

- cas, Ruston, LA, April 1982. (a)
- Sell, D.K. & R.B. Craig. Q analysis of attitude change resulting from a cross-cultural experience: A follow-up investigation of the participants in the 1979 Kent State in Mexico program. Mid-Western Educational Research Association, Chicago, October 1982. (b)
- Stephenson, W. *The study of behavior: Q-technique and its methodology*. Chicago: University of Chicago Press, 1953.
- Taba, H. *Cultural attitudes and international understanding*. New York: Institute of International Education Research Program, 1953.

## NEWS, NOTES & COMMENT

### *Q and the Policy Sciences*

Garry D. Brewer (Yale U), although not mentioned as such, is the primary author of "Elite Viewpoints on Energy," a Q study which appears as Appendix A (the 60-item Q sample comprises Appendix B) in Martin Greenberger, Brewer, William Hogan, and Milton Russell, *Caught Unawares: The Energy Decade in Retrospect* (Cambridge, MA: Ballinger, 1983). Two core viewpoints emerge from a Q cluster analysis of 150 Q sorts provided by energy elites in industry, government, and the academy primarily. The Traditionalist view is that oil and natural gas should be deregulated, that oil and gas prices are too low, that opposition to nuclear waste disposal overlooks technical solutions, that the likelihood of nuclear accidents is exaggerated, and that U.S. dependence on imported oil is a threat to national security. By way of contrast, the Reformist perspective emphasizes renewable sources (solar, biomass), the need for vigorous enforcement of environmental protection laws, and the value of a resource-conserving ethic. Both groups are sensitive to the vulnerability of the U.S. economy to oil cutoffs from abroad, but are equally agreed that military

force ought not be invoked in the event of another oil embargo. Summaries are reported of interviews with representatives of the core groups and of subgroups, and the views of the authors are also incorporated as Q sorts, thereby rendering explicit the relative standpoints of scholarly observers vis-a-vis authoritative decision-makers which is of such critical concern in the policy sciences approach. Contrasts are also drawn between mass and elite views.

Two additional policy-related Q papers were presented at the Second Policy Sciences Summer Institute at Johns Hopkins University. In his "Case-wise Policy Analysis: Another Look at the Burden of High Energy Costs," Ronald D. Brunner (U Colorado) distinguished variable- and case-wise descriptions in a study leading to recommendations for changes in the way in which data are collected for purposes of making decisions regarding energy subsidies. The variable-wise viewpoint (equivalent to R methodology) lies behind the equity goal that "the relative proportion of income spent on energy should be equal across income groups," a well-meaning formula which does in fact result in the poor as a class generally paying less in absolute terms. But as an example of case-wise descriptions, a Q cluster analysis of households of elderly Coloradans resulted in three major clusters, two of them representing the economically disadvantaged and indicating that income and expenditures for energy can mean quite different things under differing circumstances, circumstances which are ignored in the variable-wise approach. Based on 35 structural characteristics (such as income, number of rooms, annual gross income, etc.) for 348 dwellings, household clusters A and B were both shown to be in need of subsidy--group C's average income indicated they could pay for their own energy requirements--but B was shown to be spending a much higher percentage of its income on energy, hence at first blush was presumably more in need of subsidies. However, when the data configurations which the case-wise approach produced were matched with estimates of discretionary income, it turned out that cluster A households were in the direst straits by far: Low-

income, urban renters on the whole, and significantly older on the average than those in groups B and C, group A's low energy use was due to the fact that they had little income left over with which to purchase energy; consequently, energy support based on the equity formula above would have been relatively unhelpful, leading Brunner to support *minimal comfort* as an alternative to equity as a basis for public assistance. Brunner's paper appears as Discussion Paper No. 6 (April 4, 1983), Center for Public Policy Research, University of Colorado, Boulder, CO 80309.

The second presentation was by William Ascher (Johns Hopkins U), "Designing a Forecast of Inter-Group Violence: Exploring the Attitude Structures" (presented originally at the 3rd International Symposium on Forecasting, Philadelphia, June 8, 1983). Q technique and its methodology are proposed, and preliminary results are presented, to facilitate "monitoring and interpreting predispositions to inter-group violence, for the purposes of anticipating and perhaps forestalling the outbreak of such violence." Q is employed to probe "the 'mindset' of violence directly, because it mediates between sociopolitical triggering factors and the expression of violence." In an effort to incorporate stereotypes, credenda (beliefs, justifications), and affect, several Q samples were drawn from interviews with, and then administered as Q sorts to, small numbers of persons from three nationality/ethnic groups--Irish Catholic, Lebanese Maronite Christian, and Armenian--known for their violence against members of out-groups. (a) The first Q sort deals with *general* principles condoning or condemning violence, e.g., "People are responsible for the crimes committed by their fathers." (b) The second Q sort, which parallels the first, deals with *specific* attitudes, e.g., "All Turks bear responsibility for what some of them have done to the Armenians." (c) The image of the out-group is obtained in a third Q sort, e.g., "Unwilling to change their ways." (d) A fourth Q sort focuses on identifications, demands, and expectations, e.g., "Unless an Armenian Republic is reestablished, we are going to lose our identity as a people." Pre-

liminary analyses indicate diversity in justifications for violence, e.g., reciprocity (an eye for an eye) and obeying the wishes of elders. More detailed analyses are currently underway.

Other recent and on-going policy related studies in which Q methodology figures prominently include:

(a) Global Food Policy, an investigation by Kirk W. Halliday (Wilmington College) which will be summarized in the next issue of *OS* as "Research in Progress."

(b) Social and Political Values of West Bank Palestinians, a study involving more than 70 Q sorts gathered from Christians and Moslems in the villages, towns, and refugee camps of the Israeli-occupied West Bank--directed by J. David Gillespie and Thomas P. Weaver (Political Science, Presbyterian College) in collaboration with Ali Al-Jarbawi (Political Science, Birzeit University).

(c) A Typology of Nuclearism, a study by Brian D'Agostino (New York, NY) inspired by Robert J. Lifton and Richard Falk's *Indefensible Weapons*. Comprised of statements drawn in part from dialogs with weapons engineers at a nuclear weapons think-tank, the Q sample focuses on national security, nuclear weapons, and the peace movement.

(d) *Forest Policy Institutions and Organizations*, a 1980 report by Greg J. Protasel (Oregon State U). Originally Study Module I of Washington State University's Forest Policy Project, the report is currently available from the National Technical Information Service, U.S. Department of Commerce, 5282 Port Royal Road, Springfield VA 22161. An extension of this study has taken the form of an unpublished manuscript on "Values Analysis for Planning Problems." Protasel has also recently completed another Q study on "Soft vs. Hard Energy Paths: How Clear Is the Fork in the Road?"

(e) "Values, Development, and Character: Appraising Korean Experience," by Steven R. Brown (Kent State U), is scheduled to appear in a forthcoming issue of *Korean Studies Forum* and examines the character of a people underdoing rapid economic development. An earlier summary of this study appeared in *OS*, July 1982.

### *Other Recent and Forthcoming Scholarship*

James M. Carlson (Providence College) and Mark Hyde, "Situations and Party Activist Role Orientations: A Q Study," *Micropolitics*, forthcoming. This paper was originally delivered at a meeting of the Midwest Political Science Association, Milwaukee, 1982, and was previously abstracted in the July 1982 issue of *OS*, pp. 151-152.

Karen E. Dennis (Nursing, Maryland U), "Q Methodology in Nursing Research: Promise and Problems," Third Annual Research Conference of the Southern Council on Collegiate Education for Nursing, Baltimore, December 2-3, 1983. Dennis is currently working on her doctoral dissertation, focusing on those kinds of actions and interactions on and with the environment that give patients a sense of control over their lives during the experience of hospitalization. She can be reached at 12510 Killian Lane, Bowie MD 20715.

Alexander Nesterenko (Tulsa U), "Understanding Values in Science: A Learning Exercise," Association for Education in Journalism and Mass Communication, Mass Communication and Society Division (Science Writers Educators Group), Corvallis OR, August 1983.

Alexander Nesterenko, Jerilyn S. McIntyre & Huber W. Ellingsworth, "Social Reality as Dimensions of *Gemeinschaft-Gesellschaft*: Applying Q-Methodology to Facilitate Operant Subjective Meaning-Structures," Southwestern Social Science Association, Social Psychology Program, Houston TX, March 1983.

### *Q Methodology and Physics*

William Stephenson's more recent writings have endeavored to render explicit the connections between Q methodology and modern physics (e.g., in *Psychological Record*, 1982, 32, 235-248; 1983, 33, 213-230), and this has no doubt produced consternation among many who have struggled to comprehend. For those whose science backgrounds are somewhat dated--given the advances of recent years, this includes almost everyone--the following can be recommended: Heinz R. Pagels, *The Cosmic Code: Quantum Physics as the Language of Nature* (New York: Simon & Schuster, 1982; New York: Bantam Books, 1983) and Gary Zukav, *The Dancing Wu Li*