

COMMENT ON "A NEW Q TOO?"

It is not possible in this brief comment to respond in detail to the many interesting issues which Professor Gould raises, but the one issue which cannot be lost sight of is that of subjectivity, about which Gould says little other than to equate it with Cartesian consciousness. It may therefore come as a surprise to him to learn that Stephenson has been among the most assiduous in his attack on "Descartes' blunder" (Stephenson, 1980a) and in his insistence that the metaphysics of consciousness be replaced by the empiricism of concourses, shared knowledge (conspiring), and communicability (Stephenson, 1968, 1980b). What is "fundamentally incommensurate" (Brown, 1972) is not introspective awareness of internal states of mind vs. the external world of physical events, but a person's own point of view (which the term subjectivity denotes) vs. what is objective about the person, such as his traits, characteristics, and other objectively measurable variables. This is not, as has been supposed, a "traditional distinction" (Gould, 1985), but a fresh distinction which corrects Descartes' blunder and permits a science of subjectivity to progress rather than languish.

Gould at the outset confesses to some difficulty in understanding the claims of Q methodology, but ultimately concludes that it is simply a degenerate form of Atkin's Q-analysis; however, his misassociating Q methodology with a subjectivist stance (for which he has a ready-made critique) and his relegating Q's tie to quantum theory to mere analogy (a stretched one at that) belies a conventional vantage-point with which Q has had to contend for almost 50 years now. Atkin's Q_A and Stephenson's Q_S , to adopt Gould's notation for the moment, are q-connected at only the highest level of abstraction--both endeavor to reveal structure, as Gould acknowledges--but at a

more substantial level Q_S provides the possibility for a science of subjectivity involving feeling and a self referentiality which is of little concern in Q_A . The concern in Q_A , as Gould's and Atkin's many papers bear witness, is with the structure among individual *observables*--such as the committee structure in the example of moving the university bar (Brown, 1984: 12-13)--whereas in Q_S , as in quantum theory, concern is with *states* (of mind) rather than with the observables (traits) in the states (Stephenson, 1982: 237). Q_S statements are therefore not measurable events in the same sense as the q-connectables of Q_A , but are simply made available to the Q sorter as a medium through which to display his state of mind.

At the risk of redundancy, we plead an opportunity for yet one more illustration, and there is no better place to begin in this regard than with Gould's and my own papers, which are brimming with subjectivity. From Gould, first, we are offered assertions such as the following:

- What is termed subjective and objective is a comparatively recent Cartesian distinction whose pertinence and utility are questionable.
- Q_A acknowledges the possibility of inducing structure change to meet goals, thus raising explicitly those moral and ethical questions that are constitutive of the human world.

These are clearly matters of opinion, Gould's opinion: They reflect *his* state of mind. By the same token, my own paper is chock full of opinion and commentary which likewise falls short of being self-evidently true:

- Q_S demonstrates the structure of the subjectivities involved, and these structures are as important as any q-connectivities demonstrated by Q_A .
- Q_A and Q_S are incommensurate in their subject matters--the structure of objective characteristics in the former, and the structure of subjectivity in the latter.

Statements such as the above are different in character from statements such as "William Stephenson lives in Columbia, Missouri" or "Peter Gould is a geographer," which are without self reference, are uncontroversial, and are objective as opposed to self referential and opinionated: We can, for example, ascertain whether or not Gould is a geographer by examining his doctoral diploma, checking to see if he has an office in the Department of Geography, etc. But how might we either prove or refute (in any scientific sense) the contention that Q_A explicitly raises those moral and ethical questions that are constitutive of the human world? Still, we assume that Gould meant what he wrote and, further, that he would be reluctant to characterize his views as emanations from some subterranean stream of Cartesian consciousness.

But we can go further, with the aid of Q methodology, and examine the structure and form of the subjectivity at issue, in this instance by gathering a sample of statements from Gould's and Brown's papers --23 statements in this example, with those pro and con Q_A and Q_S roughly in balance--and representing the contested standpoints hypothetically, as Q sorts. Five such were constructed: (1) My own view, the only non-hypothetical Q sort, (2) Gould's, as best as I could represent it based upon reading several of his papers, (3) William Stephenson's view, (4) Ronald Atkin's view, and (5) Cyril Burt's standpoint. The latter was included as a kind of control: Burt never really accepted the subjectivity at issue in Q methodology, regarding Q as the mere reciprocal of R (Burt, 1972), but he was cognizant of the quantum-probabilistic nature of factor analysis generally (Burt, 1958: 86n), about which Gould has expressed doubts; Burt's view was therefore expected not to be strongly aligned with either the Q_A or Q_S vantage-points.

It almost goes without saying that the persons whose views were simulated might have constructed their own Q sorts slightly differently had time and opportunity permitted them to be consulted directly, but it is doubtful that differences would have been

major. Gould, in his writings, does not express himself obscurely, and in the case of the Q sort constructed to represent his position (for example) the top score of +3 was given to the abovementioned statement relating to those moral and ethical questions which Q_A allegedly raises in an explicit way, and likewise to the statement that "Q_A and Q_S are both 'text creators,' but the former allows the creation of many texts whereas the latter creates a single, highly constrained structural text." These views Gould openly espoused. By the same token, he took issue with the view, advanced by Brown (1984), that "binary yes/no observations would appear to rule out Q_A as a method for the study of subjectivity..." and this statement was therefore assigned a score of -3 in the Gould Q sort. Quite apart from the veracity of the constructed Q sorts, however, the principle that viewpoints can be represented in this fashion remains viable (Peirce's Law of Mind), and does not implicate consciousness in any way.

The operant structure is shown in Table 1, as rendered conspicuous by factor analysis, that "harsh, even brutal, methodological step [according to Gould] that forces rich human material through a linear filter and onto an orthogonal...rack." Be that as it may, two distinct and readily identifiable standpoints

Table 1
HYPOTHETICAL Q SORTS

	Correlations ^a					Factor Loadings		Perspectives
	1	2	3	4	5	A	B	
1	--	-41	71	-12	-13	(78)	-29	Brown
2	04	--	-47	72	21	-25	(89)	Gould
3	05	-08	--	-13	03	(76)	-23	Stephenson
4	09	04	03	--	32	02	(77)	Atkin
5	-08	-04	06	09	--	05	30	Burt

^aCorrelations in upper off-diagonal; residuals in lower off-diagonal. Decimals to 2 places omitted in correlations and factor loadings.

stand revealed, and the "disappointing and paradoxical" statistics employed provide, not statistical cake for the having or eating, but food for thought--that Brown is on one factor (with Stephenson) and Gould on the other (alongside Atkin), and with Burt defining neither. The two preceding papers, then--Brown's and Gould's--boil down to this, to these two factors.

But "structure for what?" Gould is obliged to ask, and he conceives of only two responses: "Either structures are important for other things, so that they allow, forbid, but do not require various forms of traffic on them..., or they just stand there to be contemplated" (Gould, 1985: 50), but this assumes that structures refer to objective features of the world--of information networks, urban structures, university committee systems, and the like. In Q methodology, structures provide opportunities for contemplation, to be sure, but with an eye to reaching understandings about subjectivities. This is achieved primarily through the examination of factor scores, as in the following:

	Factors	
	A	B
5. Atkin's Q_A does for <i>information</i> what Q_S does for <i>communicability</i> .	+3	-1
3. We can arrive at Q_S by adding con- straining assumptions to Q_A , just like we can arrive at traditional forms of mathematical structures by adding con- straining assumptions to algebraic topology.	-3	+1
22. Q_A and Q_S are both "text cre- ators," but the former allows the cre- ation of many texts whereas the latter creates a single, highly constrained structural text.	-1	+3
19. Binary yes/no observations would appear to rule out Q_A as a method for	0	-3

the study of subjectivity, since subjectivities seem always to admit of degrees.

Factors A and B are manifestations of two separate "thematic imaginations" (Holton, 1973). The Brown-Stephenson view (factor A) understands Q_S and Q_A as being different from one another, as independent systems, each applicable to the subject matter with which it was designed to deal-- Q_S with subjective communicability, Q_A with objective information (statement no. 5); the former is therefore not conceived as simply a degenerative form of the latter (no. 3). There are, according to this view, two separate, fundamentally incommensurate realities--one with self-reference, one without--each with its own structure and each requiring its own methods.

The Gould-Atkin factor B, on the other hand, appears to view the situation in hierarchical-evolutionary terms (statement no. 22), vouchsafing Q_A 's role even in the realm of subjectivity (no. 19): As Gould makes explicit, "the long and rocky road from Q_A to Q_S " is a steep descent which begins with Q_A at the apex of methodological development and arrives at Q_S by journeying down 11 constraining steps to the Pleistocene depths of Q factor analysis, which only enjoys continued popularity because of "the poverty of ontological, epistemological and methodological thought" current in contemporary inquiry (Gould, 1985: 51).

The methodological commitments are clearly different, as are the themata which undergird them.

Primarily on technical grounds (having to do with the injection of metric information into ordered spaces), Professor Gould challenges the assertion that factors in Q methodology can be homologous with actual audience segments, yet it is hard to imagine--after examining the ordering of the statements in factors A and B--that he would not identify himself more with the latter than the former, and this is all that the principle of transformation implies. Indeed, could any competent scholar, after reading the Brown and Gould papers, not see A and B as their factor

equivalents? The literature is now filled with hundreds of cases, at both extensive and intensive levels of analysis, in which Q factors have demonstrated their status as operant summaries of the subjective communicability which they model, and to dismiss this accumulation of evidence on the grounds of some metric or any other ad hoc hypothesis is to run counter to Newton's (1726/1934) dictum that "the argument of induction may not be evaded by hypotheses" (p. 400), i.e., that "propositions induced on the basis of experiment should not be confuted merely by proposing contrary hypotheses" (Holton, 1973: 49). We must be excused, therefore, if we fail to take seriously claims that it is not possible to do what we have been doing for so long, particularly if those claims rest on only hypothetical foundations.

It is hopefully by now obvious that Q methodology's "tinge of worry" (as Gould puts it) about usurpation of the letter Q has nothing to do with notation per se, but with the widespread tendency to obfuscate and restrict the possibility of a science of subjectivity by partially incorporating some of its language and technical accouterments (such as Q sorts, factor analysis, etc.) and then, in many instances, citing Stephenson's *The Study of Behavior* as if his approval could be assumed. This creates confusion: Even Gould acknowledges some confusion around the distinctions between Stephenson's Q and Cattell's PQRST systems, and between what Q methodology vs. other "subjective" methods (such as personal construct theory, psychotherapy, etc.) are up to. At the same time there have been legions of experts--the Cattells, Eysencks, Burts, McNemars, and other churchmen of the contemporary human sciences--who have never performed a single experiment in the subjective realm, and who, like Gould, can provide a long list of reasons (all logico-technical, none experimental) why it cannot be done. The "tinge" which Gould detects, therefore, is not worry, but the frustration encountered in trying to get across complex ideas to a recalcitrant audience.

We experience no difficulty, finally, in accepting Professor Gould's assertion that Atkin's Q-analysis

raises "explicitly those moral and ethical questions that are constitutive of the human...world" (Gould, 1985: 51). There are real problems in the world, and revelations about them (with the aid of Q-analysis or whatever) do indeed give rise to ethical questions constitutive of the human world. Granted this, what next? What happens after these questions are explicitly raised? Just like the preceding discussions concerning the comparative advantages of Q_A and Q_S, ethical discussion is subjective communicability, and it is at this point, therefore--when ethical issues have arisen--that a science of subjectivity must be called upon to help sort out the solutions that will be advanced--about war and peace, abortion, hunger, or even less weighty issues such as where to move the university bar--not with a promise of solution, but so that through the aid of technique, "rival theories can be rationally evaluated, there being everyone to serve as court of observational appeal" (Stephenson, private communication). Others may of course take a crack at it--personal construct theory, modern psychotherapies, and the "free" methods of interviewing to which Gould (1985: 44) refers--but none of these is as sophisticated in logic-of-science respects as Q methodology, with its theory of concourses, quantal units, abductory logic, operant factors, and laws of subjectivity.

As indicated initially, Professor Gould has raised many more issues than can be responded to here. Some require additional thought, but we take some comfort in assuming that while we are pondering further, we will not be alone.

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REFERENCES

- Brown, S.R. (1972) A fundamental incommensurability between objectivity and subjectivity. In S.R. Brown & D.J. Brenner (Eds.), *Science, psychology, and communication* (pp. 57-94). New York: Teachers

College Press.

- Brown, S.R. (1984) "Q-analysis": Caveat emptor. *Operant Subjectivity*, 8, 6-17.
- Burt, C. (1958) Quantum theory and the principle of indeterminacy. *British Journal of Statistical Psychology*, 11, 77-93.
- Burt, C. (1972) The reciprocity principle. In S.R. Brown & D.J. Brenner (Eds.), *Science, psychology, and communication* (pp. 39-56). New York: Teachers College Press.
- Gould, P. (1985) A new Q too? *Operant Subjectivity*, 8, 42-53.
- Holton, G. (1973) *Thematic origins of scientific thought*. Cambridge MA: Harvard University Press.
- Newton, I. (1934) *Mathematical principles of natural philosophy* (3rd ed., A. Motte, Trans.; revised by F. Cajori). Berkeley and Los Angeles: University of California Press. (Original work published 1726)
- Stephenson, W. (1968) Consciousness out--subjectivity in. *Psychological Record*, 18, 499-501.
- Stephenson, W. (1980a) Conscience and consciousness. *Operant Subjectivity*, 3, 74-82.
- Stephenson, W. (1980b) Consciring: A general theory for subjective communicability. In D. Nimmo (Ed.), *Communication yearbook 4* (pp. 7-36). New Brunswick NJ: Transaction Books.
- Stephenson, W. (1982) Q-methodology, interbehavioral psychology, and quantum theory. *Psychological Record*, 32, 235-248.

Erratum

In the October issue of *OS* (p. 24), Brian Zakem's PhD-granting institution was misnamed. He is anticipating a June 1985 completion of his dissertation at The Fielding Institute.