necessary to ground truth in science alone. A brisk discussion ensued among members of the panel, and between the panel members and an audience of 20-25 persons.

Nov 14-16, Sheraton University Hotel, Philadelphia Panel scheduled for the 1985 meeting of the Northeastern Political Science Association

EMPIRICAL POLITICAL THEORY AND Q METHODOLOGY

Conceptions of Political Corruption Kathleen Dolan, University of Maryland

Moral Conflict in Organization: A Q-test of Organizational Behavior Ann Martino, Dickinson College

Conceptions of Representation: A Study of Delegates to Party Conventions James Carlson (panel chair), Providence College Richard Martin, Slippery Rock University

NEWS, NOTES & COMMENT

Q Methodology at Minnesota

Graduate students in political science at the University of Minnesota are initiating several Q studies, three of which had taken fairly definite form by the time a small Q interest group met with Steven R. Brown during consulting sessions May 7-8. Davida Alperin is generally interested in political coalitions, not of the party kind as found in legislatures, but in broader interest groups and social movements, especially those (such as NOW, NAACP, the peace movement) which are subordinated in society. As a first step, Alperin plans to focus on intragroup consciousness and intergroup identity among Black, Hispanic, and Asian and Native American students from around the country who are in their junior year of college and are attending a summer program for minority students in which she will be teaching: Solidarity, empathy, and identification will be looked for in the Q sorts which are planned to be administered to the students at the first and then again at the end of their summer experiences. Subsequent Q studies will examine political activists' coalition strategies (the pragmatic or principled reasons for joining or not joining forces with other subordinated groups) and on attitudes about what political activity entails.

Amy Fried's project focuses on belief systems pertaining to the issue of abortion. The working hypothesis is that abortion is a symbolic issue--that organized opposition to legalized abortion reflects activists' fears about the changing role of women, changing family structures, and increasing acceptance of different sexual activities and lifestyles; and that pro-choice activists support legalized abortion for instrumental and pragmatic (e.g., health) reasons. The Q sample is organized around the abortion issue itself (pro-choice, anti-abortion, mixed) and includes moral perspectives (self-determination, life of mother vs. life of fetus), links to social change (valuelinked, issue-isolated), and social issues (women's roles, sexuality). The P set will incorporate strong and weak activists from both sides, plus the uninvolved.

Wendy Rahn is examining the current economic stress in American agriculture, particularly the attitudes of members of the farm community regarding their position in society. Interest is focused on differences in belief system structures within the farm community, what might account for the differences, and how belief systems might undergo change, with implications for the possibilities of a united farm movement. A two-stage study is anticipated: The first on value orientations (egalitarianism, individualism), and the second on agriculture's place in society and on what should be done from a policy standpoint. (The purpose of using two different Q sorts is to see if there is a consistent relationship between overarching values and lesser abstractions regarding farming.) Retrospective conditions of instruction (e.g., respondents' views five years ago, or what they were brought up to believe) are also being considered as a way to determine the extent of belief system change.

Several other students--Gloria Christopher, Julie Sender, Beth Theiss-Morse, and John Williams--were also in attendance and raised issues related to the application of Q methodology in political research, and/or discussed studies at earlier stages of formulation. Also present during the discussions was Ki Jeong Kim whose Q study, "The Indigenization of Methodology," appeared in *Social Science and Policy Research* (1981). One student not present, M.J. Willoughby, is in West Germany collecting Q-related data on the Greens Movement; a Q-sort study of hers on the Soviet shootdown of the Korean airliner is currently undergoing the reviewing process.

Other apparently unrelated Q-methodological initiatives are in evidence at Minnesota. Betty Hanley, for example, is completing her dissertation in music education (see "Dissertations in Progress"). In the Department of Speech Communication, Ernest G. Bormann and his associates have recently completed a study on "Rhetorical Visions of Committed Voters" (see "Q Bibliographical Update" for details), the abstract for which reads as follows:

This study uses the presidential campaign persuasion and media coverage in the 1980 election to develop and validate a method for making empirical connections between messages and audience responses. The study applies the research method that synthesizes fantasy theme analysis, small sample Qsorts, and large sample survey techniques to the shared fantasies and rhetorical visions of voters in a midwestern city. The study documents and describes the extent and nature of five rhetorical visions among committed registered voters in the target city and provides a brief humanistic rhetorical critical analysis of the visions.

The Bormann study therefore joins the short list of research efforts that have combined Q technique with questionnaire methodology.

And Minnesota therefore joins the short list of intellectual centers which appear to have developed a critical mass of persons interested in Q methodology and capable of engaging in concerted and mutually reinforcing efforts.

Q Tips! Using Q Methodology to Study Q Methodology

"What shall we study?" This was the question put to 10 members of a seminar on Q methodology which met during the 1985 spring semester at Kent State University. Whereas technical matters can conveniently be illustrated with examples already in the literature, the rationale of Q methodology can be presented more forcefully in the context of an actual example without an already known outcome so that the actual judgments involved--of composing the Q sample, deciding the number of factors, rotating, and interpreting--can be performed in full view.

The size of the seminar lent itself to a nominal group session, which initially involved each member in writing as many responses as possible to the focalizing question above. Suggestions abounded--e.g.:

- -- apartheid in South Africa
- -- the Democratic and Republican parties
- -- the evaluation of Kent State
- -- the abortion issue
- -- aid to Ethiopia
- -- prayer in public schools

Etc. Once the seminar member has temporarily exhausted his or her ideas, the sheet on which the ideas were anonymously written is placed in the center of the table for others to pick up, examine, and add to, past ideas thereby providing a stimulus for subsequent suggestions from others. In this way, working silently, the group members generate a large number of possible topics in a short time, and benefit from task-centered free association.

The collection which results is, of course, a concourse and provides an opportunity to introduce this concept via Stephenson's 1978 paper. It is also possible, following discussion, to illustrate the shared nature of the topics (consciring) -- i.e., that all members are conversant with each of the topics introduced --and the fact that topics suggested for study are nominated on the basis of interests: Seminar members in the campaign management sequence, for example, had introduced topics such as "why young people tend not to vote" and "the ideal Democratic presidential candidate for 1988," whereas a black student nominated "apartheid in South Africa," a student in speech communication suggested "the nature of argumentativeness," and "aid to Ethiopia" was recommended by an international student from the Sudan. Already, therefore, subjectivity occupies center court.

The seminar was offered at the doctoral level, and so all participants--from political science (mainly), speech, and geography--had already been exposed to Q in one form or another and each was already well trained in modern research methods (i.e., R methodology). Consequently, it became possible at this point to suggest how we might be interested in identifying the currents in the group, how scaling the items would be beside the point, and how our concern was with this group and this group alone, hence was independent of norms and tendencies among groups generally. This paves the way for introducing interbehavioral specificity and the problem-boundedness of Q's logic of inquiry. Much of a methodological nature can be introduced, therefore, before a single Q sort has been perpetrated.

A Q sample of 28 only marginally structured items was available for administration on the following day, the condition of instruction being to provide a Q sort to represent the topics which the person would be most interested in pursuing as a class project. (The Q sort items were arrayed from +3 to -3 so as not to require much tabletop space.) The Q sorts were completed and recorded on score sheets within 10 minutes, leaving ample time to discuss the forced distribution, statement ambiguity, and other procedural matters. Two or three correlations were then calculated to illustrate the statistics involved, and the standard error formula was introduced as a rough-and-ready method for determining the extent to which individual preferences coincided. With experience as hindsight, it became a simple matter for each seminar member to accept the homologous relationship between his or her subjective preferences and their Q-sort manifestation --hence of the Law of Transformation, the idea of formal modeling, and operantcy. It also became possible to introduce Newton's Third Rule (of inductive generalization) and to assert that the same general procedure could be employed in any and all decisionmaking situations--e.g., how to raise money for one's candidate, what policies to promote for agricultural development in rural Sudan, which personal strategies to pursue in combatting stage fright, etc.

			Factors			
			Α	В	С	
1	politica	l science	(87)	06	-24	
2	11	**	(85)	13	-09	
3	11	11	(81)	21	-04	
4	**	11	(65)	-08	15	
5	11	11	03	(81)	15	
6	11	11	29	(65)	-18	
7	11	**	01	(57)	29	
8	11	11	-10	20	(51)	
9	geograph	у	02	01	(-47)	
10	speech c	ommunication	-15	(-43)	(-41)	

The 10 Q sorts were duly correlated and factored, as shown, and factor arrays were calculated. Seminar members 1-4 were all associated with the campaign management program, and their factor was distinguished by the following items among others:

	A	В	<u> </u>			
the Democratic and Republican parties	+3	+1	0			
why young people tend not to vote	<mark>,</mark> +3	-1	-2			
Hence did their specific interests serve to set them apart. Distinguishing factor B were the following:						
prayer in public schools		+3				
the proposed new Political Science graduate program	-2	+2	-1			

Subjects 5-7, all political scientists, had previously agreed to embark together on a study of school prayer, and all were preoccupied with the implications of a newly proposed revision of the department's graduate program, topics in which their seminar-mates were disinterested at best. Factor C was bipolar, with the following among the distinguishing items:

allocation of funds within the Poli-	-3	-2	+3
tical Science Department			
democracy within the Political Science	-2	-2	+2
Department			
town-gown relations	-2	-3	+1
nuclear war, nuclear freeze	0	0	-3
Soviet-American arms talks	0	0	-2
President Reagan's "Star Wars" program	0	-1	-3

Seminar member 8 was also a political scientist (political theory) who was concerned with intradepartmental affairs; members 9 and 10 were the only non-political scientists, and their disinterest in discipline-specific issues is registered in their negative loadings on factors B and C. That no. 9 is an international student from an African state helps explain his interest in international affairs and his antipathy for parochialisms of concern on the third floor of the Arts and Sciences building at Kent State University.

That, as we say, did it! Any doubts that may have existed beforehand about Q's capacity to model a situation quickly dissipated, and this newly gained conviction was given added validity as the Practical Politicians (factor A), the School Prayer Group (B), the Departmentalist (C), and Internationalists (Cnegative) cast friendly jibes at one another. Unfortunately, no topic emerged to consensus--the bipolarity of factor C virtually precluded it--thereby depriving the group of a commonly agreed upon class project, but thereby clarifying a non-methodological issue: Conflict cannot always be settled by technique (as failures in psychotherapy bear witness). This lends substance to Wittgenstein's admonition, in another context, that it is not the philosopher's task to get the fly out of the bottle, but to show that it is, in fact, in a bottle. But a service can be rendered by showing there is no known solution: At least then attention can be turned elsewhere, to soluable problems.

The pedagogical value of a study such as this is that it serves as an intellectual prime which stimulates interest in how factors are derived, how factor scores are estimated, how abductions permit intuition its role, and how the excess and unnecessary baggage of validity, social desirability, statistical generalizability, and the like can be left behind in a cloud of smoke, to be replaced by operantcy, consciring, and the lawfulness of "single cases," whether they be single individuals or a small group of them in interaction.

It is also worth noting that a study such as this --which is most effective at the very beginning of a seminar on Q methodology--convinces students of the possibility of multiple conditions of instruction-e.g., which of these topics would likely be the most acceptable as a class project, given your knowledge of the three factors above? Which would be most do-able given constraints in time and resources? Which would be most important in filling gaps in our knowledge of human behavior? Which would likely result in a publishable product? Findings from which would most likely lead to the greatest number of additional studies? Etc. In this morass, a consensus might yet emerge. Programmatic Self Assessment

Evaluation of the Christian Scholar-Servant model (CSS) for Christian higher education provided the impetus for a study, directed by Bruce F. McKeown, of Seattle Pacific University's proposed General Education and Foundations program.¹ The 64-statement Q sample was drawn from interviews with faculty and was structured so as to include general ideas about the CSS model (faith and learning, scholarship, service), program structure (requirements, responsibilities), general education, and outcomes (for faculty, students, general learning, and the University generally). The 35 respondents divided into three factors (one of which was bipolar), and the diverse commitments which they subsume can be inferred in the following distinguishing statements:

The CSS model is the university's attempt to shape students to become servants, to become people with a concern for others, as well as to be scholars (+5 -1 -1).... The basic notion or value behind the CSS model is the stress placed upon scholarship, and the motive for scholarship is to serve through it (+1 +5 +1).... There ought to be more flexibility as to what counts as general education credit. Students who do not have a firm major in mind when they first enroll often take courses that do not count toward GE requirements and then, once a major has been established, find themselves in a credit-course bind (-3 -4 +5).

The differing emphases between factors 1 and 2 in particular are hyperbolized in a concluding section of the report, "Heaven or Harvard?": Factor 1 is generally sanguine about the program's balance between

^{1.} Report of Findings and Interpretations: A Qtechnique Study of the SPU General Education Program (Seattle: Seattle Pacific University, General and Interdisciplinary Programs Coordinating Committee, April 1985). For details, contact Bruce F. McKeown, School of Social and Behavioral Sciences, Seattle Pacific University, Seattle WA 98119.

Christian service and scholarship, whereas factor 2 believes scholarship to have received short shrift. Factor 3 is less involved with these philosophical matters and is more concerned with pragmatics, such as scheduling difficulties.

Like a client-centered therapeutic intervention, McKeown's report was intended to be a minimally evaluative reflection of the faculty's feelings and perceptions on the issues involved, hence it offered no policy recommendations. However, he reports that members of the faculty have responded as if a mirror had been held up to them (to continue the Rogerian metaphor) and have begun to refer to themselves in terms of the above factors, as if an adjusted lens had sharpened the focus.

Audience Segmentation

In his "Techniques for Audience Segmentation" (for details, consult "Q Bibliographic Update"), Jonathan Gutman joins a relatively small group of methodologists who recognize that Q is more than a simple matrix transformation: "...the generation of the data sets it apart from traditional forms of analysis.... Qtechnique implies that people...project something about themselves into their responses" (p. 130). Gutman also appreciates the Fisherian principles involved in structured Q samples, as well as the benefits of factor analyzing the acquired Q sorts. However, he never really relinquishes the logical structure of the Q sample in favor of the more concrete reality of the factors.

Influenced by Neff and Cohen's paper (*Psychological Bulletin*, 1967), Gutman assumes that statements have specified meanings, hence are amenable to variance analysis as the preferred method of evaluation, F tests being called upon to justify item modifications so as to enhance within cell homoscedasticity. He also defers to criticisms surrounding social desirability and the ipsative nature of forced-choice data (asserting the latter to be in violation of correlational and variance analytic assumptions), and refers to these, among others, as "valid arguments presented both for and against the use of Q-technique" (p. 135).

It is of course true, as Gutman says, that the forced distribution eliminates elevation (mean level of response) and scatter (standard deviation), but this overlooks the more important fact that the shape of the distribution is independent of the Q factors produced, and that the former is arbitrarily imposed to induce the latter: Operants must be forced out, but within tolerable limits they are as little dependent on the properties of the inducing mechanism as the diffraction of light is upon the size and angularity of the prism, or that a pigeon's key-pecking is upon the color or composition of the key. Were Gutman to attend more to the factors which his sophisticated technology has produced (rather than to the gears in the machinery), he would see that this is so.

Political Philosophy and Q

Steven R. Brown (Kent State U) and Gertrude A. Steuernagel, "The Structure of Political Theory," American Political Science Association, August 29-September 1, 1985, New Orleans. Abstract: Knowledge of the external world is said to be secured in an objective fashion according to the principles of proof, refutability, and those canons of science which can be traced to Newton's four published Rules of Reasoning in Natural Philosophy. Much of scientific reasoning, however, especially in the human sciences, involves propositions incapable of either proof or falsification--e.g., "An individual can develop fully as a moral being only through participation in the life of the state" (Aristotle), or "The source of all political authority must always lie with the people as a whole" (Rousseau), or "Custom and emotion, not reason, dictate political action" (Hume)--yet belief in and commitment to unprovable propositions obviously influence scientific work and provide the basis for schools of thought. Political theories, normative as well as empirical, are organizations of subjective assertions of the above kind which, along Q methodological lines, can be shown to be structured, thereby giving empirical substance to Newton's unpublished Fifth Rule. As a demonstration, leading hypotheses concerning the nature of political society and conduct are collected.

and the views of major political theorists (Plato, Locke, Marx, et al.) are each modeled as Q sorts. Correlation then demonstrates the interconnections among these schools of thought, and factor analysis points to the fundamental vectors (intellectual traditions) of Western political philosophy. Q sorts obtained from citizens from a variety of walks of life demonstrate the extent to which these traditions have penetrated the public mind.

Q BIBLIOGRAPHIC UPDATE (CONTINUED)

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