

NEWS, NOTES & COMMENT

Recent and Forthcoming Scholarship

William Stephenson (2111 Rock Quarry Rd, Columbia MO 65201), "William James, Niels Bohr, and complementarity: III--Schrodinger's cat," *Psychological Record*, 1987, 37, 523-544. *Abstract*: In the psychological context, William James had introduced the concept of complementarity, applicable to every thought: In the previous papers of this series it was shown that this applied also to transitory thought itself. The "mind" is quantumized. The implications of this have to be pursued, and the present paper provides an introductory look at what this means for psychology. It means rejecting classical causation, determinism, and reductionism, and recognizing the opposite, as well as that the role of the observer is crucial in psychology, as it is in physics. It is important to recognize that this means we can now measure anyone's psychological experience *de novo*, without depending upon any psychological principles heretofore used in the classical mode. An example is given of a "single case," in which, except for the use of Q-technique, everything confronting the subject is in her own everyday commonplace language ("communicability"), which provided the concourse and the conditions of instruction for her Q-sorts. In this introductory paper I also provide the first empirical data for the separation of classical and quantum-theoretical modes of thought, as subject to complementarity. Technical aspects of this quantumization will be developed in subsequent papers. Meanwhile Q-technique is the key to it: It involves a new use of statistics, to represent states of feeling.

Amy Fried (Political Science, U Minnesota, Minneapolis MN 55455), "Abortion Politics as Symbolic Politics: An Investigation into Belief Systems," *Social Science Quarterly* (March 1988). *Abstract*: Abortion politics has been deeply emotional and acrimonious. This research project proposes a symbolic politics explanation and uses Q methodology to investigate attitude structures in activists and non-activists. For activists primarily, abortion is a condensation

symbol for changes in women's roles, the family, and acceptable sexual behaviors. Pro-life and pro-choice perspectives are not opposites along a single dimension; instead, they are differences in kind. A third group does not have symbolic attachments and views the issue as highly complex. These findings explain the polarization of the debate and the exceptional reactivity of previous measures.

Patrick Peritore (Political Science, U Missouri, Columbia MO 65211), "Brazilian Communist Opinion: A Q-Methodology Study of Ten Parties," *Journal of Developing Areas* (June 1988). This article is a revision of the paper presented at the 2nd Q Conference. Background to the study is found in "Field Notes on the Use of Q Methodology in a Study of the Brazilian Left," OS, October 1986.

William Ascher (Inst. Policy Sciences, Duke U, Durham NC 27706) and Steven R. Brown, "Technologies of Mediation: An Assessment of Methods for the Mediation of International Conflicts," in Harold Chestnut (Ed.), *Contributions of Technology to International Conflict Resolution* (pp. 95-103), Oxford, England, Pergamon Press, 1987. *Abstract*: The conceptual boundaries of international mediation are defined, and the variety of available techniques is summarized. Philosophical premises are discussed, and the issue of appropriate technology is raised. Q methodology is then introduced as a method for exploring the structure of parties' perspectives, and an example of its potential applicability is provided in a simulation of the border conflicts involving Somalia, Kenya, and Ethiopia.

Four Q-based papers were among those presented at the 1987 meeting of the International Nursing Research Conference, October 13-16, in Washington, DC: *Client Control During Hospitalization* by Karen E. Dennis (Director, Nursing Research, Francis Scott Key Medical Center, Baltimore MD 21224), *Important Nurse Caring Behaviors as Perceived by Patients and Nurses* by Donna M. Deane (Associate Dean, Research and Development, Wright State U, Dayton OH 45435), *Cross-Cultural Assessment of Food Habits and Preferences Using Q-sort Methodology* by Sharleen H. Simpson (College of Nursing, U Florida, Gainesville FL 32611), and *Rapid Decision Making in ICU Nursing: The Limits of Decision*

Analysis by Andrea Baumann (School of Nursing, U Ottawa, Ottawa, Ontario, Canada). The conference was sponsored by the American Nurses' Association Council of Nurse Researchers. The theme was "Nursing Advances in Health: Models, Methods, and Applications."

In the January 1986 issue of *Operant Subjectivity* (pp. 69-70), reference was made to the second edition (1983) of Denise F. Polit and Bernadette P. Hungler's *Nursing Research: Principles and Methods*, the third edition of which has now been published (Philadelphia, J.B. Lippincott, 1987). And the same misconceptions remain--e.g., that "it is unwise to use fewer than 50 or 60 items, because it is difficult to achieve stable and reliable results with a smaller number," and that "without a sizeable sample [of respondents], it becomes problematic to generalize the results of the study" (p. 302). By the same token, there is a certain sophistication in this brief summary of Q methodology (pp. 301-303) which hopefully reflects a professionwide growth of awareness of Q's more abstract principles. The standard remains Karen E. Dennis's "Q Methodology: Relevance and Application to Nursing Research," *Advances in Nursing Science*, 1986, 8(3), 6-17.

More on Melanie Klein

The Selected Melanie Klein: The Essential Writings, edited by British psychoanalyst Juliet Mitchell, has just been published by Free Press (1987, \$19.95 cloth, \$8.95 paper), and is the most recent indication of growing interest in Klein's ideas. (A two-volume set, *Melanie Klein*, by J.M. Petot, is currently in preparation at International Universities Press.) William Stephenson was associated with Klein prior to World War II, and has recently been requested by the editor of *The Journal of the Melanie Klein Society* to contribute a detailed accounting of that association. Reference to works related to Klein have appeared in previous issues of OS: January 1980, 68-69; April 1980, 101-102; October 1984, 26-27; July 1986, 136-137.

"Modifications" of Q Technique

Donald M. Miller (Human & Educational Services, Oakland U, Rochester MI 48063), David E. Wiley, and

Richard G. Wolfe, "Categorization Methodology: An Approach to the Collection and Analysis of Certain Classes of Qualitative Information," *Multivariate Behavioral Research*, 1986, 21, 135-167. In this lengthy paper, Miller and his associates introduce the "F sort," which, they claim, follows the format of Q technique, but which "was developed independently...and is quite dissimilar methodologically, since Q sort involves assigning stimulus items to fixed categories ordered along a predefined dimension while F sort is a free-sorting technique the end result of which is a set of stimulus categories completely defined by the sorter" (p. 136n). The F sort is quite unlike Q in a technical sense, and worlds apart methodologically: the example given consists of instructing teachers to categorize a sample of verbs into nominal groups implying the same kind of learning facilitation--such as evaluation (tests, grades, judges), child development (rewards, persuades, repeats), administration (controls, enforces, penalizes), and so forth. Latent structure analysis was chosen over factor analysis since LPA is appropriate for categorical as opposed to continuous data.

Judith Garrard (Box 197 Mayo, Program in Health Education, School of Public Health, U Minnesota, Minneapolis MN 55455) and William Hausman, "The Priority Sort: An Empirical Approach to Program Planning and Evaluation," *American Journal of Social Psychiatry*, 1985, 5(5), 29-36 [reprinted in D.S. Cordray & M.W. Lipsey (Eds.) (1987), *Evaluation Studies Review Annual* (Vol. 11, pp. 279-286), Beverly Hills, CA, Sage Publications, 1987]. As in the case of the F sort above, the authors regard this "new" use of Q as sufficiently radical to require a new name. A claimed distinction is that the "priority sort" can be extended beyond personality measurement and applied to problems such as corporate decision making and curriculum content, topics for which bodies of literature, although small, already exist. More importantly, the priority sort is designed to be used conjointly by all the members of an interacting group: the result is a single sort which is the product of a group effort. Although there may be occasions when a group sort of this kind might be fruitfully employed, one needn't look far to see why it has not and why it certainly ought not to be

an exemplary usage. A major purpose of Q method, after all, is to reveal operant differences (factors), and providing for a group product simply guarantees that whatever differences exist will be covered over by group processes. Historically, however, the priority sort does appear to be the first reported use of Q as a group measure in this sense.

The literature of Q is strewn with suggested modifications of one kind or another, from David M. Jackson and Charles E. Bidwell's "A Modification of Q-technique" (*Educational and Psychological Measurement*, 1959) to John M. Bolland's "The Search for Structure" (*Political Methodology*, 1985), the latter carrying a message similar to that advanced by Miller, Wiley and Wolfe. In all cases, these recommended alterations have been technical only (hence of only secondary interest to methodological discussions) and have constituted both the first and last word on the topics uttered by their authors: these modifications, in short, have been accompanied by intellectual trumpets and drum rolls, but have failed to retain the continued interest even of their authors, which is testimony to their importance.

The Ipsative Sidetrack

Criticisms of Q sorting as an ipsative procedure are made by Ronald C. Johnson in his "Personality Assessment by Observers in Normal and Psychiatric Data," in R.B. Cattell & R.C. Johnson (Eds.), *Functional Psychological Testing: Principles and Instruments* (pp. 208-236), New York, Brunner/Mazel, 1986. Johnson distinguishes Q sorting as "a method of scoring" from Q technique as "a method of factor analysis," and refers the reader to Stephenson's *The Study of Behavior*, in addition to works by Burt and Cattell, for additional information about Q factor analysis. But his conception of Q, in which he is joined by Burt and Cattell, is wholly at odds with Stephenson's:

It [Q] correlates people over tests instead of tests over people...and it yields the same factors as R-technique, with one omission. It does *not* yield species types. Stephenson pointed out its special adaptation to clinical work in which one is sometimes forced to deal

with a mere handful of cases...but may have evidence on 100-200 variables on each, permitting significant correlation of people. (p. 222)

It's as if Stephenson had never steadfastly insisted (for more than 50 years now) that Q does not involve a reanalysis of a transposed R matrix, but rather a singly-centered matrix of its own.

Johnson cites the ipsative standardization presumably intrinsic to Q, and addresses two major "problems": (1) Social desirability, or the tendency for the Q sorter to give high scores to socially-approved traits, for which Johnson recommends the use of both positive and negative Q samples; and (2) the issue of comparable behavioral observability. The latter arises from the fact that a Q statement may be assigned a zero score because the rater feels neutral (e.g., "smiles easily" may be scored zero to reflect neither grim nor smiley) or because the rater does not know due to the unobservability of the behavior in question (e.g., "has an unresolved Oedipus complex"). Among his recommendations, Johnson suggests that individuals be scored normatively before providing ipsatized rankings of the same traits, and that Cattell's r_p be used rather than Pearson's

r .

Johnson regards Burt's 1940 critique of Stephenson's position to be definitive--it "does not, however, apply directly to most other Q-sort uses" (p. 224)--but questions can be raised as to whether he really understands what Stephenson's position is. As noted previously, Johnson's rendition of Q-technique factor analysis is quite at variance with Stephenson's, even though he cites Stephenson's 1953 book; moreover, the most *recent* literature citation in this section of Johnson's chapter is a quarter century old, which means that he is apparently unaware of the 80+ publications which Stephenson has penned since *The Study of Behavior*. In general, however salient the normative-ipsative distinction might be to Cattell's version of Q technique, and however bothersome social desirability, they are of little concern in Q methodology. Neither is indexed in *The Study of Behavior*, and it was not simply an oversight.

Quantum Theory

Readers wishing to keep in touch with developments in quantum theory, to which Q methodology is increasingly tied, are referred to Abner Shimony's "The Reality of the Quantum World," *Scientific American*, 1988(Jan), 258(1), 46-53, which contains simplified illustrations of major concepts.

RESEARCH IN PROGRESS: ANTARCTICA

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This project has theoretical and substantive dimensions. Theoretically, the goal is to articulate a systematic approach to the study of interaction in the international system based on Q methodology. This approach interprets that interaction in terms of concourses of opinions and verbal interchanges. The Q approach offers an alternative to more widely used orientations such as microeconomic formal theory, which interprets interaction in terms of games (prisoner's dilemma, chicken, etc.) or preference aggregation. Our claim is that the approach from Q is competitive with formal theory in terms of an ability to model conflict and consensus, to understand and account for outcomes (e.g., the formation of international regimes), and to generate advice for international actors (e.g., third party intervenors in disputes). Substantively, the concern is with the structure of evolving debates and decisions about the future of Antarctica (often considered a success story of productive and harmonious international politics).

The Antarctic concourse was examined to produce a 34-item Q sample. No cell structure was used, but