

PROTOCONCURSUS: THE CONCOURSE THEORY
OF COMMUNICATION *

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Abstract Communication is ubiquitous, intrinsically subjective, and schematical in structure and function. A universe of statements for any situation or context is called a *concourse*, and refers to conversational and not merely informational possibilities, and is arrived at empirically for every concept, every declarative statement, every wish, every object in nature when viewed subjectively, etc. Q samples drawn from concourse are administered as Q sorts, which are factor analyzed and interpreted, leading to understanding. An example is provided of a concourse around the statement "It is raining," and demonstrates that schemata, made operant by Q factors, and not message systems, are key factors in communication. Discussion focuses on applications in the physical and social sciences and humanities, and on implications for problems in a variety of areas.

* To be continued in the next issue. References for the entire article will appear at the end of the final installment.

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INTRODUCTION

The editors invited the author to prepare an article outlining his conception of communication and its role "in all of the fundamental human affairs." They would be interested, the invitation added, in his views on the "importance of communication in individual human life, and in the health and productiveness of social systems."

He agreed to write an article. Certainly there is something interesting to say about communication, and that it applies to all human affairs will become clear. But what will be important in social systems as the outcome of his theories is not exactly what the author had in his mind. His concern is to restore a semblance of normal science to the orderly study of communication and to let the chips fall elsewhere in social engineering.

The author's concern is with new-look science, which finds its freshest expression in Kuhn's (1970) *The Structure of Scientific Revolutions*, but the logic of which (or lack of any) is to be found earlier in the thinking of C.S. Peirce on *abduction*, which the present author introduced in his own work twenty years ago (Stephenson, 1953, 1961). The new look puts emphasis on discovery and upon the use of laws, theory and instrumentation to reach *understandings*, not facts, by proceeding from concrete situations to interpretations and explanations which are subjective to the proponent of knowledge. With facts the scientist seeks to change the world outside him; with understandings he may be glad to leave things outside him as they are (Stephenson, 1972a).

Objectivity, over the past several decades, has reigned supreme in communication theory and research (as elsewhere), and facts, norms, and testable hypotheses (via the H-D, hypothetico-deductive methodology) have been *de rigueur*. The truth is, however, that textbooks and almost every philosopher of science since Peirce have been selling science short, not as it is but as it was imagined. In our communication field, from Baschwitz (1951) to Cherry (1957), Freidson (1954) to Schramm (1964), Brouwer (1967) to Kel-

man (1965), Thayer (1967) to Dance (1967) and scores more, from the fields of psychology, journalism, sociology, anthropology, linguistics, philosophy, history and all else of academia, the paradigm of objectivity has been obligatory. Matters of opinion and interpretation were relegated to the limbo of "noise," "froth," outside the pale of science. Even the logical positivists, who ought to have been wiser, threw out the subjective from their reductionist metaphysics. Now we know a little better and although subjectivity is still *infra dignitatum*, it is beginning to raise its gentle head above the floodwaters of an out-moded paradigm.

The new look mixes laws, theory, instrumentation and application in what may seem to be hopeless confusion. But it permits of discovery, penetration, elaboration, evaluation, criticism and all else of the reasonable quest for knowledge--indeed what Kuhn calls *normal* science. It may even wax metaphysical. It proceeds by way of "working theories," "working contexts" in which laws are not facts but guidelines for the *understanding* of concrete cases and situations, and this is as true of Newton's second law as it is of Ludwig Binswanger's (1958) 90,000 word existentialist essay on the case of Ellen West.

The present paper is in this framework, in which there is a broad abductive *paradigm* (to use Kuhn's term in a definitive sense--he gave it many different meanings, but ultimately only one [Kuhn, 1970]), and powerful "exemplars" to push it along. It follows a series of papers and books by the author, and dissertations by his students, to which reference will be made in the sequel.

The paradigm is that communication is ubiquitous, wherever humans are alive: It is intrinsically subjective and schematical in structure and function; the self is central to it; and as a consequence vast numbers of problems in nature can be examined subjectively *as problems of meaning and communication*, prior to any objective approach to them. The "exemplars" in the system are Q-technique designs from Q methodology (Stephenson, 1953), in part because all scaling and measurement problems are resolved this way, the con-

cern being with the same units for everyone for every problem, for every aspect of normal science within this framework.

On this basis, as it will appear, problems in every field of human endeavor and knowledge can be offered a solution; and one can prove, by the same token, that most papers in the human sciences are either stillborn or premature for want of a little subjectivity to bring the gestations to orderly birth.

The thesis, it will be agreed, is indeed a tall order!

BACKGROUND

We have come a long way since Ruesch and Bateson (1951) distinguished between intrapersonal, interpersonal, group, and cultural networks of communication, the theory being couched in information-theory terms. Or since Ayar et al. (1955) attempted a comprehensive survey of communication in which every academic discipline participated--philosophy, phonetics, mathematics, chemistry, biophysics, zoology, psychology, law, art, anatomy and communication theory (in the person of Colin Cherry). The principles then discussed made mention of symbols, social factors, and the place of machines in communication, now encompassed by information theory, stemming of course from Shannon and Weaver (1949). Or since Berelson's (1959) pessimistic conclusion that communication research was "withering away": He made mention of some achievements, notably of Lasswell's (1935) theory of revolutions, in his *World Politics and Personal Insecurity*; also of Lazarsfeld and Merton's (1949/1960) work on audiences; and of course the work of Hovland and his colleagues (1953) on persuasion.

We have come a long way, but without any widely accepted working theory about communication. Ruesch (1961) abandoned information theory for the greener fields of clinical analysis; Colin Cherry (1957) remains enigmatical, half in and half out of information theory. Hovland had to confess, after 10 years of research, that it would have been better to have studied how people *internalize* message systems, rather than

persuasion which had proven nothing much.

The complications of theory can be observed, if one will, in Hans Hormann's (1971) *Psycholinguistics*, rich in the literature of symbols, linguistic units, the probability theories of language, the phenomenology of verbal associations, the field concept of meaning, semantic generalization, conditioning theory of meaning, the concept of grammaticality, and much else concerning language and communication--sender, receiver, "bits," channels, capacities, and all. It is a scholarly textbook indeed, full of information for students but empty of any working theory about communication.

One has to turn to Gerbner (1967) in the *Proceedings of the 1st International Symposium on Communication Theory and Research* to find a theory veering in the right direction. He states, most simply, that communication is interaction through messages, which are "symbolic or representational events of shared significance in a culture." These define for a person "the realities and potentials of the human condition," by which Gerbner means the "perspectives of existence, the priorities, the values of the person." Message systems, he has to say, are the common currency of social interaction; and the problem is not how these are processed as *information* (senders, receivers, "bits," channels, capacities and all) but how they form and maintain the *culture* of a society--and one would add, the subjectivity of an individual. Gerbner attributes to mass communication, in modern societies, the "maintenance...(amongst) vast and otherwise heterogeneous communities...of perspective and meaning among people who can interact no other way." He gives mass communication a revolutionary impact: It makes "publics," contriving new grounds for collective thought and action across all previous institutions and boundaries of locale, history, and time.

For theory, Gerbner makes reference only to the concept of "image."

This concept, indeed, is versatile. Almost everyone in communication theory has had something to say about it, from Pool and Prasad (1958) to Kelman (1965). It is enough to give the reminder that it is

a *subjective* construct: About any topic or event the individual has a "structure of assumptions, views, ideas, tastes"; these are prestructured, that is, they are *preconceptions*; but they can be "mass produced"--as every advertiser seems to be aware--and they are the shape our culture takes. Involved in them are our notions of what *is* (existence), what is *important* (what matters to the person), what is *right* (for society), and *what* goes with *what* within each.

Gerbner divides the area of concern in mass communication into entertainment (fiction, drama) and reportage (argument, information, non-fiction, documentary and the like). One isn't sure how far he would apply the concept of "image" to the non-fictional side of things.

Next, Gerbner proposes a system of *message system analysis* to make his theory operational. He asks about any message what *is* it (existentially); what is *important* about it--no doubt in some context--and what its *value* (its news value, story value, as a matter of attention, credibility, etc.), and what *valency* has it (is it positive, negative, or neutral)? Also has it a theme?¹

All of this seems constructive and on the right lines. But it is not a working theory, and its roots are deep in the objective paradigm.

The theory will be developed rather differently be-

1. It is instructive to note that in discussion subsequent to the paper, Colin Cherry opined that emotion was ignored. Davis remarked that the theory did not develop a measure of the "collective consciousness" of those who possess the same broad knowledge or purpose. She remarked, too, that there are other cultures besides that of the mass media--the military, the scientific and so on. Besides, argued Duncan, there's religion, economics, and so on, all involving systems of communication and all alike *biased!* To which Gerbner had to reply that these systems have historical roots which had been developed unsystematically, whereas mass communication is a matter of the industrialization of culture, its "mass production," and in need of urgent control.

low. A working theory consists of laying down some broad lines, a law, abduction, or paradigm, in terms of which one searches for principles by studying a few actual cases, chosen to gain as much knowledge as possible. Gerbner's operations (and his thinking) are with respect to *messages* as such. But his theory is about "images." Until there is a working theory about "images" (granted for the moment that this is getting close to nature as it is), the analysis of messages as such is likely to be premature, and probably erroneous.

THE MEANING OF "IT IS RAINING"

Let us proceed, then, to a "working theory" about communication. One chooses the declarative statement "It is raining," an example used by MacKay (1969). What does this "message" mean if a person is asked about it?

He may begin, if he is a physicist, by saying that rain is wet, water, falls from the sky at constant speed, is drizzle or the like. If he is a behavioral scientist, he may look for his raincoat, ask for an umbrella, wonder whether the car windows are closed, or remark "Thank goodness I won't have to water the garden." Or, if just anybody, he may wonder how long the rain will last because long spells of rain give him "cabin fever"; or rain makes him, he says, feel depressed, sexy, or sad; a kiss, he says, tastes better in the rain; it's dreary, dark; or, nonchalantly, let it rain, who cares? Or, if poetically inclined, he may softly muse, "it dropeth like the gentle rain from heaven"; and "pitter-pat upon the pane"...and so on, *ad infinitum*.

Any communication vis-a-vis "it is raining," therefore, will be in relation to some such complex of innumerable "messages." This is not to say that each person has these stored away in his mind like hay in a loft. The physicist no doubt will have one complex, the behavioral scientist perhaps another, due to their different interests (as we would say). What the common man has will be in some way dependent upon his interests too--dating perhaps, or gardening, or poetry.

Nor will all the "statements" be necessarily verbal. MacKay, for example, asked how one reached the concept "chair"? Photographs of chairs for every dynasty down the centuries, all different, from ancient China to modern Sweden, could constitute a body of stimuli vis-a-vis chairs. The innumerable instances could give us opportunity to look at what "chair" means to antiquarians, archeologists, behavioral scientists, and you or me. We surmise that the meanings would probably be different in such contexts; by which is meant that individuals will talk, hold conversations about, muse about, discuss chairs very differently in terms of their own interests (values, presuppositions, beliefs, expertise and the rest).

A universe of "statements" so conceived for any situation or context is called a *concourse*,* to remind us that the concern is with *conversational* possibilities, not merely *informational*. There is a concourse for every concept, every declarative statement, every wish, every object in nature when viewed subjectively, in physics, philosophy, history, sociology, psychology, law, art--the whole gamut with which Ayar and his associates (1955) began their studies.

Anyone familiar with Q methodology will grasp at once the significance of what has just been said, and will realize that there is a way to pluck the empirical strings of all knowledge this way. It is not proposed here to offer any account of the methodology, but to take it for granted except in two particulars which are especially important for communication theory. One concerns how communication concourses are at issue; the other, how self theory enters.

PROTOTYPICAL STUDIES

A concourse is arrived at empirically; it constitutes a Q universe; Q samples are drawn from it; Q sorts are performed with these samples; these are factor analyzed; the factors are interpreted. Most Q studies stop there: In our case this is only half-way through the

* From the Latin *concursum*, meaning "a running together" [Ed.].

methodology. It has to be shown next that the factors are merely schematic for the conversational possibilities of the individuals providing the factors; and it is important to determine how the *schemata* (as we shall define the matters involved) relate to the *self* of the individuals. The importance of the latter point may be grasped when it is realized that violence on television is likely to affect viewers very differently depending upon whether they *identify* with the violence or not, and identification, as we shall see, is a self-theoretical matter.

Consider "it is raining" as prototypical in these connections: A concourse was reached by inviting individuals to enter into conversation about "it is raining." Several hundred "statements" were collected this way. A Q sample of 60 was chosen at random, consisting of statements typically as follows:

I like to go out in the rain to just get wet--the way kids like to play in puddles.

I think of my job: If it rains, it is muddy when you go out.

If it rains a little, you can smell all the bad smells.

If it rains hard I enjoy it because it's furious and violent.

If it rains during the night, I sit up and watch.

Makes me feel sad if I'm alone or depressed for some reason.

I feel--here I've spent hours getting my car all cleaned up, and the rain comes--I resent it.

...and so on.

Studies with graduate students, using this Q sample to describe by Q sort their "image" of what "it is raining" means to them, provides evidence of at least

Table 1
IMAGES OF "IT IS RAINING"

Q sorts	Factors		
	F ₁	F ₂	F ₃
1	X		
2		X	
3	X		
4	X		
5			X
6	X		
7		X	
8	X		
9		X	
10		X	
11			X
12		X	
13	X		
14			X
15		X	

Significant loadings
are marked "X".

three main factors, one turning on a "poetic" image, another on "nostalgia," and a third on "fun."

In Table 1, for example, is a typical result for 15 graduate students whose Q sorts were factored and rotated to simple structure. The inference is that each individual has an "image," but there are three different ones, F₁, F₂ and F₃: Six individuals relate to F₁, six to F₂, three to F₃.

The factors are merely averages of the Q sorts for the individuals on them: Q sorts for 1, 3, 4, 6, 8 and 13 are averaged to provide a single Q sort to represent all six, and this is F₁.

The factors represent the students' "images": But they are laid out before us, in each case as the 60 statements arranged in a definite order--different for each factor. Gerbner could only theorize about them; we, instead, materialize them as factor arrays.

The arrays are then interpreted, which no doubt is "theoretical," and certainly a complicated matter.² The interpretations turned, as was mentioned, about a "poetic" mode of regard for F_1 , "nostalgia" for F_2 , and "fun loving" for F_3 .

The study is only half complete at this point: One next has to check whether or not the factors really do represent the *common conversational modes* for the individuals on a factor. Engaging the individuals on F_1 in conversation, for example, should show that indeed they do think about "it is raining" somehow poetically -- associating with pleasant walks in the rain, with the sweet smell of the damp earth after rain, with the violence of the storm, the peace of gentle rain, the rainbow beauty, the taste of a kiss in the rain...and so on. One wants to be sure that the Q sample hasn't merely put these ideas into empty heads, but that the factors do in fact correspond to the everyday conversational possibilities of the individuals. The concern is not with what a person *knows*. Nor is it with the mere fact that of course it is *possible* for him to talk, think, feel, etc. about "it is raining" this way: There is a distinct *readiness* to react this way, a complex preconception in this direction amounting to a thrust or vector by the individual in the way he exists, based on his beliefs, wishes, or whatever.

But, it will be said, isn't this just to say that a measurement has been made of the person's interest, sentiment, attitude, or the like? Perhaps so: But what to call it doesn't matter at this point. *What is more profoundly at issue is the communicability of the*

2. The score gained by a "statement" on a factor is open to inductive inference with the assumption (testable) of source regularity for it. The scores on the whole array (for all 60 "statements" in our example) are subject to a complicated inductive process to seek a common cause running through all in some degree, from one end of the array to the other (+5 to -5). Thus "poetic" seemed to describe what F_1 was all about. If the Q sample is structured (Fisherian design), each factor is open to dependency analysis (Stephenson, 1953).

person.

Here, indeed, we are just making a beginning: probing into *communicability* is the basic problem of communication theory and research. Q methodology helps out again by way of intensive studies of "single cases" (Stephenson, 1961).

Thus, to continue with "it is raining," person No. 4 was selected at random from the above 15-person study. One could use the same $n = 60$ Q sample or develop a special one for him, his own particular course of ideas, thoughts, recollections, reflections and so on vis-a-vis "it is raining." For our example the $n = 60$ sample was used. Over a period of several days person No. 4 performed Q sorts under different conditions of instruction, one after another, as follows:

- (a) Describe the "image" you have about "it is raining."
- (b) How do you think a person who is nostalgic about rain would describe "it is raining"?
- (c) In a heavy downpour, how would you describe it?
- (d) Poets write about rain; how do you feel that a poet would describe "it is raining"?
- (e) There is a practical view to take about rain; what, in your view, would be a practical view about "it is raining"?
- (f) Some people see only the bright side of things about rain: how would they describe "it is raining"?
- (g) Farmers probably think of rain differently from most of us who are not farmers: how do you suppose a farmer would describe "it is raining"?
- (h) Use the statements to describe *yourself*, i.e., what you think about *yourself*.

These make possible, of course, another level of inductive inference across different Q sorts: (a) is the basic condition to elicit an "image"; the others (b) to (g) have reference to hypotheses about what might, or might not, enter into (a) as suggested by the across-individual studies providing factors F_1 ,

F₂ and F₃. No. 4 had no idea of his "poetical" vector; condition of instruction (d) offers an opportunity to project himself upon the Q sample in this direction. Condition (e) was suggested by the nature of F₂, and so on. Condition (h) is the clincher, however: It asks the individual to say what he thinks he is like in terms of "it is raining." It may seem a stupid thing to ask of anyone, but it is in fact readily countenanced, and is of first importance for self-theoretical reasons, as we shall see.

Table 2
INTENSIVE STUDY OF SUBJECT 4

Condition of Instruction	Factors		
	f ₁	f ₂	f ₃
(a)	X		
(b)			X
(c)	X		
(d)	X		
(e)		X	
(f)		X	
(g)		X	
(h)	X		

Significant loadings are marked "X".

The Q sorts for No. 4 were factored and rotated to simple structure, with the results as shown in Table 2. This is a genuine "exemplar" in Kuhn's sense, as important in empirical self psychology as the Wheatstone Bridge is in electricity. It involves the theory, with William James, that one should be able to distinguish what is *me* from what is *mine*, what is *him* from what is *his*, what is somehow intrinsic to No. 4's conception of *himself* in contrast to merely what is *of* him, but not what he really identifies with.

The data indicate that No. 4's communicability is divisible into certainly two and probably more parts, *only one of which involves his concept of himself--it*

is factor f_1 .

We should sit back and contemplate this result because it holds within it what may be the key to effective communication, for No. 4 in particular, but in principle for all concourses. Factor f_1 is what Gerbner would call No. 4's image, operationally defined by (a). But it is also what No. 4 *identifies* himself with. This is quite unconscious on his part. Not only has he a vector in the direction of "poetic" (which theorists would describe as preselective, e.g., Klapper, 1961), but now there is a hint as to why: It is probably because of his self identifications. The other elements such as f_2 and f_3 are *of* him, but do not characterize him (according to his own report). If one wanted to communicate with him in such a manner as to relate to his essential interests it would have to be in relation to f_1 , not f_2 or f_3 . But this is to say that, by way of the intensive analysis we have come face to face with an important principle: It may well be that the damage done by violence on television is only demonstrable for individuals who are already predisposed to some such, as integral to their self vectors, as indeed some recent studies have concluded but with no compelling proof.*

THE COMMUNICABILITY PARADIGM

With these exemplars in mind, it is now easier to express what is at issue in our "working theory" of communication. The foundations have been laid elsewhere (Stephenson, 1953, 1967, 1968, 1969a, 1972ab, 1973c) and it is impossible and unnecessary to review this growing body of working theory here.³

* Subsequent Q-methodological evidence to this effect has been provided by Stephenson, "Q-Methodology: Conceptualization and Measurement of Operant Effects of Television Viewing," *Journal of the Centre for Advanced Television Studies*, 1976, 4(1), 17-18. [Ed.]

3. The theory has a number of primary formulations in which objective and subjective aspects of the domain are distinguished. *Objectivity, facts, information, explanation, and communication pain* go together

The "working theory" is to the effect that *schemata, made operant by Q factors, and not message systems as such, are key factors in communication.*

Factors, such as F_1 , F_2 and F_3 as well as f_1 , f_2 and f_3 , are *operants* in a Skinnerian sense, representing schemata, about which there is more to say.

Communication is to be studied on the basis, not that it is merely interaction through "message systems" such as appear in print, television, film, or radio, but in terms of what is "in the minds" of the readers, viewers, and listeners, as fundamental to all else. It is not these message systems which define for a person "the realities and potentials of the human condition," but the way the person confronts these and other systems, based largely on his past experiences, which are organized, however loosely, into "perspectives of existence," priorities, values, and belief systems of the person, all of which are subsumed under the concept of *schemata*.

Q factors represent schemata. But there is nothing mysterious at issue, merely the ordinary day-by-day communication possibilities of the individual, as discussed earlier, in relation to concourses.

CONCOURSES

The concept of a concourse corresponds to Brouwer's

like peas in a pod, and *subjectivity, opinion, understanding, and communication pleasure* are all hand-in-hand, and our theory has to do with these matters. The two domains, alike, can be looked upon in terms of the "utterances" they encompass (as logical-positivists would say) and differ only intrinsically in one profound respect, that observations and measurements can be made by anyone (in principle) or even by machines in the objective domain, whereas in the subjective only the individual himself can observe and measure (order, position) his *own* subjectivity (Stephenson, 1972a). It is for this reason that Q methodology is so significant, as a *closed* system (like the theory of thermodynamics) for making subjective measurements (see Stephenson, 1972a: 18n).

(1967) mycelium model for mass communication, extended to cover all subjective regard of communities, institutions, tribes, coteries, families, and the individual himself. All have communication complexes particular to them in their day-to-day conversations and social contacts. Brouwer refers to it as a "mushroom growth," and conceives of it as comparable to folklore:

Mass communication research would profit [he writes] from an approach which tries to describe the folklore, the shared elements in informal mass communication, and its differentiation as to communication groups and communication situations. (Brouwer, 1967: 233)

What people are talking about informally, or could do in this respect, looks objectively like a "complex, chaotic, tangled skein of innumerable criss-crossing networks between people" (Stephenson, 1969a: 69). Klapper (1967) considered that there is no need of a basic theory for the matter; but Brouwer defended his position with the thought that though there was probably not one "beautiful general theory" explaining the networks, a model seemed possible to account for all the research data so far accumulated in mass communication research (Stephenson, 1969a: 69). The data, however, are all from the objective frame of reference, and although important conclusions have been reached that way, they are piecemeal, such as the "two-step flow" of communication of Katz and Lazarsfeld (1952) and the "active" mediators described by Trodahl and Van Dam (1965-1966). The proposal here is to look, instead, at how the *individual* sees things.

The concern in a concourse, therefore, is with informal or other forms of conversational possibilities, looked at from the standpoint of the individual involved concretely in concourse situations.

SCHEMATA

This concept, *schemata*, corresponds to Gerbner's "image" but is broader and closer to nature. A schema is

a loosely organized, active, apperceptive system of subjectivity, as defined by Bartlett (1932) and more recently by Vickers (1967), but with roots in much older Herbartian psychology, as *apperceptive mass*. Based on past experiences, the individual develops interests, values, beliefs and the like, not as items of knowledge or information stored up in memory, but as active systems which determine what the individual will perceive or react to or have fantasy about. The individual sees things the way he does because of the schematical function of his communicability. Even about so simple a matter as "it is raining," individuals react in a loosely preconceived and organized manner which, it seems certain, is their mode of conversation about the matter, and which can be adapted, slanted, and heightened or the like to suit new situations. Some individuals may never develop coherently with respect to a particular concourse;⁴ others, however, develop feelings, interests, and beliefs which take on a life of their own, schematically.

The operational definition of schemata is thus of primary methodological importance, and it is this that Q methodology has achieved in the manner exemplified by "it is raining."

Q FACTORS

Factors in our "working theory" are indicative of schemata. The literature is replete with studies of interests, roles, values, images and the like, all of which are conceived in this theory as schemata, represented by factors in relation to concourses.

The factors are *operants*: Matrices are looked at for what the data tell us, not what we project upon them as hypotheses or categorizations.⁵ Q factors are

4. It happened in the example for the 15 graduates vis-a-vis "it is raining" that all were on one or another factor. But usually in our studies some individuals are on none of the factors, suggesting lack of any consistent or coherent schemata for the concourse at issue.

5. Thus the author does not indulge in routine

in no essential way dependent on the instrumentation: Different Q samples, different Q-sort score distributions (forced or unforced) and even different conditions of instruction may have little intrinsic influence on a factor.

It is important to realize that in Q methodology all scaling problems are solved, the data for all Q factors, all factor scores, for all Q samples, and all concourses, being in standard scores, mean zero (0), standard deviation 1.00. One doubts whether the importance of this has been sufficiently widely recognized.

UNDERSTANDINGS VERSUS EXPLANATIONS

Interpretation of Q factors leads to understandings, not explanations in objective respects.

The dispute here is ancient and is being revived by epistemologists and methodologists, for example Popper (1967) and Jarvie (1972). In one of the present author's series of papers on applications of communication theory (1972ab) Q methodology is applied to this domain in a manner that must be surprising to Popper, Jarvie and others: For the moment it is only necessary to agree that explanations have reference to objective knowledge, and understanding to subjective. The matter is important, however, to shake down from the tree of knowledge some ripening communicable apples.

Basically, the concern is with "statements" ("utterances" in logical-positivist language) but with a

factor analysis, e.g., merely by varimax procedures, but accepts simple solutions for a few factors which are indicated not by points in multidimensional space alone but by the concomitant conditions of instruction eliciting the Q sorts in the first place. Nor is it assumed that the experimenter's meaning for a given condition of instruction is also the Q sorter's. In all cases the concern is with complex interbehavioral situations, and interpreting a factor is an involved abductive matter in which one tries to place oneself "in the mind" of the Q sorters.

sharp distinction between *fact* and *opinion*. As noted earlier, *facts*, *information*, *explanation* and *instruction* go together in objective operations. Facts are either true by definition (e.g., logic, mathematics) or else have reference to *use* in the real world, as Peirce, the logical positivists, and almost everyone else agrees (Hormann, 1971). The meaning of anything, says Wittgenstein, is its *use*. Facts are essentially instructions to tell us how to bring about change in the outside world--rather, we are not sure about matters in the real world until we can bring about change there (Stephenson, 1972a). Computers on this basis can solve logical problems (Newell & Simon, 1956) and given appropriate instructions can do much of the routine work of the world. Fundamental to it is information theory (Shannon & Weaver, 1949). It is widely agreed that the term *explanation* should be reserved for matters of fact, for tested hypotheses and proofs, i.e., for objective relations (Jarvie, 1972).

MacKay (1969) on these same objective grounds defines meanings as "states of readiness" to act in certain ways, in mechanical, i.e., objectively determinable ways. Each "statement" of the concourse for "it is raining," in MacKay's terms, is given a vector value (\sqrt{m}) in multidimensional space, the vectors having reference to contingencies and "preconceived possibilities." The total information for the statement "it is raining" is then the *vector* sum of its innumerable vector components ($\sqrt{m_1 + m_2 \dots}$). MacKay, however, has to go to some strange mechanical "scratching" mechanisms and the like to make his *explanations* work, and though plausible, they are remote from what nature has imposed between any such mechanisms and the lived experience of individuals, the "realities and potentials of the human condition." The self-same vectors are at issue in factor-analytic theory, but in Q methodology they are put upon a concourse by the individual in a thousand-and-one dimensions in relation to (i) his schemata, and (ii) the immediate situation.

The domain of opinion is quite another matter. Opinions are subjective, belonging to an individual as his dreams, wishes, fantasies, ideas, imagination,

musings, and feelings, all locked up within him, and that we cannot make objective: We cannot by having a wish make the wish come true. But as noted earlier there is only *one* difference between opinions so regarded and facts in the objective world: It is not that they are mental, psychical, phenomenological, consciousness, or the like, but merely that only the individual himself can observe and measure them, whereas it is a *sine qua non* of objectivity that everyone (or machines) can make the observations and measurements (in principle). We see, however, that Q method makes it possible for the individual to observe and measure his own subjectivity, and this without operational connections with anything outside him --no norms, no objective scales intervene. *He* indicates what is *important*, what the *values* are, what the *valency* is, and the *themes*.

But all is subjective to the person. Thus, with respect to "it is raining," we learn that individuals on factor F_1 "see things" that way, poetically. Also, that this in turn can be a complex of schemata for a single person, as f_1 , f_2 and f_3 were for person No. 4. But what we put into the system are *our* interpretations, the *experimenter's* understandings. It is not even to be assumed that f_1 , f_2 and f_3 *explain* F_1 . The interpretations, however, are as close to the real nature of the subjectivity as we can make them: The factors are at least a first approximation to the subjectivity at issue and put checks upon mere speculation and unsupported understandings.

But we say that a person's schemata develop from his past experience, organized that way as an interest or the like, and this is open to objective verification. No. 4's "poetical" schemata could be checked, too, by engaging him in conversation about "it is raining." It is possible, also, to predict an individual's communication in broad terms from prior knowledge of his schemata (Mauldin [1972] has an example of the kind). One may wonder, also, what might be done in clinical therapy to bring a person's schemata in relation to *himself*, much as one might ask how, for No. 4, his self can become attached to f_2 and f_3 as well as f_1 , and as has indeed already been under dis-

cussion in clinical psychology (Parloff, Stephenson & Perlin, 1963). Or, again, message systems may be created in relation to known schemata, to make it more likely that people will not only look at the messages but *identify* with them, with an expectancy of effective communication--a matter with which advertisers are familiar. All such are in the domain of explanation and objectivity. Obviously, understandings may be put to use in the real world. When one asks what should come first, however, understanding or explanation, wisdom suggests that we look before we leap. It is our position that the pristine character of understandings must be maintained the better to make cogent decisions vis-a-vis the real world outside, and this is the burden of our theory. We are not averse to *uses*: but we revere understandings as central to all else.

We may now return where Ruesch and Bateson (1951) began. One can communicate within oneself (in fantasy, in one's personal history subjectively regarded), or with others (in conversations, or inside a book), or vis-a-vis the mass media (mass folklore), or with nature (acculturation, with mountains or monuments): all are in relation to past experience which is organized schematically "in the mind." That mind, however, is sheer talk, more or less, represented in concourses. Find the schemata for a patient in clinical therapy or for a devout Catholic in prayer; for housewives gossiping over the backyard fence or for philosophers in a heated argument; for a reader immersed in a book or for an audience listening to a political speech; for an audience viewing a violent television program or a theater-goer immersed in a movie or film; for a society confronting nature and culture--find the schemata and one has gained understandings. What one does with these is quite another matter. Moreover, the understandings are *ours* (the scientist's), and not necessarily the subjects' own.

CENTRALITY OF SELF

The self is given a special place in the "working ther-

ory" as is indicated in the exemplar for No. 4 because it helps us to penetrate into schemata.

The self, in simple terms, is merely what one says of oneself. As Cherchez La Femme remarks, "I, sir, am having a private conversation with *myself*. I am talking to *me*." The conversations are schematical, like all else in communication, and can be operantly discovered. That the self has been elusive may be granted. For the present it is enough to say that a method now exists for pinning it down in terms of communication theory. Indeed it was our first application of concurrence theory, and its importance lies, of course, in what a person identifies with. Most of us attach importance to one's *self*, yet few really know themselves as they are schematically, and this is the source of the most profound perfidy and tragedy of the human condition.

Continued in the next issue

PART II. CONCOURSE THEORY APPLICATIONS

The core of our theory...rests with these syntheses, these configurations of statements from a concourse, mediated by "focalizing attention" and giving rise to operant structures. (William Stephenson)