MIND AND MEANING

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> The mind, that ocean where each kind Does straight its own resemblance find; Yet it creates, transcending these, Far other worlds, and other seas.

> > A. Marvell, The Garden

In November 1978, a symposium on "Mass Communication" was organized by the University of Amsterdam. During this symposium, Professor William Stephenson (1978) presented a paper entitled "General Theory of Communication." I was asked to offer some comments on this paper. There was not much time left, however, a phenomenon not unknown in meetings of this kind, and so I had to restrict myself to a few brief remarks.

When, a few weeks later, I received an invitation to publish my comments in this newsletter, I was agreeably surprised. Apparently, Stephenson had considered my remarks more or less relevant, an evaluation of which I myself felt far from sure. Anyway, I accepted the invitation; whether that was a wise decision, the reader may decide.

Before I start, I have another confession to make. I had met Stephenson once before. That was in 1946,

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when the British Council offered me, as an inhabitant of one of the newly liberated countries, the opportunity to visit a number of universities in the United Kingdom. Oxford was on my schedule, of course, and there I was graciously received by Stephenson, at that time still in uniform. After more than 30 years we met again, this time in Amsterdam. During the interval, I had followed Stephenson's work at a distance (in more than one sense). His interests and mine developed in different directions. Consequently I cannot claim familiarity with all his published works. Still, though we are using different approaches, we share a common concern about fundamental issues in psychology. This is another reason why I, in a sense an outsider, nevertheless venture to formulate some ideas, "free associations" rather than a systematic discourse, on Stephenson's communication theory. Although they may fall below the level of sophistication usually achieved in this newsletter, they have one redeeming quality all the same: thing more, they are "subjective"!

THE DETERMINATION OF BEHAVIOR

It is a fundamental postulate of psychology that behavior is determined, and the task of psychologists is to find out how. The set of determinants functioning at a given moment I call the situation; therefore, behavior at any moment is determined by the situation. Furthermore, the set of potential behavior determinants is infinite: It includes not only the whole physical universe, but also the products of (abstract) reasoning and of (creative) imagination.

Any situation is both personal and momentary. No two situations are identical. Sometimes, however, different situations may contain subsets of identical determinants; otherwise science, communication, society and even human life itself would be impossible: Man is a "social animal." Also, some behavior determinants are, to a large extent, constant over time. I call them transsituational. The set of transsitua-

tional behavior determinants includes those determinants we refer to by words as "anatomical," "physiological," etc.

I am well aware that these terminological statements would need further elaboration to be convincing, or even clear, but they contain several words that will be used over and again in the following paragraphs, and are meant to indicate roughly the meanings I attach to them. Words are sometimes a vehicle for, but often an obstacle to, understanding, and I want to eliminate at least a few of those obstacles. This is, in my opinion, particularly necessary under the present circumstances: Some of the key words mentioned above Stephenson and I seem to use in different senses. The first, and perhaps most important, is "behavior." Throughout this paper I shall be using it in one of its (many) standard meanings, viz. the observable activity of a living (human) being, where "observable" means "equally accessible to an (in principle) unlimited number of observers." This implies that mental activities, according to my definition, are not behavior. Let me add immediately that they are determinants of human behavior, and highly important determinants too. Perhaps an example can serve here to clarify my point of view. Stephenson describes how his 4-year-old granddaughter performs Q sorts under different conditions of instruction. She behaves in various ways: to, talks about, and arranges the material (picture postcards). Undoubtedly, her behavior is determined by her mental activities, by her mind; but it is also, and at the same time, determined by, for instance, the visual and motor systems that constitute the necessary conditions for the behavior in ques-To put it briefly, her behavior is neither mindless nor disembodied. In the context of explanation, however, we should emphasize the mind: girl's behavior makes sense, and all sense springs from the mind (so does, unfortunately, a lot of nonsense too).

MIND AND ITS MANIFESTATIONS

Human behavior is endlessly varied. In its determination the human mind nearly always is involved. In other words, the mind is seldom, if ever, at rest. For this reason, its study is of fundamental importance to psychology. But, as Stephenson points out, psychologists have mainly been interested in its products rather than its operations. The enormous efforts in the sphere of "mental testing" testify to this. Even in the "psychology of thinking," from the Wurzburg school to present-day computer simulation, a certain type of achievement has been emphasized, viz. problem solving. Undoubtedly, many valid insights have been obtained in this area, but its boundaries are far too narrow to encompass all forms of mental activity (or mentation).

Human situations are to some extent comparable to snowflakes: They are innumerable, they exhibit a multitude of forms, and above all they are highly perishable. Q methodology, Stephenson's great contribution to psychology, was designed to deal with this "infinite variety," to make it accessible to scientific exploration without distorting it. Q sorts can be carried out with all kinds of perceptual or experiential data, and as many instructions can be used as the experimenter can invent. To my knowledge it is the most flexible technique in psychology. And it works, even with small children.

It works. From this amply documented fact alone I should like to draw some general conclusions, again in my own terminology. Let us take once more the example of the 4-year-old girl. She is able to arrange the postcards under different instructions: What she thinks about herself, what her mother, her brother, her teacher think about her, etc. Each of these instructions offers a different perspective; even a young person is apparently able to move easily from one perspective to another. Now, what is a perspective? I suggest that it is a point of view in terms

of which data (percepts, etc.) can be arranged, i.e., can be ordered. The picture of the human mind, emerging from the universal applicability of the Q-sort technique, is that of an infinite capacity for ordering an infinite number of cognitions.

LAW AND ORDER

Notwithstanding this ominous title, it is not my intention to discuss political issues. On the contrary, I belong to that rapidly dwindling minority who think that politics (the search for power) and science (the search for knowledge) are not identical. I want to consider law and order from a quite different perspective, which I shall illustrate by a quotation from Stephenson's paper:

With respect to lawfulness, laws of course represent regularities in nature, but it is usually forgotten that they are also conditions of instruction, telling the scientist what he might expect.

A law, then, is found when a scientist looks at nature in a specific way, adopts a certain perspective, selects and orders the data according to the "instructions" he is following. As a matter of fact, these "instructions" are what makes him a scientist. They are mostly not of his own invention; they have been slowly developed, over the centuries, in our culture. They are rules that should be followed; they provide the norms by which a scientist should judge the outcome of his own mental activities, as well as those of others. I call them normative determinants.

Thus, the self-reference mentioned so often by Stephenson is not absent in scientific work. The scientist's mind is first of all a human mind, and as such capable of ordering any data whatsoever. But special requirements, special criteria apply to the products of any mental activities which deserve the qualification "scientific." They bear a formal cha-

racter, and are derived from formal disciplines like logic and mathematics. Metaphorically speaking, the scientist listens to an "inner voice" telling him what is and what is not "acceptable" (consistent, justified, etc.). So, in their own (and different) fashion do composers, painters, writers, etc.

Self-reference: What does it imply? According to Stephenson it is a universal, a fundamental characteristic of the human mind. In the most general sense it means that a person can observe himself, not only his external appearance, as in a mirror, but also his "inner" activities: His feelings, his thoughts (the latter perhaps only retrospectively). This possibility of observing oneself constitutes the necessary condition for judgments about oneself, positive or negative, for self-regulation (e.g., conforming to rules), or for intervention (e.g., use of cosmetics). In other words, human beings do not "coincide" with themselves, but are able to create a distance between "inner" observer and "inner" observed. This is why they can produce not only art and science, but are capable of living within a social structure. It is also why they are liable, at times, to experience guilt and shame. So, psychologically speaking, law and order in the political as well as in the scientific sense have something in common after all: They both derive from the same fundamental characteristic of the human mind.

MIND AS COMMUNICABILITY

Stephenson says that "Mind is nothing but human communicability," surely a bold and provocative statement. As with all "nothing but" propositions, it needs but one contradictory instance to be refuted, and it challenges the reader to think up such an instance. Anyway, I, for one, upon reading it, felt the stirrings of a doubt.

It should, of course, be considered in the context outlined above. Communication implies self-reference. Let me quote Stephenson again:

It is not enough, of course, to have discovered operant structure for self-referent communication for the language we use with feeling and self-reference. There is need for an explanation of why it is so.

For this we begin by distinguishing between information and communication. Information is always without self-reference. Communication is always with self-reference.

Consider, then, "it is raining."

The *one* statement, "it is raining," is enough to inform us of a matter of fact in nature. But not ten thousand can exhaust what "it is raining" may mean subjectively. It is beautiful; as warm as tears (Longfellow). It dances down. It is a sign of the resurrection (the Koran). It is exasperating, a delight, a farmer's joy. Has it a father (Job) who begot the raindrops? Do I have to put something away for a rainy day? Is kissing in the rain more exciting than kissing in bed?...and so on, ad infinitum.

As to the multiplicity of possible subjective meanings, I find myself in complete agreement with Stephenson. I can concur, too, with his distinction between information and communication. But if he says "the human mind is nothing but communicability," and then goes on to state that "communication is always with self-reference," must I then conclude that an "informative" statement like "it is raining" is not (partially) determined by the mind? To me this seems improbable. Even harder to believe is that Stephenson's paper, by which these remarks have been inspired and that contains so much interesting information, did not originate in Stephenson's mind!

A dilemma. Fortunately, Stephenson himself is offering us a way out. I quote another of his statements: "Meaning is sui generis, always to be found, never assumed" (Stephenson's italics). This "law of the mind" ("Peirce's law") is "the most important of all." "Mind" here appears in its two-fold function, as the creator and as the discoverer of meaning. Re-

turning to our example, let us assume that someone says "It is raining." Let us further assume that it actually rains, i.e., that drops of water are falling from the clouds, and that the speaker is referring to this event. If we are present and hear his utterance, we shall not find it meaningless; rather, we often shall discover various meanings even in this trivial statement, e.g., disappointment (a hostess sees her garden party ruined) or contentment (a farmer after a period of drought). We may, of course, be mistaken, and we may silently attach our own subjective meaning to the statement (e.g., we may feel relieved because some proposed outdoor activity, which we did not like anyway, has now become impossible). If we had the inclination and the opportunity, we could detect all those meanings by using Q technique: Such is its versatility.

I would like to suggest that in all these different meanings there is self-reference as well as "event-reference." After all, the statement in this case is true. When a person is lying, the situation becomes somewhat more complicated: He is then trying to create the impression that his phrase carries "event-reference," while in fact it does not.

But the mind is always involved in expressing our feelings and thoughts as well as the lies we are sometimes telling. The mind is the "instrument" of truth as well as of error and falsehood. (I doubt whether even the Q sort is an infallible lie-detector.)

The spoken phrase, "It is five o'clock," can be meant as a piece of factual information (e.g., in answering a question); it may contain a warning ("Hurry up, or we shall be late"). The (unspoken) thought may carry the (self-referent) meaning: "Still another hour to go." What precisely is meant (and what is understood) depends on the actual situation. The difference between self-reference and event-reference, between "communication" and "information," in my opinion reflects the differences between the situa-

tions in which each of them is occurring.

CONCOURSES

"A collection of 'presentations' for anything is called a concourse." I have not been able to trace the eleventh edition (1890) of the Encyclopaedia Britannica, referred to by Stephenson, so I am not quite sure what is meant by "presentation," a word used by Ward in his contribution to this Encyclopaedia. Presumably it is a translation of the German word "Vorstellung," quite current at the time, but I cannot be sure. At any rate, presentations are "the simplest form of psychical life." And further on, "Every concept, idea, feeling, event and experience in common life has about it the possibility of innumerable 'presentations'." Then follows the quotation with which I opened this paragraph.

¹James Ward's "Psychology," typeset from Volume 20 of the ninth edition of the *Encyclopaedia* (Edinburgh: Adam & Charles Black, 1886, pp. 37-85), is reprinted, along with his Psychological Principles (2nd ed., Cambridge University Press, 1920), in Volume 8 of Significant Contributions to the History of Psychology (Series A: Orientations), edited by Daniel N. Robinson and published by University Publications of America (Washington, DC: 1977). According to Ward, "All that variety of mental facts which we speak of as sensations, perceptions, images, intuitions, concepts, notions, have two characteristics in common: -- (1) they admit of being more or less attended to, and (2) can be reproduced and associated together. It is here proposed to use the term presentation to connote such a mental fact, and as the best English equivalent for what Locke meant by idea and what Kant and Herbart called a Vorstellung" ("Psychology," p.41). Chapter 4 of Psychological Principles is devoted to Ward's "Theory of Presentations." Comments regarding Ward's influence are found in A.D.B. Clarke, "Seventy-five years of the British Journal of Psychology, 1904-1979," British Journal of Psychology, 1979, 70, 1-5. (Ed.)

With Stephenson, I think that it is extremely important that psychologists keep in mind the situations of "common life." What we want to understand is "the man in the street," the people in their everyday activities, problems and troubles. The whole apparatus, laboratories, experiments, sophisticated statistics, etc., are but means to this end.

But this background of everyday experience is extremely difficult to describe. In the words of the Victorian poet Patmore, it, "spirit-like, eludes embrace." It consists mainly of tacit assumptions; a genius like Proust can evoke it, but no description can exhaust it. Nevertheless it is somehow not quite unstructured; it provides, so to say, the stage settings and the platform for the enacting of life's drama. There are very many of these "settings," many "spheres of life." In growing up, we get more or less acquainted with all of them.

If I am not mistaken, the "concourse" mentioned by Stephenson is such a "sphere," such a "world" (the "world" of books, the "world" of sport, or, more specifically, the "world" of baseball, etc.). Concourses are subjective, but they are also shared. Their boundaries are fluid, as is their internal structure. They are not logical constructions. They do not lack a certain coherence; this, however, is not brought about by the nature of their content (which may be quite heterogeneous), but rather by a common feeling-tone.

This is, roughly, my interpretation of Stephenson's remarks on his "theory of concourse." Supposing-optimistically-that I am on the right track, I venture to add a few comments.

Concourses are both subjective and, to a large extent, shared. This implies that "subjective" should not be equated with "individual." Biologically speaking, each person is a distinct unity, separate, self-contained. But from the point of view of psychology, a biological individual becomes a "person"

mainly by becoming similar, i.e., partially identical, to others. An example: Insofar as we learn to speak the *same* language (e.g., English) we are, from the point of view of linguistics and psychology, indistinguishable. Otherwise, it would be impossible to construct an English grammar, for grammar contains a set of rules codifying usage. If the "native speakers" were not uniform, i.e., indistinguishable in their usage, no such rules could ever be found

I do not mention this because I want to enter into a discussion about the "generalized other" and similar concepts, which for a long time have been en vogue in sociology; rather, I would like to point out that "rules" (e.g., grammatical rules) imply order. Order originates in the mind; communication and understanding are possible only because, and insofar as, we discover in the utterances of another person the effects of the (order-creating) operations of his mind.

MIND AS COMMUNICABILITY

Wherever we find language, we find mind. But there is more to communication than language alone. First of all, there are the so-called non-verbal forms (or modes) of communication: Paralingual, extralingual. They are, as we know, "conventionalized" to different degrees; they usually express "feeling states" rather than thoughts (if we limit ourselves to this rough dichotomy). Insofar as they express "feelings," they fall under the concept of "mind" as defined by Stephenson. Still, in view of their frequency and importance, I am beginning to feel somewhat uneasy; I become aware of a problem not yet discussed. "Mind is communicability," but what is communicable? Or, what are the criteria for communicability?

A few examples may serve to illustrate this problem. In many language areas there are regional variants, dialects, etc. Between such a variant and the "standard language" there are differences in vocabulary and especially in pronunciation. A "native speaker" usually has no difficulty at all in identifying the words as spoken by a Texan, a Cockney, or a Bavarian as the case may be. This identification (or categorization) is completely independent of the "content" of the message. More or less comparable is the situation when I am called on the phone. Usually I can, without the slightest hesitation, decide whether the caller is male or female. Often I can identify friends or acquaintances and, of course, members of my family by the sound of their voices alone. And vice-versa, as I recognize them, they recognize me.

All this, I repeat, is completely irrelevant as far as the message is concerned. When I have a message to convey, I do not care about the personal timbre of my voice; it is a necessary condition for, but most certainly not part of, my (oral) communication. And I do not believe that my mind (such as it is) has had anything to do with the structure of my speech organs. Still, the person who listens to me identifies me as his friend, hears that I am a man, etc. Apparently, I communicate more than I wish, or more than I know. And this "more," in my opinion, is not "mental," not "mentally determined," at least insofar as my speech organs are involved.

I have mentioned acquaintances, friends, family members, but even a total stranger, who happens to notice me in the street or in a shop, manages to obtain many impressions—e.g., that I am a man of a certain age, that I am clean shaven, that my (greying) hair is rather short, that I am wearing glasses, etc. All this, and much else, the casual onlooker sees at a glance, even when he is completely uninterested in me and I am unaware of his presence. In others words, my physical appearance conveys a kind of "message" to a stranger; if this is communication, his mind is, but my mind is not, involved.

Many other similar examples could be added. I will refrain from doing so, however, for what I have said is, I believe, sufficient to indicate the difficulties I encounter while trying to answer the ques-

tion, What is communicable? These difficulties are so serious that I am inclined to substitute for Stephenson's "mind is communicability" another formulation, less terse, less elegant, but perhaps more adequate: "Mind is man's interpretative potential." I do not rule out the possibility that I have misunderstood Stephenson's intentions; nevertheless, I would like to compare my phrase with his, and, at the same time, "try it on for size."

SELF-REFERENCE

In the Encyclopedia of Psychology (Eysenck, Arnold & Meili, 1972), "interpretation" is defined as "an activity as a result of which a physical or psychological datum is related to a conceptual model which assigns place and significance to the datum." Perhaps the definition is not in all respects quite satisfactory: For instance, categorizing a "datum" as physical or psychological, in my opinion, is in itself already the result of an interpretation; and instead of "model" I would prefer "context." But these differences I consider minor. On the whole, I find it a useful definition and suitable to my purpose. Since it is rather long and somewhat cumbersome I will abbreviate it as follows: "Interpretation is putting into context."

Stephenson, when discussing communication, repeatedly mentions self-reference as one of its fundamental characteristics. Undoubtedly, the human mind may, in its operation, refer to itself, to one or more of its own activities or "states" (ideational, affective). What I am suggesting is that categorizing a feeling or thought as "mine," as a manifestation or result of the workings of my own mind, is an interpretative act. Furthermore, it is an act of which any "normal" person is capable. There are, however, circumstances under which this capacity seems to be lost, as in extreme (psychotic) states of depersonalization, where the patient interprets his thoughts, feelings, etc., as originating outside himself. We know this, because he still is able to

communicate with us. In other words, and to cut short a long argument, if the *lack* of self-reference should be attributed to an inadequate mode of interpretation, is it then not plausible to ascribe the *presence* of self-reference to an adequate mode of interpretation?

Schachter's (1964) situational theory about the emotions also seems relevant here. The identification of emotional states, according to Schachter, depends on the interpretation of physiological processes; in its turn, this interpretation is suggested by the situation in which a person finds himself.

In short, both in self-reference and at least in some aspects of "feeling," interpretation is of decisive importance.

Interpretation is a "subjective" activity. Here again, "subjective" is not synonymous with "individual." Many interpretations are shared with other participants in the same (sub)culture, and are acquired during the process of socialization. Perhaps even some interpretations are universal, because they are determined by the "psychophysical organization" of the human species.

If interpretations are subjective but not individual, neither are they always conscious. This was perhaps Freud's most important discovery, and remains one of the cornerstones of psychoanalytic theory. Our spoken "messages" convey more than we know; similarly our interpretations often contain more than we are aware of.

Now let us return to Q-sort methodology. Q sorts are factor analyzed. Why? I would say, in order to facilitate interpretation. Factor analysis is not used to *impose* structure; its purpose is to elucidate, to make manifest a hidden, a "latent" structure, already present in the material, but not at first sight apparent. It is not intended to distort, but to clarify (and simplify).

The Q sort's versatility reflects the limitless capacity of the human mind for interpretation, for putting-into-context, for ordering data. Sometimes the context is "self-referent" (as when a girl selects a picture which is most like her). may be "event-referent" (for instance if the postcards are to be arranged on the basis of color characteristics). I must add, however, that even in such an arrangement, subjectivity is not wholly absent. To take an example from another sphere ("con-In a typical psychophysical experiment the course"): subject is required to pay attention only to (selected) properties of a (single and usually "simple) stimulus. Nevertheless, the judgments are his and are experienced as such (particularly in the crucial area of the just-noticeable differences).

Instead of words like "sphere" or "concourse" I prefer the term "context." But it should be taken into account that, as I am using this word, there are contexts within contexts. Thus, a particular episode in a baseball game belongs to the context of this game, but the game as a whole may be considered in a broader context (e.g., the World Series); this, in its turn, may form part of a still larger context (the "world" of sports), and so on. Behavior (including lingual, expressive, motor, etc., behavior) will be (partly) determined by a context of inter-The instruction for a O sort provides pretation. such a context (including the presence of the experimenter, willingness to follow his instructions, understanding his language, and the like).

Earlier I mentioned the manifold of perspectives opened by Q methodology. What I there called "perspective" may equally be referred to as "context." A perspective may be considered as a principle of ordering; so may a context, since it is a complex of mutually interrelated "data," in which a new datum finds its place. (Cf. the quoted definition of "interpretation.") Interpretation also implies order-(ing). The immediate result of a Q sort is the arrangement, according to an instruction, of data by a

subject. It is a consequence of the interpretation given by the subject to the instruction and the relevant data. Factor analysis is necessary to enable the experimenter to find out the underlying principles of ordering applied by the subject. In the construction of a theory about subjectivity, a still wider context of interpretation is aimed at.

The ultimate goal of such a theory, in my opinion, is first to discover and then to explain both the possibilities and the limitations of the human mind. This is an ambitious program, overambitious perhaps; at any rate, it is an extremely difficult undertaking, vide the history of philosophy. theories should be anchored in observable data. Right from its beginnings in psychology, the problem of subjectivity has been an awkward one. It has been dealt with in several ways: By eliminating it altogether, by using unreliable techniques providing unreplicable data, and by the use of anecdotal and impressionistic approaches. On the other hand, Q methodology has given us a powerful tool to explore the still largely uncharted territories of human subjectivity. It enables us to catch subjectivity "in the act" without damaging or distorting it. Its data are public, and for this reason may be used in formulating and testing all kinds of hypotheses.

I have been hinting at the possibility that interpretation rather than communication is the principal function of the human mind. My argument has been brief and perhaps not thoroughly cogent. But whether one prefers to consider man as a communicator or as an interpreter (as homo interpres) is unimportant as far as the usefulness of Q methodology is concerned. Disputes about definitions are not quite futile, but they are not science's primary concern. The theoretical context, the "nomological network," is what we should be concerned about in the first place. It is such an interpretative context that supplies us with the criteria on which we may base our judgments about the usefulness of proposed definitions. Definitions, like all other categoriza-

tions, are neither true nor untrue; they are only more or less functional.

CONCLUSION

These are some of the thoughts which occurred to me while reading Stephenson's paper. Both in scope as well as in depth, my few remarks may fall short of doing justice to his ideas. An exhaustive comment would require not only a much longer paper, but also more sustained thought.

It will, I hope, have become evident that in most respects I find myself in perfect agreement with Stephenson. Even the fact that I have brought up, in a tentative fashion, one or two points where our opinions might diverge should be taken as a tribute to the "inspirational" nature of the work of this important pioneer.

"Meaning," Stephenson says, "has to be found, has to be discovered. The attribution of meaning is a creative act." What I have written has been an attempt at communication. Whether I have succeeded in making myself understood is a question to be answered by the reader. Hopefully his creative search for meaning has not been in vain.

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