

PERSPECTIVES ON Q METHODOLOGY: IV.
BEHAVIORAL WORLDS

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P.G. Herbst's generalized behavioral theory, in which the individual is represented in the activities in which he or she is engaged, is of considerable methodological interest. Instead of seeking universal laws, the same for everyone, every individual is seen as creator of his or her own unique behavioral world, with its own unique laws and measurement scales (Herbst, 1970). He writes:

The basic difference between non-living matter and living beings is that the former is subject to laws whereas the latter create the laws that determine their behavior. Every person as a result of his aim-directed behavior builds a behavioral universe and the laws in terms of which it operates. (p. 53)

And he adds, a few paragraphs later, that

Each behavioral universe is thus a subjective world. There are, then, a multitude of behavioral universes each of which is a subjective world. (p. 55)

The individual is therefore seen as an element in the behavioral situation, which is grasped as if it were a puffing, straining, shuffling, gasping, struggling, active (or passive) elemental mass--truly an anthropomorphized model--in which the person is part of the action, so that motivation and emotions belong to the behavior, like steam from an engine or breath from an animal body. The scientific constructs to clothe the model are of the kind *task involvement*, *strain*, and *balance* (experienced as *ease*)--much as one would employ about a mechanical model.

For methodology Herbst proposes *dimensional analysis*. This, he reminds us, was used by Sir Isaac Newton, who referred to it as the principle of similitude. Given nothing but the dimensions of length, mass, and time, and one or two simple laws (Borelli's, Froude's, Bergmann's and the like) hundreds of problems in nature can be solved by dimensional analysis. One recalls with what excitement one first opened D'Arcy Thompson's masterpiece of methodology, *Growth and Form* (1942), to discover that answers to problems could be reached with only a few mathematical and dynamical principles to guide one, and with *no* cases at all. A tiny flea jumps as high as a grasshopper twenty times its size (Thompson, 1942, p. 37). As Galileo knew, a dog can carry two or three of its own size on its back, but a horse cannot even carry one horse of its own size (p. 35). Only large birds live in the arctic regions. All such problematics in nature are open to solutions by way of dimensional analysis. It was therefore with unusual expectancy that one turned to Herbst's proposal that this form of analysis might be applicable to behavior variables.

A study Herbst reports is for students working at their studies. The state of a student's work at any time was represented by four variables, (1) work done, (2) amount judged necessary to achieve a satisfactory result, (3) degree of boredom, and (4) degree of anxiety with respect to the impending examinations. The student rated himself on a 4-point scale from *zero* to *extremely much* (0-3).

The argument is that the four variables are dimensions which will have different quantities and rela-

tionships for different individuals, pointing to what Herbst wanted to think of as a different "theory" for each individual.

He found something of the kind for two students he studied. Variables (1) (2) were directly related in both cases, as were (3) (4); but for one student (3) (4) were inversely related. In one (1) (4) were directly related; in the other (2) (4). That is, the student who thinks he works hard (1) also judges that this is necessary in order to achieve a satisfactory result (2). If one was bored (3), anxiety about the examination (4) was also likely; but if one was anxious (4), one was unlikely to be bored (3). These relationships are not very different in logical form from those covered by Bergmann's Law, that small size goes with high rate of food consumption--so that a warm-blooded animal much smaller than a mouse becomes an impossibility since it couldn't obtain or digest the food required to maintain its constant temperature.

Now it is true that conclusions to tested hypotheses have been reached in the above manner and therefore explanations are provided of the students' behavior: To this extent unique theories are at issue in Herbst's framework. The scales are unique to each student, since nothing is done to standardize or otherwise normalize the student ratings.

This, however, from Q's standpoint, is playing at logic, not science. The whole structure is seen through the eyes of the psychologist--it is *his* subjectivity that is at issue, not necessarily that of the students. The four parameters (1) (2) (3) (4) are imposed on the situation, and are not necessarily any that could have issued from the students themselves, as intrinsic to *their* frameworks.

As a rider to his system, Herbst postulated that each motivated activity not only constitutes the existing structure, but also goes beyond it, leading to "developmental structural changes." These may be evolutionary, or devolutionary (to use his terms), i.e., "superior to the previous structure," or not: The anxious student, unlikely to be bored, may pull himself together, or, instead, have a nervous break-

down. Herbst concludes:

We do not as yet have a theory that makes it possible to predict the effects of actions on the future state of a behavior system. (Herbst, 1970, pp. 17, 55f)

The situation is very different by way of Q. Instead of categorical parameters there would be a first look at students' work in terms of a concourse of their statements about it. A Q sample and Q sorting would readily represent the state of a student's "behavioral world" about the situation. Subjectivity is indeed at issue, but it must be the student's, not the scientist's. On Q's grounds the consequences are the reverse of Herbst's. Though every person is a creator of his or her "existence," the underpinning laws are the same for everyone, as are the units of measurement (they are pure numbers, statistical in distribution, the quantal unit). With respect to predicting the effects of actions, and the future states of behavior systems for which Herbst had nothing to offer, we have two laws in Q--one Parloff's, the other Perlin's. Parloff's law is to the effect that self-referred operant factors ("me") are indicative of future behavior--friendly attitudes are conducive to friendly behavior: But self reference is the key to this (Stephenson, 1974, p. 14). Perlin's law, similarly, is that changes in "existence" are in relation to prior operant factors: The schizophrenic Myra, in the course of taking part in the investigation of schizophrenia, changed in line with her pre-existing factor structure, *not* in relation to the theories employed by the psychiatric and psychological investigators (Stephenson, 1974, p. 15). Neither of these laws is predictive: In the world of quantum theory, probabilities are at issue--the laws tell us what to look for in a probabilistic theoretical framework. Parloff's and Perlin's laws have to compete with others in any given situation.

It should be clear, then, that study of individual cases need in no way preclude lawfulness and universality as these terms are generally understood.

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Panel scheduled for the 1985 meeting of the
International Society of Political Psychology
June 18-21, George Washington University

SUBJECTIVITY IN PSYCHOLOGICAL AND POLITICAL THEORY

Making a Good Cup of (Political-Psychological) Tea

William Stephenson, Distinguished Professor of
Advertising Research (Emeritus), School of Journal-
ism, University of Missouri-Columbia

The Structure and Form of Subjectivity in Political Theory and Behavior

Steven R. Brown, Professor of Political Science,
Kent State University, Kent OH

Psychoanalysis as an Inquiry Into Subjective Worlds of Experience

Richard B. Ulman, Research Assistant Professor,
Department of Psychiatry and Behavioral Science,
New York Medical College, Valhalla NY
Peter Zimmerman, private practice, New York NY

Discussant

Robert Jay Lifton, Distinguished Professor of Psy-
chiatry and Psychology, John Jay College of
Criminal Justice, New York NY