

Linguistic Research Institute

Report No. 4b

NOTES ON BEHAVIOR DESCRIPTION

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The concept of a Person was presented in an earlier report (LRI Report #3) as a preliminary introduction to a foundational discipline for behavioral science designated as Descriptive Psychology. In the present report the concept of behavior description is developed in greater detail.

The connecting link between behavior description and the Person concept is given by the statement that "The study of human behavior is itself a form of human behavior." This statement was used previously as a standard of adequacy for any general conceptualization, whether explanatory or descriptive, of human behavior. Under this standard, any purportedly general theory of human behavior would be ipso facto incomplete, hence in principle inadequate, if it did not exhibit that relationship within the theory itself. The same considerations generate a parallel statement, i.e., "The description of human behavior is a form of human behavior."

Pursuing this latter statement, we may then ask, "Well, what form of behavior is that?" We already have a descriptive expression, i.e., "behavior description," to designate that kind of behavior, but clearly, it is not just a locution that we shall require, but rather, an articulation of what it is that the locution "behavior description" designates. We may proceed in this regard by reference to the three-person diagram which is used heuristically for the general purpose of representing in content-free form the interaction among individual Persons:

S .

P . . Q

For our present purposes we consider ourselves individually to be in the role of Q. In that role, we characterize a particular behavioral phenomenon, namely, that behavior of P which consists of giving a description of the behavior of S. Of course, whatever we say of P must also apply to us, i.e., Q, since Q is also engaged in describing behavior (that of P), and so we will not have to say anything directly about Q. This condition reflects the criterion of adequacy mentioned above. Note that there is an independent check on whether what we say about P will also apply to us as Q, so that the criterion is a usable one.

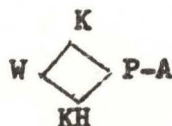
An examination of this situation reveals two kinds of relevant considerations. The first has to do with the content of P's description, or at least its logical form. From the basic concept of the Person, we derive a system of logical forms. Although a paradigmatic list of logical forms is given below, they form a system, not a list, since they can be used in combination and recursively to generate an unlimited number of distinct logical forms of description. Thus, this system provides the "logical grammar" of behavior description, and the describing of S's behavior by P must exemplify one of the logical forms in order to qualify as behavior description at all. After we have presented the paradigmatic logical forms, one of which is designated as "achievement description," we shall be able to say more perspicuously that it is under an achievement description (given by Q) that P's action of describing S's behavior must exemplify some one of the logical forms.

The second consideration is that of empirical validity. In this regard, we present several maxims which collectively serve as standards for the empirical validity of P's description of S's behavior. The maxims operate as logical constraints rather than as simple, explicit prescriptions. The constraint is that P's describing of S's behavior must directly exemplify one or more maxims and must fail to violate any of the maxims. P's description must conform to the maxims if it is not to be logically inconsistent with other statements that he would be prepared to make about S and his behavior. It is by way of the maxims that a statement of what S is observed to do may have the consequence that P changes his mind about S. Ordinarily, this consequence would be expressed by saying that P had empirically falsified a statement about S which he had previously accepted as true or possibly true. However, as indicated elsewhere, with respect to the Person concept and its use, the concept of truth is superfluous.

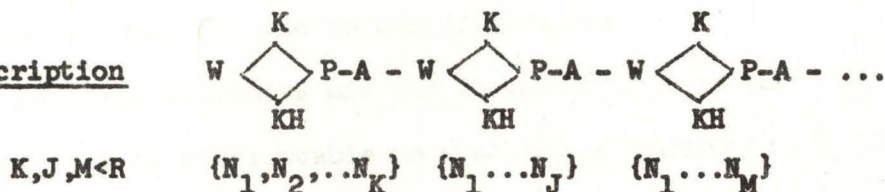
Correspondingly, if P and Q differ in their descriptions of S, their efforts to negotiate an agreement must, if they are not misdirected, take the form of a joint appeal to the maxims and to statements about S in regard to which P and Q do not differ.

I. Logical Forms

At any given time, the behaving Person will be engaged in some social practice. By virtue of that, he may also be engaged in a course of action. In either case, he is engaged in intentional action. Thus, we have identified three forms of behavior description which differ in their logical structure.

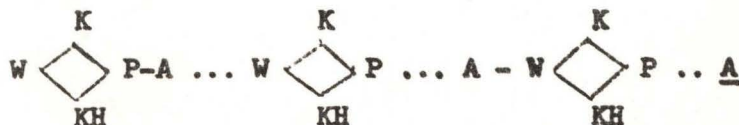
1. Intentional action description

To give an intentional action description is to be committed to all five parameters, i.e., want, know, know how, performance, and achievement.

2. Social practice description

A social practice is a pattern of actions engaged in by one or more persons. The actions of the different participants may be successive, simultaneous, or overlapping (thus, the diagram is a simplified one, showing only one linear series of actions). The structure of the practice is given not only by the pattern of actions, but also by which of the R participants has the option of engaging in each action in the pattern. Thus, each action is associated with a set of "activity positions" which identify the participants who are eligible to perform that part of the social practice.

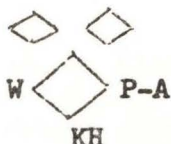
Social practices vary in extensiveness, and many of the shorter and simpler ones are components of longer, more extensive ones. The same practice, e.g., calculating sums, may be a component of various distinct practices. The basic practices are those which need not be part of any other practice, but are intelligible in themselves (N. B. Wittgenstein's "form of life," and "this game is played").

3. Course of action description

The concept of "course of action" is the same as that of social practice except in regard to the adequacy of the participants' skills for the task at hand. Since a social practice is the done thing, there is a way of doing it, and so carrying it off successfully in its paradigm instances has the characteristic of an action in that the success is attributable to what the participants know how to do rather than to luck, chance, or coincidence. In a course of action there is at least one point in the sequence where the participant(s) lacks the practical assurance of success in advance which is normally provided by the KH of intentional action.

Because of this feature, much human learning and the paradigm cases of problem solving fall under the course of action description. Likewise, the concepts of "strategy" and "motive" are subsumed here.

The comparison between social practice and course of action, and the reason the former is logically prior, may be illustrated by reference to most games. Playing chess is a social practice, and we all know how that is done. Winning at chess, if it is a contest and not a massacre, can only be a course of action. It is the existing game which defines that particular A (= checkmating) as an intelligible goal, hence renders intelligible a course of action directed toward that A. Likewise, it is the hostility formula (see "EFR" paper: Provocation by O elicits a corresponding hostility by P, unless...) which renders intelligible the A in "his motive was anger."

4. Deliberate action description

In intentional action, the parameter K refers to some distinction between an X and its correlative non-X's (e.g., yes vs. no; blue vs. green, yellow, etc.; north vs. south, east, west; anger vs. greed, fear, envy, etc.). The action may be described as a case of treating something as being a case of X rather than non-X.

Deliberate action is that special case of intentional action in which the distinction in question is or involves the distinction between one kind of intentional action and another.

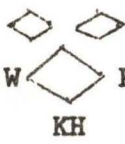
Note 1. Deliberate action, rather than merely intentional action is the basic case and the paradigm case of human behavior. (The behavior of most animals is merely intentional, whereas human animals normally behave deliberately.) In the three-person diagram, the behavior of P must be of this sort, since he is describing S's behavior as being of one sort rather than another. Both of these considerations apply to "Q," since that person is describing someone's behavior and, moreover, he knows and says that that is what he is doing.

Note 2. The fact that as a behavior describer P's behavior must be

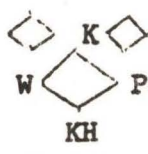
represented as  allows a clarification of why the statement

"the study of human behavior is a form of human behavior" is a standard of adequacy for any putatively general theory of behavior. Any such

theory is the product of deliberate action, since it constitutes the statement that all behavior is of a certain sort, B (the sort defined by the theory), rather than any other sort. If B is logically less

complex than  W P-A or if it is logically incompatible with the

latter, e.g., by virtue of being a deterministic causal description, then to assert the theory itself is to assert that no such behavior as

 W P-A ever occurs. In turn, this is to deny that the theory

itself is the product of deliberate action. But if it is not that, then it does not have the status of an assertion, and so nothing has been said there. (And, moreover, nothing ever has been said.) And if nothing has been said, then nothing has happened that one could agree or disagree with, and nothing there calls for any answer, either. Thus the "theory" that all behavior is of type B is not merely incomplete, but self-annihilating as a possible general theory of behavior and could only be regarded as a more or less inconvenient fiction.

Note 3. The designation "deliberate action" is not to be taken as implying that there is an episode during which deliberation occurs. It is "deliberate" mainly in the sense of knowing what one is doing.

Note 4. The forms of behavior description are combinatorial, not simply discrete. For example, the distinction involved in a deliberate action may not be that of one action vs. others, but instead that of one

social practice vs. others or one course of action vs. others. And in either of these, some numbers of the actions represented there might be deliberate actions, not merely intentional actions. And such a deliberate action might be one in which the distinction in question was that between one social practice and another (e.g., the one being engaged in vs. others). Etc. Etc. Similar considerations will hold for the further forms described below.

Note 5. The paradigm case of human behavior is not merely a deliberate action in which the distinction between intentional action B and other intentional action C is involved. Rather, that case is found where the individual, P, engages in B because it is B, rather than C. It is in this sense that we regard human beings as having freedom, choice, and the correlative responsibility in regard to their behavior.

If the action, B, is indexed by W_B , K_B , KH_B , P_B , and A_B , then the statement that P engages in B because it is B rather than C is not simply a reiteration of the fact that P wants W_B and acts so as to achieve it. Rather, because behavior always occurs within an organized matrix of social practices (the culture, the society), the doing of B by P then and under those circumstances is not merely a case of doing B. That this is so is simply an instance of the general character of part-whole relationships, and we have already seen how it works in the relation of type X behavior to the life history of which it is a part (Persons, Part II). Another example having more direct relevance was given above, i.e., the chess example showing the relation between the

social practice and a course of action. The practice of chess makes certain achievements intelligible as goals, hence creates the logical possibility of having the corresponding wants. It is possible to want and try to win, protect the king, gain control of the center, make a waiting move, etc. "Playing chess," however, is not one of the wants which the game of chess makes intelligible. Rather, "playing chess" identifies the perspective a person is operating within when he is playing chess. That perspective serves as a standard in that it brings with it the logical possibility of appraising particular moves, strategies, etc. as effective or ineffective, inept or brilliant, in that respect. Moving P-K6 is per se neither effective nor ineffective, neither inept nor brilliant, even within the perspective of chess. It is, rather, making that move now, in these circumstances, that could always be appraised in this way. And of course, the appraisal carries with it grounds for doing or not doing it.

A consideration of real-life deliberate action leads us to identify four perspectives or standards which are actually used in appraising and choosing among actions. As to the necessity of such standards, we can only say that at least one such standard is necessary if an individual is to be able to choose among behaviors. That there are at least these four is an empirical observation, at least for the present. The four standards are the ethical (ethical-moral), the prudential (self-interest), the hedonic, and the aesthetic (aesthetic-intellectual). The last of these is perhaps better rendered by the more primitive concept of "fittingness," or, in the language of the "basic human need" theorists,

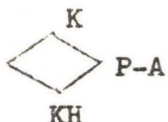
"order and meaning." The conceptual experiment proposed for checking the validity (relevance) of these standards is to imagine an individual to be completely lacking in any one of these perspectives and ask whether such an individual would not be a parody of a person rather than straightforwardly a person (paradigm case methodology here).

The four standards are themselves combinatorial or mutually assimilative rather than mutually exclusive. The degree of mastery and extent of application of these perspectives is codified by individual difference descriptions. If we take any one perspective, say the prudential, as a starting point, we may ask, how would an appraisal of this sort work as between two individuals who are otherwise identical except that one has a greater mastery of the ethical perspective and applies it more widely? The answer is, it would work differently. If a person can and does operate ethically, then, what is in his self-interest is in general different from what it would be if he could not or did not, because if he can or does do this he is a different person from what he would be if he could not. Likewise, what is fitting for him to do will be different in the two cases. And so on. Because the four perspectives are not mutually exclusive, it is easy to maintain the debating stance that all behavior represents the exclusive application of one of those standards. ("Your doing that shows that you're getting some pleasure out of it, otherwise you wouldn't do it"; "Nobody does anything unless he's getting something out of it"; etc.) To take such theses seriously is to qualify under a distinctive range of

individual difference descriptions (cynic, stoic, philistine, hedonist, etc.).

Finally, since the existence of more than one perspective for appraising and selecting actions presents a selection problem in itself, i.e., which perspective do I give priority to now, there is a more comprehensive pattern unit, the "way of life," which serves as the larger context for appraisal. This is closely related to the individual difference concepts. The latter reflect a patterning of type X actions within a life history. The way of life is a patterning of a life history. From the aesthetic and ethical perspectives within our ways of life we may say that it is at this level that social engineering must be conceptualized.

Note 6. Up to this point, the four logical forms of behavior description correspond to phenomena. There is behavior of each sort, so that the paradigm case of the correct use of these descriptions is simply a case of describing B as "B." In the following forms this correspondence does not hold, and we are involved with a number of partial descriptions (Persons, Part I) and a degenerate case. It is the availability of these descriptions via paradigm case methodology which gives a major point to talking about forms of description available to P rather than simply talking about what S is doing. The partial descriptions which follow are partial descriptions with respect to intentional action.

5. Activity description

In giving an activity description of S's action, P withholds commitment regarding the W parameter. Ordinarily P's reason for withholding commitment is that he is unsure about this aspect of S's action. Ordinary English does not appear to contain either a distinctive set of locutions for giving activity descriptions or a descriptive label for designating a description as an activity description. Frequently, activity descriptions are given by using certain disclamatory expressions such as "It looks as if...", "It seems as though...", or "Apparently..." Such expressions, however, are ambiguous in regard to which aspect of the behavior being described is being refused commitment. A more effective and not infrequent device is to give the action description and follow that with a specific disclaimer. For example, "He's walking toward the building, but I don't know why," or "He's listening to the lecture, but I don't know why." One unfortunate consequence of our mastery of this form of ordinary discourse is that it suggests that the behavior that people engage in is quite separate a thing from their reasons for doing what they do. In this way, for example, people who have undertaken the task of the scientific study of behavior have defined behavior (implicitly) as something distinct from motivation and then many of them have found their major employment in the task of reconnecting the two, usually via a physiological or otherwise causal, underlying process

model. In turn, the thus impoverished concept of behavior has sustained, if not generated, a correspondingly impoverished concept of human nature.

Although the usual reason for being noncommittal about S's motivation is that P is unsure about it, there is another use which is of special interest to social scientists. Consider a modified social practice description in which the component action descriptions are replaced by the corresponding activity descriptions. This is now a representation of the purely procedural aspects of the social practice. It is this aspect which is common to the individual who simply and straightforwardly participates in that practice and to the individual who pretends to do so or has an ulterior motive for engaging in that activity. In the latter cases the behavior of the individual will also qualify for an action description and a social practice or course of action description of a very different sort. For example, if an individual plays chess for the sake of presenting himself as an intellectual person, his behavior will qualify for a course of action description referring to the self-presentation and an activity description referring to chess playing. Thus, the activity description provides the additional resources required by P to represent deception or alienation on the part of S. In general, any case of "going through the motions" of participation in a social practice may be represented by the applicability of activity descriptions for which the corresponding action descriptions do not apply.


In addition, the activity form of the social practice description provides a representation of behavior interaction patterns, and more

generally, group structure and group processes without reference to the motivation of the individuals involved.

6. Performance description  P-A

This is a highly reduced form of description in which P is noncommittal with respect to the W, K, and KH parameters of the action. Since the parameter P refers to the process features of the action, the performance description leaves the observer P uncommitted as to whether S has acted at all or merely undergone a movement (compare "his eyes blinked" with "he blinked his eyes").

Ordinarily, this form of description has little application, since starts, tics, twitches, and blinks are about the only occasions where P would have that kind of uncertainty about S. In a technical context, however, the performance description has a great deal of historical interest and current vogue, since almost universally when psychologists or philosophers talk about "behavior," they are referring to actions under a performance description. Thus, it is not merely motivation (W), but the "stimulus" (K) and habit (KH) or "cognitive structures" (KH) which have to be brought into the picture and ponderously reconnected to 'behavior' (P) in order to provide 'explanations' of 'behavior.'

7. Achievement description  - A

In giving an achievement description of S's behavior, P has reference only to the result, or product of S's behavior.

The achievement description has a particular methodological interest and historical importance in that among the applicable

achievement descriptions of S's behavior we will usually find some (usually of the sort we would call "concrete" or "objective") which are readily established and generate little disagreement among observers. For example, "Eighty-three bar presses per hour," "Sixteen trials to criterion performance," "Solved the conservation problem," "Received an IQ of 110," "Hit a home run," "Landed on the moon," and "Said that he would come at six o'clock" could all qualify as achievement descriptions.

Note 1. Ordinarily the relation of performance to achievement is one of succession. That is, the performance precedes the achievement as cause precedes effect, and engaging in that performance is what brings about that achievement. (The notion of man as an agent is not merely that he does things, but also, that he causes things to happen by doing what he does.) There is, however, an interesting limiting case where there is no difference between performance and achievement and the distinction can be carried through only because it is anchored in paradigm cases where there is a difference. Many body movements are of this sort. For example, I grasp the cup by first reaching for it, then...etc. And perhaps I could be said to reach for it by moving my arm in a certain way. However, I do not move my arm toward the cup by doing something else first. Moving my arm toward the cup is what I do first. But moving my arm toward the cup is also an accomplishment. Thus, moving my arm in this way is both what I do (performance) and what I accomplish (achievement). The fact of there being the limiting case has two

significant consequences. First, it prevents an infinite regress of means-ends relationships (some of the Zeno paradoxes may be thought of in this way). Second, since the limiting case is reached in a finite number of steps, this state of affairs represents a limit on what a person can be instructed to do. (Saying "Do X" specifies an achievement. If a person does not know how to achieve X via some relevant performance, we may pick a relevant performance, P_x , and say "Do P_x ." P_x is now a new achievement. If the person does not know how to achieve P_x via some relevant performance, we may pick one, P_{xx} , and say "Do P_{xx} ," etc.

Note 2. Because the relation of performance to achievement is usually that of process to outcome, an achievement description can always be interpreted as a reference to a hypothetical process which produced it. For example, if writing down "3" on a piece of paper qualified as having solved a problem (e.g., "...what is the smallest number of trips required to get the missionary and the cannibals across the river."), then that achievement, i.e., solving the problem, may be designated as the outcome of a process. What process? The process of problem solving. If no such process is observable (all we see is that he writes "3" on the paper), it may still be retained as a hypothetical process which precedes the observable process (performance) of writing "3" on the paper. In a similar fashion, saying "I'll be there at six" may be thought of as the outcome of a hypothetical process of activating the grammatical structures exemplified by that sentence.

Note 3. A more detailed discussion of the relationships pointed to in Notes 1 and 2, above, would require extensive reference to the "reality calculus" which defines the concepts of "object," "process," "event," and "state of affairs" (LRI Report #4A).

8. Performative description
$$\begin{array}{ccc} & K & \\ W & \diamond & P - \\ & KH & \end{array}$$

The performative description is the formal complement of the achievement description. In giving this form of description, P makes a commitment with respect to all of the parameters of S's action other than the achievement.

Recognition of a possible discrepancy between the action (in the restricted sense of performative) and its achievement reflects a recognition that accident, luck, chance, and coincidence do play a part in human affairs, and that, consequently, even when we do what we know how to do, we may fail to achieve the expected result. ("The operation was successful, but the patient died.") It was from such considerations as these that the original formulation of intentional action in "Persons" made reference only to the four parameters of the performative description and the P parameter was at that time designated as the "overt attempt," whereas the achievement was left open as an empirical consequence. It appears, however, that if we are to speak of "knowing how" at all, there must be a range of paradigm circumstances ("under normal conditions") in which success is the norm and failures require explanation. Thus, the present five-parameter formulation represents

the paradigm case with respect to which the performative stands as a partial-description.

Note. If we restrict ourselves to verbal behavior, in contrast to intentional action in general, the partial-descriptions mentioned above will be found to show a close relationship to concepts developed in linguistic philosophy. For example, Austin's categories of "locutionary," "illocutionary," and "perlocutionary" appear to be straightforwardly the verbal version of performance description, performative description, and achievement description. The concept of "performative" in the philosophical literature appears to extend across at least the performance description and the activity description, and perhaps the performative description as well.

9. Marginal forms

The logical forms presented above do not exhaust the possibilities generated mechanically by considering five parameters taken one at a time, then two at a time, three at a time, and four at a time. (Note, too, that any of the partial-descriptive forms might appear in place of any action in a social practice or course of action description.) The forms mentioned explicitly do appear to be the ones most commonly and significantly used at the present time.

Certain other possibilities may be mentioned briefly. For example, the notions of "conation" and "sentience" which characterized the philosophy and psychology of the not too distant past may be given systematic representation. P may describe S and his behavior as

"conative" by virtue of the Want and Performance-Achievement combination

(W \diamond P - A). He may describe S as "sentient" by virtue of the Know

and Know How combination ($\begin{array}{c} K \\ \diamond \\ KH \end{array}$). The complementarity of these

pairs within the framework of action gives sense to the either-or character of sentience and conation as well as to their empirical inseparability.

Several other cases are of interest. For example, the analysis of fear and guilt (Persons, Part I), when generalized, gives rise to what might be called a "feeling" description. The ingredients here include

- (a) a specific discrimination (e.g., X vs. non-X, dangerous vs. non-dangerous)
- (b) having a built-in significance (e.g., what is dangerous is something to be avoided)
- (c) learned ways of treating something as a case of X (e.g., treating something as dangerous), together with
- (d) a learned tendency to act upon the discrimination without deliberation.

Or again, the characterization of symbolic behavior (Persons, Part I) includes the following ingredients:

- (a) P engages in behavior B_1 because of the way that it resembles behavior B (and therefore is the same behavior as B, under some description), and

(b) in the absence of the resemblance, P would not have reason enough to do B_1 .

Similarly, "unconscious motivation" descriptions include the ingredients

- (a) that P has a reason to do B,
- (b) has a reason not to recognize that he is doing B, and
- (c) is able to treat his behavior B as a case of doing some other behavior C, rather than B (though he may still accept B under an activity description--a significant point for a therapist who wishes to get B to see what he is doing).

It would seem that unconscious motivation, acting on a feeling, and acting symbolically are general schemata to which we assimilate many particular types of behavior. They differ from the logical forms described above largely by being more complex, and they are more complex primarily by virtue of bringing in biographical or individual difference concepts. Thus, they serve to remind us that there are Person descriptions (i.e., I.D. concepts) which are other than behavior descriptions and that these complex schemata show how both kinds may be used jointly. (See also Maxims 8 and 9, below.)

10. Cause-effect description



The C-E description makes use of a degenerate case of the intentional action paradigm. In the present case no distinction is made between the K and W parameters and no distinction is made between the KH and P parameters.

The existence of this form of description directs our attention to the relationship of the K-W and KH-P pairs of parameters in the intentional action paradigm. In each case the relationship is one of inclusion in that anything which qualifies under W necessarily qualifies under K for the same action and anything which qualifies under P necessarily qualifies under KH for the same action. There is a further inclusion relationship involving the individual difference paradigm. What qualifies under W qualifies not merely under K, but also under the individual difference concept of knowledge, since whatever qualifies under K qualifies under Knowledge. Likewise, whatever qualifies under P will qualify not merely under KH, but also under the individual difference concept of Ability. There is also, of course, an inclusion relationship between W and the individual difference concept of Value.

In both cases, then, the inclusion relationship also amounts to a potentiality-actuality or repertoire-use contrast. To give an action description in parametric form is to say, in effect, that of the circumstances to which S might have reacted, he is in fact reacting to these (i.e., K) and that of the states of affairs which he now distinguishes there is one which he is in fact trying to achieve. Likewise it is to say that of the ways in which he might have (KH) treated his circumstances as being a case of X, he is in fact doing it this way (i.e., P).

Thus, to collapse the W-K and KH-P distinctions is to adopt a position in which there is no difference between what was and what might have been, which is to say that it is a deterministic position. It is

to adopt the position that under certain circumstances (i.e., C), certain things (i.e., E) happen, which is to say that an implicative relationship holds between C and E. Finally, it is to take the position that the relevant (here the repressed K peeks forth) circumstances produce, or bring about, the corresponding E, which is to say that a causal relationship holds between C and E.

Note. The discussion above is in terms of collapsing the KH-P distinction. The question will naturally arise, what about the fifth parameter, the Achievement? Since the performance is already the limiting case of the Achievement, as noted in connection with the Achievement Description, no new methodological considerations are introduced if we speak of collapsing the KH-P-A distinctions.

Maxims

As indicated above, the behavior description maxims provide the standards by reference to which the empirical validity of particular behavior descriptions is appraised. As will be seen by inspection, the maxims fall naturally into three groups. The first five deal with descriptions of behavior; the next two deal with the acquisition of behavior potential; the last two deal with causal, historical, and individual-difference characterizations.

It will be seen by inspection that the maxims have much the same kind of factual triviality that logical tautologies do (in fact, as presently formulated, more than one would qualify as a logical tautology). Rather than embodying factual assertions, explanatory

claims, or pre-theoretical assumptions, the maxims codify the fundamental rules of procedure in the giving of behavior descriptions. Because of our general preoccupation with empirical-theoretical questions in psychology it may be apropos to remind ourselves that without the rules of procedure there is no such phenomenon (behavior, including behavior description) to be explained or described, hence also, nothing which calls for assumptions. (Compare the familiar example: without the rules, there is no such phenomenon as chess.)

Maxim 1. A person takes it that things are as they seem, unless he has a reason to think otherwise.

This maxim reminds us that implementing a rule of procedure is (as the Tortoise might have said to Achilles) first of all a matter of competence and only incidentally a matter of empirical knowledge or assumption. Intentional action is a case of treating one's circumstances as being a case of x rather than y. To treat one's circumstances as being a case of x rather than y is an exercise of competence, and for something to appear to be a case of x is an exercise of the same competence. The appearance is not the "given" of empiricist metaphysics -- one takes it to be a case of x. What we do not do, and logically cannot do, is to take this to be a case of x by virtue of having in fact ruled out all of the ways in which we might go wrong in treating this as a case of x. Any attempt to do that would immediately raise the same question in regard to that procedure and generate an infinite regress from which nothing could emerge. To put it bluntly,

behavior and participation in social practices are not a form of truth-seeking investigation -- it is the other way around.

Thus, P takes it that S is doing what he seems to be doing, unless P has a reason to think otherwise. If P has enough reason to think otherwise, then S will seem to be pretending, or "going through the motions," or exhibiting some misleading performance characteristics. Often enough S's behavior is sufficiently ambiguous to P so that there is no one thing that S seems to be doing. In this case, P does not understand S's behavior and is in a position to give no more than one of the partial-descriptions, e.g., an activity description. Among the partial-descriptive forms, the notion of "sentience" has a particular relevance here. ("Sentience" is discussed briefly above as one of the "marginal forms" of behavior description.) For the preceding is, in effect, simply the attribution (by Q) of sentience to P in his description of S: if P's behavior is to be a behavior description, then P must exhibit the relevant competence, i.e., the competence to distinguish one behavior from another and treat it accordingly.

In this way, Maxim 1 may be seen as a conceptual derivation from the concept of a Person, including the concept of intentional action. That is, it illustrates the way that the concept makes its appearance in the context of a specific form of intentional action, i.e., behavior description. Conceptual derivation from a concept, via illustration, or instantiation, contrasts fundamentally with the more familiar notion of propositional derivation from a set of propositions, via deduction, or inference.

Maxim 1 serves as a standard for appraising empirical validity along the lines of a "burden of proof" argument. If S seems to be doing B, then so far it will be empirically legitimate for P to describe S as doing B. For that description to be challenged successfully by P or anyone else, the challenger will have to provide P with a reason for thinking otherwise. If the challenger cannot provide a convincing account of S's not doing B when on the face of it S is doing B, he himself will present the appearance (to Q) of lacking the relevant competence either to challenge or to assent to P's description of S.

Maxim 2. If a person recognizes an opportunity to get something he wants, he has a reason to try to get it.

This maxim, like Maxim 1, may be regarded as a paraphrase, for behavior-descriptive purposes, of the concept of a Person and of intentional action. The content of this maxim carries three reminders:

- (1) That intentional action, being a case of trying to achieve a wanted result, is a case of conation as well as sentience.
- (2) That there is a conceptual connection between the W and K parameters of acting. What is wanted is also necessarily known, in the sense of being distinguished from its correlative alternatives.
- (3) That the question to be answered about behavior is not merely "Why did he do B?" or, more generally, "What did he do?", but also, "How come he did it now?"

Thus, Maxim 2 provides the logical form for the giving of a legitimate answer to the question "Why is he doing what he is doing now?"

The answer will take the form "What he is doing now is an effort to get something he wants, and he does it now because that's when his circumstances seemed to him (recall Maxim 1) to be an opportunity to get it." (Definition: Circumstances C constitute an opportunity for S to get A if in those circumstances S can get A by doing something he knows how to do.) To be sure, unless P can say of S what it is he is doing, P has only a descriptive formula, not a description.

On the negative side, the maxim specifies that certain kinds of behavior description are incompatible. For example, to say both that

(1) S is trying to achieve A

and either

(2) S cannot distinguish A from not-A

or

(3) S cannot or did not distinguish

(a) an opportunity for getting A

from

(b) any other opportunity

is to be left with no intelligible conclusions regarding S. Ordinarily, if it appears to P that either (2) or (3) is the case, then he will have a reason to give up (1).

Maxim 3. If a person has a reason to do something, he will do it, unless he has at that time a stronger reason to do something else.

This maxim, too, has more than one ingredient. It reminds us of the difference between the two senses in which it might be the case that

S wants A more than B. The first of these is the sense in which S would choose to have A rather than B if he could have his choice and had to make a choice. In this sense, S would prefer A to B, and this is codified by the individual difference concept of "value," which represents the hierarchy of priorities among S's wants. (Since the formulation of I.D. structural concepts in "Persons," two concepts of this sort have been added, namely Value and repertoire of Knowledge.)

"Value" is not the operative concept here. S is not constantly engaged in the pursuit of what he values most highly. But if we ask, "How come?", Maxim 3 provides an answer, in light of Maxim 2. If S does not now recognize an opportunity to get A, then he has no reason to pursue A now, and so he does not now have a stronger reason to pursue A than he has to try to get B.

The primary use of Maxim 3 follows the old saw that "actions speak louder than words." That is, it gives P a basis, post hoc, for appraising the relative strength of S's motivation in regard to those aims which he did have an opportunity to pursue. But it is post hoc only with regard to S's behavior on that occasion. If P did not have information of this kind with respect to S, he would be in a poor position to operate with Maxim 2 in saying that S's behavior was a case of trying to get something he wanted, for then P would not be in a position to say, independently of his then current observation, what it was that S wanted.

Thus, Maxim 3 provides a descriptive formula which refines the account (Maxim 2) of why S is doing what he is doing now, and it serves as an empirical check on other descriptions of S.

Note. Between a complete opportunity to get A and no opportunity to get A, there are the intermediate cases of more or less good or poor opportunities to get A. Thus, if A is sufficiently valued over B, S may act on a poor opportunity to get A rather than on a good opportunity to get B. Little wonder, then, that cognitive "theories" in psychology typically have reference to some function (often multiplicative) of "expectancy" and "value" as the selective principle in behavior (i.e., an answer to the question of "Why, of all the things that S could have done, he does this?").

Maxim 4. If a person has two reasons for doing B he has a stronger reason for doing B than he would have if he had only one of those reasons.

This maxim can be used recursively, so that it holds for any number of reasons for doing B, not just two reasons. It specifies strength of motivation as a monotonic function of qualitative increments (additional reasons). Note that there is no implication that all reasons contribute equally, so that one cannot gauge strength of motivation simply by counting reasons. What is implied is that if S gains a reason for doing B, then he has on the whole a stronger reason for doing B.

Maxim 4 provides one of the ways of giving a "precipitating event," or "that was the last straw," description of S's behavior when the response seems disproportionate to the occasion. For in this case, one of P's major options is to pursue the line that "S must already have had other reasons, as yet unknown, for doing B."

Maxim 4, along with Maxim 3, enables P to deal with S's behavior now as being complexly motivated, while nevertheless distinguishing the limited range of reasons that S is acting on now from the greater range of reasons that S is understood to have. This is the contrast between "Want" as an IA parameter and "Value" as an I.D. concept.

Note. One of the less obvious consequences of Maxim 4 is that it provides P with a basis for describing S as "scheduling" his efforts. Consider once more the case where S wants both A and B but values A more than he values B. Under these conditions, S frequently tries to get B, and not merely by virtue of the absence of an opportunity to get A, which was the possibility dealt with by reference to Maxim 3. One of the circumstances under which this occurs is that S can count on other opportunities to get A more than he can count on other opportunities to get B. P may then see S as choosing between two courses of action, Z_1 and Z_2 . Z_1 consists of trying to get A rather than B. Z_2 consists of trying first to get B, then A. S's reason for doing Z_1 is provided by A. His reasons for doing Z_2 are provided by A and B. Thus, on the face of it, S has a stronger reason for doing Z_2 than Z_1 . Of course, S's ability to recognize and act on the opportunity to get both A and B by

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doing Z_2 would normally require that he have some mastery of the prudential perspective (see the discussion of "deliberate action," above), and so it is just such choices that will lead P to take it that S has that ability and is using it in choosing Z_2 .

Maxim 5. If the situation calls for a person to do something he cannot do, he will do something he can do.

Again, this maxim is simply a paraphrase of one feature of intentional action, i.e., the Know How parameter. It reminds us that one of the primary uses of the concept of "ability" occurs when P uses it to explain why S did not do something that he might have been expected to do, i.e., P says that S lacked some relevant ability.

The maxim also has some consequences for P as a behavior describer, for it will be clear to Q that P's descriptions of S reflect P's limitations in ability and that, for example, P cannot attribute to S the use of concepts of which P has no mastery, even if S's behavior calls for it.

Note. In an earlier report (LRI Report #7), three of these maxims (2, 3, and 5) were characterized as "principles of response selection." The characterization is still considered to be apropos, but incomplete. "Principles of response selection" evokes a picture of internal processes which operate to select one single, determinate behavior. In contrast, the maxims remind us that P's task is not somehow to discover and baptize a hypothetically pre-existing process which produces S's behavior, but rather, to distinguish logically applicable descriptions from logically inapplicable descriptions.

(The former is not necessarily incompatible with the latter, but is, rather, a very restricted case.) To establish the logical applicability of a given description on more than one ground, involving a more comprehensive set of circumstances, is to have an empirically confirmed description.

In general, a variety of descriptions will be applicable to a given behavioral episode. Thus, maxims 1-5 codify the positive basis for P's description (S seems to be doing B), together with three bases for ruling out various classes of description (S can't make the relevant distinction, doesn't want to achieve A_1 , hasn't got the ability to perform P or to treat something as an X_1). Failure to rule out the description selected positively (S seems to be doing B) by reference to these bases will leave the description B in the status of "empirically confirmed."

Maxim 6. A person learns facts by observation (and thought).

Maxim 7. A person learns skills and concepts by experience and practice.

These two maxims are probably best discussed jointly, since they are both complementary and in contrast. Maxim 6 points to a feature of behavior that has probably not been made clear in previous discussions of intentional action. That is that it is facts and not merely concepts that are involved in the K parameter of intentional action. In intentional action, S treats his circumstances as being a case of X rather than Y. The circumstances that S can distinguish are limited by the concepts that S has, so that, for example, S could not engage in the

intentional action of "sitting down in a chair" if he could not distinguish chairs from non-chairs (though P might correctly give a performance description or an achievement description of S as "sitting down in a chair"). However, being able to make that distinction is not enough, for in order to so act, S would have to be responding to there being a chair there.

If S's ability to respond to this state of affairs or that is a correlative of the repertoire of concepts he has acquired (and the degree to which he has mastered each one), from what does this ability derive?

The answer given by Maxim 7 is that the answer to this question must be a reference to S's history. To speak of acquiring concepts "by experience" is not, it should be noted, to make any phenomenological commitments (and particularly, none of the "private language" or "beetle in the box" sort). To say that S acquires concepts by experience is not to say that there is something called "experience" from which his concepts are derived, any more than to say that he learned the alphabet "by rote" is to imply that there is something called "rote" from which his knowledge of the alphabet is derived.

"First hand learning" is perhaps the vernacular locution which comes closest to identifying the kind of acquisition referred to in Maxim 7. But "first hand" may be better thought of as distinguishing learning per se from other possible forms of acquisition.

More systematically, we may say that for S to acquire the concept of X (vs. Y) or to acquire a given competence in this way (by practice

and experience) is for him to acquire it by virtue of participating in (this is the "first hand" feature) some one or more (usually the latter) of the social practices in which that distinction or that skill plays a part. That participation is the relevant part and the relevant aspect of his history in regard to the acquisition of that concept or competence.

Maxim 8. A person has a given person characteristic if he acquired it in one of the ways in which it can be acquired.

Recognizably, this is the general form of which Maxim 7 is a particular case, since the latter specifies the only way in which we can say with confidence that concepts and skills actually have been acquired. With respect to concepts and skills, Maxim 8 reminds us of the so far almost purely logical possibilities of other modes of acquisition. In the light of current progress in biological technology, it is possible to think of acquiring arithmetic concepts or acquiring the ability to see in the ultraviolet range or to appraise peoples' motivations, and so forth, as a result of the judicious administration of drugs or surgical intervention. Likewise, in the light of current progress in electronic technology, it is possible to think of an individual constructed "from scratch" who would be able to "treat his circumstances as an opportunity to get x, as against y." Such an individual could be said to begin with "innate" concepts and skills.

But Maxim 8 has reference not merely to how concepts and skills are acquired, but also to how the entire range of individual difference

characteristics are acquired. A person has the factual repertoire, abilities, traits, attitudes, interests, value structure, moods, statuses, states, needs, and styles that he has by virtue of having acquired them in one of the ways in which they can be acquired. Note that if there are ways in which they can be acquired, then there are ways in which they can fail to be acquired.

By extension, we may define the notion of capacity: If x is a person characteristic, then S has the capacity to acquire x if there is some set of circumstances under which he would acquire x. Similarly, if both S and R have the capacity to acquire x, S's capacity to acquire x is greater than R's if the range of circumstances under which S would acquire x is greater than the corresponding range for R. It will also follow that S's capacity for x at a given time can be expressed as the outcome of his capacity at an earlier time and that all his capacities may be expressed as a function of his "original" or "innate" capacity.

Of course, if P does not know of any particular ways in which particular person characteristics are acquired, then he has only a descriptive formula, not a description of S. P acquires such knowledge in one of the ways that it can be acquired, i.e., principally by observation.

Maxim 9. Behavior goes right if it does not go wrong in any of the ways in which it can go wrong.

This maxim may be regarded as the counterpart of Maxim 1, but now in the context of action rather than knowledge. Just as P does not and

could not take it that something is as it seems on the basis of having eliminated all the logical possibilities of its being otherwise, neither could it be that his successful exercise of competence is successful by virtue of his having seen to it that it does not fail in any of the logically possible ways that it could fail. Just as the former would involve an infinite regress in investigation so the latter would involve an infinite regress of actions (exercises of competence).

One consequence of this consideration is that S's successful participation in an existing social practice does not, per se, call for any explanation on the part of P, for no non-trivial explanation of this sort is possible. If P did attempt to raise such a question, Q would have a prima facie case for saying that it was P's behavior that had gone wrong. Of course there might be an explanation for that. Ordinarily what P may seek an explanation for is why S's behavior is this behavior (under any of the forms of behavior description) now, rather than some other behavior or some other time. We have seen above that the "response selection" maxims provide the behavioral format for P's giving of such explanations. (Similarly, we do not ask, nor could we answer non-trivially, why there is physical movement. Rather, we ask why it is this movement that occurs now instead of some other movement or at some other time. To refer to "forces" here is to refer to a feature of the bookkeeping system for the systematic description of movements, not an explanation of movement per se.)

As noted in discussing achievement descriptions, if we are to speak of "knowing how" at all, then there must be paradigm

circumstances ("under normal conditions") in which success is the norm and failures require explanation. Maxim 9 codifies this as a procedural principle for P. Failures on S's part to carry off existing social practices successfully will call for some explanation, and that explanation will be along the lines of Maxim 8, i.e., P brings to bear what he knows of the particular ways in which particular person characteristics (in this case disabilities) are acquired. Explanation of this sort, and in general, explanations having the form of Maxim 8, will be causal-historical explanations. In this case, however, the causal explanation does not imply either universality or determinism. For P to say, for example, that S cannot do arithmetic because he is mentally retarded and that he is mentally retarded because of an early dietary deficiency or an early stimulus deprivation is for P to give a causal explanation for S's being mentally retarded. P is not thereby committed to saying that whenever an individual suffers that stimulus or dietary deficiency he necessarily becomes mentally deficient. Nor is he committed to saying that that stimulus or dietary deficiency is the only way that S could have become mentally retarded. And nor is he committed to saying that the state of the universe is such that it was inevitable that S should have suffered the deficiency he did. In short, Maxim 8 codifies P's knowledge of causal relationships and permits him to say what he knows about particular causal relationships without perpetuating the mysticism and confusion of 'determinism.'

