of democratic decisionmaking to cope with the expertise-dependent choices that increasingly dominate the political agenda."

Elizabeth Theiss-Morse, Amy Fried, John L. Sullivan, and Mary Dietz, "Mixing Methods: A Multistage Strategy for Studying Patriotism and Citizen Participation," in James A. Stimson (Ed.), *Political Analysis: An Annual Publication of the Methodology Section of the American Political Science Association* (Vol. 3, pp. 89-121), Ann Arbor, University of Michigan Press, 1991 (© 1992). *Abstract:* We propose a methodological strategy that addresses some of the widespread criticisms of survey research. Traditional survey research has, to a great extent, neglected the role of contested concepts in politics and respondents' subjectivity. Our mix of methods -- including conceptual analysis, Q-methodology, and survey research -- enables us to measure people's subjective understandings of

contested concepts while allowing us to reap the benefits of survey research. In two case studies, one on patriotism and the other on participatory citizenship, we demonstrate that the mixed method more accurately measures respondents' subjectivity and leads to greater predictive ability through more accurate measures. [The senior author can be reached c/o Department of Political Science, University of Nebraska, Lincoln, NE 68588; Fried is at Colgate; Sullivan and Dietz are at Minnesota.]

James C. Rhoads, Jr. (Political Science, Westminster College, New Wilmington, PA 16172) and Tung-Wen Sun, "Studying Authoritarianism: Toward a Fresh Methodology," *Southeastern Political Review* (in press). *Abstract:* Forty years of research into the authoritarian personality has largely revolved around the measuring instrument, i.e., scales. Taking Altemeyer's Right-wing Authoritarianism scale (1988) as illustrative of the orthodox approach to studying authoritarianism, we subjected high scorers, in both the United States and Taiwan, to Q factor analysis. This analysis demonstrated a secondary viewpoint, unrelated to a conventional understanding of authoritarianism, that would have been obscured by scale measurement. However, we show this information to be available even to those who use psychometric methods to study the phenomenon. [This publication is a revised version of a paper presented at the 1991 Q conference.]

Tung-Wen Sun (Dept of Gov't and Public Administration, United College, Chinese University of Hong Kong, Shatin, New Territories, Hong Kong), "Indigenization of Public Administration Knowledge in Taiwan," *Asian Thought and Society,* 1992, *17,* 97-112. *Abstract:* Indigenization represents an attitude regarding the proper direction for the development of a particular discipline in a country. In those social sciences in which Western concepts and theories have dominated, indigenization reflects efforts of scholars in developing countries to close the gap between the current state of knowledge and the desired end state of knowledge in country-based discipline.

Q methodology is employed to analyze Taiwan public administration (PA) experts' attitudes toward the indigenization of PA knowledge. Four factors emerged from the Q analysis. Factor A respondents believe in a unique Chinese PA, but agree that some foreign principles and criteria are important for guiding the development of PA knowledge in Taiwan. Factor B is a view which does not perceive complete Westernization as a valid alternative to the development of PA knowledge in Taiwan; it also recognizes that Chinese culture and administrative contexts in Taiwan should be considered in the process of indigenization. Factor C is a belief in the "science" of PA knowledge whose applicability should be valid across cultures and time. The factor D type of Taiwan PA experts rigorously criticizes the current PA knowledge in Taiwan as too westernized and the local PA community as not yet prepared to deal with the problem of indigenization. The principle of indigenization is generally accepted by PA experts in Taiwan. For them, indigenization also involves the considerations of "how to" indigenize PA knowledge. Indigenization has multiple dimensions. It not only concerns the process and the end of intellectual efforts to reconcile imported theories and local contexts; indigenization is also a theoretical debate regarding the essence of PA knowledge: Should it be universally applicable or culturally bounded? Indigenization also involves a careful evaluation of the current state of PA knowledge, its perceived problems, and the desired end state.

Tung-Wen Sun, "Hong Kong Public Administration in Transition: A Strategic Perspective," a paper read at the International Conference on *Hong Kong Public Administration in Transition: A Regional Perspective,* sponsored by the Hong Kong Public Administration Association, 1992. *Abstract:* Hong Kong public administrators have traditionally played a dominant role in the process of decision-making. Functioning within a rapidly changing environment and facing an uncertain future after 1997, some tough strategic decisions have to be made by the Hong Kong government concerning "what is to be done" in the transition period. Concepts of policy-making process

and strategic management are combined with group process and Q techniques to assess Hong Kong public administration. On the surface, local public administration experts are more concerned with reforms in the civil service system and provisions of specific policy programs than with any other issue or problem in the transition period. Further analysis indicates that no clear group consensus has emerged as to the strategic importance of these two broader issue areas under the considerations of the time span and resources required to solve these problems. Three factors revealed by Q analysis suggest that decisions focus on the popular and common issues have to consider the questions of how to maintain the status quo and how to improve the Hong Kong-China relationship. Particularly, proposals to introduce democratic elements into Hong Kong's political structure and society may encounter resistance from some public administration experts since they oppose such a movement.

Validity in Q and R

A series of papers authored or co-authored by Marten Brouwer (University of Amsterdam) provides the basis for a reconsideration of the issues of reliability and validity in Q and R. The first is by Cees P. Middendorp (Erasmus University, Rotterdam) and Brouwer, "Quantitative 'Subjective' Individual Data Analysis in Political Psychology: An Application of Q-methodology in Assessing Individual Positions in an Ideological Space," International Conference on Social Science Methodology, University of Trento, Italy, 22-26 June 1992. *Abstract:* In this paper a research project is outlined in which Q methodology is employed using structured Q-sorts composed of items drawn from a larger research project (Middendorp, 1991b) in which, by means of "ordinary" R-type factor analyses, the two-dimensional ideological space in the Dutch electorate has been established firmly in the years 1970-1985. The two dimensions are socioeconomic left-right and politicocultural libertarianism-authoritarianism. The Q-sort results can be validated on this basis. In addition

to this, results will be validated by relating Q-sort person-based results to ordinary R factor-analytical results. Person Q-sort factor loadings will be related to standardized factor z scores for persons on R factors, and vice versa: items loadings on R factors will be related to factor z scores for items on Q-sort person factors. On the basis of two-factor solutions for various combinations of selected items and persons, high correlations are predicted. Much attention will also be paid to the reliability of results. Similar person factor loadings are predicted using different but theoretically comparable sets of stimuli, and various sets of stimuli drawn from the same universe should yield similar factors based on the same set of individuals. Results based on a 70 (respondents) by 80 (two sets of 40 stimuli) matrix will be discussed.

Marten Brouwer, "The Roots of Studying Roots: Political Origins of Empirical Research on Attitudes and Ethnocentrism," International Society of Political Psychology, San Francisco, 4-8 July 1992. *Overview:* A historical summary is presented of the invention and development of attitude scales (focusing on Thurstone, Likert, Osgood, Bogardus, Adorno et al., and Guttman) as they relate to the study of ethnocentrism. It is noted that "aptitude" and "attitude" are related etymologically (from the Latin *aptus,* hence the word *apt*), and this poses a conceptual dilemma: Whereas the former now generally refers to a talent or skill, which is more or less objective, the latter refers more to something subjective and unlike a skill. The paper concludes as follows:

> Unfortunately, practically all of attitude scale research has this same "aptitude" bias in it. The unidimensionality efforts of Guttman (and Lazarsfeld) are not shared by many of the other attitude scale experts; yet, the logic of it is the same: what people say in surveys should be amenable to an "objective" reduction to scores in a one-dimensional, two-dimensional or three-dimensional space consisting of groups of items.
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> Maybe the Stephenson approach, where groups of persons (or even groups of instructions per person) define the k-dimensional space, is a better way to avoid this dilemma.... That would, however, be a quite different ballgame, beyond the scope of the present paper. (p. 16)

Brouwer's above papers complement and extend the views he expressed in "Q^2 R^2 or: Quantifying the Qualitative with Real Reliability," in E.S.O.M.A.R, *Marketing in the New Europe* (44th E.S.O.M.A.R. Marketing Research Congress) (pp. 717-736), Luxembourg, European Society for Opinion and Marketing Research, 1991. In this paper, Brouwer addresses the issues of reliability and validity in a series of studies which used two sets of pictures of celebrities appearing in the Dutch media. Both single- and multi-case investigations are involved. Brouwer is Professor of Political Psychology at the University of Amsterdam. He can be reached c/o Hobbemakade 27, 1071 XK Amsterdam, The Netherlands.

In the next issue...

Marten Brouwer, *Validity: Q vs. R*

Dan B. Thomas and Larry R. Baas, *The Issue of Generalization in Q Methodology: "Reliable Schematics" Revisited*

Plus Commentary by Karen E. Dennis and Steven R. Brown, and Rejoinders by Brouwer, Baas, and Thomas.

QMethod Mainframe Software

There is now a comprehensive new mainframe computer package which has been made available for the analysis of Q-technique data. *QMethod* is a multiphase program written in Fortran-77 that assists in all the technical phases from data entry through correlation, factor analysis (centroid), rotation (graphical or varimax), and the calculation of factor scores. Among other tables, the final printout contains the original correlation matrix, unrotated and rotated factor matrices, history of the rotations (i.e., angles of rotation used), the ordered factor-score array for each factor, and distinguishing

and consensus statements. Extensive on-line help places the package in the user-friendly category.

QMethod was written by John Atkinson, Manager, Academic Services, Kent State University Computer Center, and it is available free of charge in both IBM and VAX versions. Individuals who have access to electronic mail can order the package by sending the command *get qmethod package* (IBM) or *get vaxq package* (VAX) as the sole contents of an email message addressed to listserv@kentvm. The VAX version is also available via anonymous ftp at ksuvxa.kent.edu in the QMethod subdirectory. (It is also possible to forward the package on diskette.) The total package occupies about 1.3mb, or a little more than two cylinders of IBM 3380 blocked at 4k. A README file describes the other component files in the package. Individuals unfamiliar with the steps required to obtain and operationalize this program should consider entering into collaboration with a consultant at their own computer center. John Atkinson is available for consultation by email (atkinson@kentvm) or phone (216/672-2736).

One of the advantages of QMethod is that is greatly reduces the need to understand certain technicalities, which therefore makes it possible to place it in the hands of a non-technical audience. The program is menu-driven and begins with the entry of statements (actually, statement fragments of up to 60 characters). This phase is of considerable utility since it enables the user to skip entirely the phase of transcribing the Q-sort score sheets onto data-entry forms. Data-entry errors (e.g., missing statements) are immediately brought to the user's attention. Correlation is obtained at the press of a button, as is the factor analysis, and the eye-blink speed of these phases is astonishing. Some factor-analytic theory is necessary at the rotational phase, but the graphical aid available for judgmental rotation should, by virtue of its labor-saving simplicity, serve to bring this lost art back into the realm of the feasible for those Q methodologists who have avoided it in the past. Varimax rotation of course remains a viable solution in many contexts, and the program even facilitates further judgmental adjustment of the varimax solution if desirable.

QMethod then assists the user in selecting those defining Q sorts which will enter into the calculation of factor scores. The factor scores are also obtained with the press of a button, and a detailed analysis is available all but immediately.

QMethod now takes its place alongside Van Tubergen's QUANAL and Stricklin's PCQ as a technological development designed to assist in the systematic study of subjectivity.

The Perils of Averaging

A recent Q study on breast cancer demonstrates the problems associated with summary statistics, such as averages: H.J. Sutherland, G.A. Lockwood and N.F. Boyd, "Ratings of the Importance of Quality of Life Variables," *Journal of Clinical Epidemiology,* 1990, *43,* 661-666. According to the abstract, the main purpose of the study was to determine the relative importance of 28 items about health and disease among a group of patients with metastatic breast cancer.

This is one of those articles that makes a good counterfoil for classroom critique, for although the statements were administered in a Q sort and although there are the appropriate citations to Stevenson (*sic*), Block, Nunnally, and Kerlinger, the authors of the article follow none of them. Instead, they take the mean rank of each of the 28 items across all 60 persons: hence, for instance, the item "family relationships" attains an average rank of 4.62 (on a Q-sort scale of 0 to 6), and therefore comes in first among the 16 "general health" items. And the general health items are analyzed separately from the 12 "disease and treatment related" items. Whatever might be operant among the patients, therefore, is obviously washed out in the arbitrary averaging that takes place.

The Q-sort data are compared with data on the same 28 items using a linear analogue scaling procedure, which consists of a 100 mm linear scale (ranging from "not important at all" to "extremely important") on which the person makes a mark indicating the position of each item. The number of millimeters from the left is equivalent to the Q-sort scale scores. The condition of instruction was the same: Which of

these activities/symptoms most affects your health? The two measures were found to be equivalent, with the Q sort demonstrating slightly higher reliability. This finding therefore verifies what Beebe-Center and others found 80 to 100 years ago -- namely, that the psychophysical methods of merit and single exposure (which were among the methods of impression) produce essentially the same results (see Beebe-Center, *The Psychology of Pleasantness and Unpleasantness*).

The taking of averages is unavoidable in science; what is critical, however, is how those averages are to be taken. A factor, for example, is also an average -- i.e., the factor array is a merger ("average") of the Q sorts comprising the factor. But factors in Q methodology conform to Zizek's *postulate of the greatest possible homogeneity of series,* which states that "the average shall refer to a complex of causes as nearly unified as possible, since only in this way will it possess a definitely intelligible content..." (see F. Zizek, *Statistical Averages,* New York, Henry Holt, 1913, p. 65). Zizek continues:

> If masses of items, which have evidently been variously influenced by quite independent causes, are taken together in a series the average so computed has little scientific value, since it does not express the activity of a unified complex of natural or social causes and is, as a rule, poorly adapted to purposes of comparison. (p. 65)

Although Zizek is not using the term "items" in the same sense as Q statements, the postulate applies nontheless. Simply because a group of statements has been declared homogeneous on categorical grounds (i.e., as meaning "thus and so" in general) provides no guarantee that they will be so viewed in the singular situation of Q sorting, for as Stephenson has said, "we fully expect (and indeed hope for it) that the statements will 'mean' very different things for different persons in different interactional settings, or for the same person in different settings" (*The Study of Behavior,* p. 144).

The issue ultimately is not one of averaging or not averaging, but of when (and how) to ask nature a question, and when (and how) to listen to the answer. Writing at the time

of the American Civil War, French physiologist Claude Bernard, like Zizek a half century later, was warning against "the use of averages which, in medicine and physiology, leads, so to speak, necessarily to error" (*An Introduction to the Study of Experimental Medicine,* New York, Macmillan, 1927, p. 134).

But Bernard's more fundamental contribution was to remind us of the two operations combined in experimentation -- of premeditating and observing. Premeditation of necessity involves a priori ideas of the kind expressed formally in hypotheses to be tested: These are the probes that put questions to nature. But when nature replies, Bernard says that observers must divest themselves of preconceived ideas so as to be able to hear more clearly: "the observer's mind must be passive, that is, must hold its peace; it listens to nature and writes at nature's dictation" (p. 22). And nature does not dictate in terms of averages, as the factor analysis of Sutherland et al.'s data would have shown.

For a copy of the study in question, contact Dr. N.F. Boyd, Ontario Cancer Institute, 500 Sherbourne Street, Toronto, Ontario, Canada M4X 1K9.

Measuring Cognitive Schemata

An exchange in the December 1991 issue of the *American Political Science Review* touches on the use of Q sorts for the measurement of cognitive schemata. The lead contribution is by James H. Kuklinski, Robert C. Luskin and John Bolland ("Where Is the Schema? Going Beyond the 'S' Word in Political Psychology"), who comment as follows:

> Conover and Feldman's use of Q- instead of R-factors is particularly inapt. The transportation [sic] of the data matrix yields person- rather than item-factors (condensations of people, not opinions), which may plausibly be construed as personality types but cannot plausibly be taken as schemas, attitudes, or other mental constructs. (fn. 8, p. 1351)

The authors, of course, mean *tranposition* rather than *transportation,* and this is part of their problem: Q, for them, is

simply a factor solution based on a transposed data matrix that, in its original form, produces the basis for an R factor analysis; in other words, Q and R are understood as merely two complementary ways to interrogate a single data set. This is Burt's *reciprocity principle,* and it is amazing how tenacious this erroneous idea is insofar as Q methodology is concerned.

But the problem runs deeper. In response to Kuklinski et al., Pamela J. Conover and Stanley Feldman defended themselves as follows:

> Are the individual Q-sorts schemata? Of course not. We assume that they are *indicators* of the contents of the schemata that the subjects hold in each substantive area.... It does provide an *indication* of the contents of people's schemata and provides evidence of shared patterns of schemata.... (fn. 3, pp. 1376-1377)

The protopostulates in both of the above comments are familiar ones:

> (a) What is on the behavioral surface is a mere reflection of more substantial events below (e.g., Kuklinski's "mental constructs," Conover and Feldman's "contents"), which are of more genuine interest. Therefore, the unreal is what we see, the real is hidden; consequently, Q sorts, like scales, provide indirect evidence of those real causal factors down below which orchestrate the dance of life above.

> (b) Q methodology, like R, is a method of assessment (e.g., of variables, personality structures, etc.), and its aptness is to be judged in terms of the extent to which it can validly tap those dimensions which are only indirectly accessible, which means that its findings only gain currency insofar as they comport well with findings obtained by other methods.

Yet it is unlikely that Kuklinski et al. or Conover and Feldman regard the views which they have espoused to be mere shadows of a more substantial reality; moreover, were we to sample the most salient aspects of their essays and place them in a Q sample, it is doubtful that the resulting Q sorts would be regarded by them as assessments of a personality structure or of any other variable. Rather, the view which

each expressed in print -- or a Q sort representation of it -- would be considered for what it is: *My* point of view about this matter, to be accepted (or not) and critiqued or defended on its own terms.

Q methodology operates in the monistic space of *the given,* as in William Stephenson's "Monistic Protopostulate of Communicability," (*Operant Subjectivity,* October 1984); its world is therefore empirical at the same time that its subject matter is subjective. Kuklinski et al. and Conover and Feldman operate instead in a bifurcated space of causes and effects, the latter being "indicators" from which the former can be inferred: it is the familiar Newtonian world of pushes and pulls. However, after the dust of assertion and counter-assertion has settled, all of the discourse that has been stirred up -- about measurement, monistic vs. bifurcated space, indicators, personality constructs, etc., all of it subjective in the extreme -- is still subject to measurement: *in monistic space!*

Political Subjectivity Out of Print

The paperbound edition of *Political Subjectivity: Applications of Q Methodology in Political Science,* by Steven R. Brown, has been declared out of print by Yale University Press; however, the International Society for the Scientific Study of Subjectivity has purchased several copies and is currently selling them at a reduced rate. As long as supplies last, orders can be made through Keith Sanders (ISSSS Treasurer) or Won Ho Chang (Director, Stephenson Research Center) in care of the School of Journalism, Box 838, University of Missouri, Columbia, MO 65205.