

LRI Report No. 3

PERSONS

Volume I

Peter G. Ossorio
1964

LRI Report No. 3

PERSONS

Volume I

Peter G. Ossorio
1964

ACKNOWLEDGEMENT

Permission to reproduce portions of copy-righted material is gratefully acknowledged:

American Psychological Association: Material from Goldin (1964), Miller (1965), Mischel (1964), Orne (1962), Schacter and Singer (1962), Tyler (1959). [Complete citations appear in the bibliography.]

Cornell University Press: Fodor (1965-American Edition).

D. Van Nostrand, Inc.: Atkinson (1964).

Holt, Rinehart and Winston, Inc.: Allport (1937) and (1961).

The Macmillan Co.: Feigl (1962).

University of Nebraska Press: Osgood (1957).

Foreward

This report calls for more than an ordinary degree of charity and dispassion from the reader. It is, for one thing, neither easy nor pleasant to read. It has not the pin-stripe rectitude of academic prose, nor yet the terse virtue of a measured research report. Rather, it bears the mark of its construction piece by piece and with impatience. At best, it may be said that no jury-rigging or baling wire is required in order to hold it together, for it is all of a piece. But even that would be of more comfort if it were less of a challenge.

It requires some charity because it lacks the promise, which we have come to expect in scientific reports, of presenting something that is true or something "useful" or something that is both. The conceptualization presented here is neither true nor useful. That is not a matter of opinion or evidence, for it could not be either. But then, it needs neither, and so if anything is missing, it is not that. That fact will serve to indicate the magnitude of the change in style of thought required of the reader.

Such a change is doubly necessary, since the presentation is supported by neither argument nor evidence (at times, it may be difficult to believe that). But after all, these could support only a claim to truth. Instead, the conceptualization is simply presented and illustrated, and that is taken to be enough to carry the point of its basic relevance for Psychology as an empirical science. Such a procedure is hardly less unprecented than the conceptualization it goes with, and so of itself it requires a significant change in style of

thought in order to deal with it responsibly. An appreciable portion of the readers of the original manuscript (Part I—Part V) have been unable to see that such a shift is called for. They have seen illustrations, examples, and analogies as arguments, or as evidence, or assumptions, or whatever. And they have been enraged, suspicious, perplexed, disdainful, egregious, or simply impolite. It is easy to do that.

The presentation requires dispassion because it is paradoxical. In dealing with it, as in the case of mirror-writing, our previously acquired automatisms are most likely to lead us astray. For example, technical terminology is avoided as a matter of practical necessity, and the illustrative procedure is adopted because the subject matter is one we all know, but since it is one we have not thought about in certain ways, what is being said is not something we all know, and so the familiarity of the language is both necessary and misleading. Too, the concern with language, necessity, and human limitations has not uncommonly appeared as a wholesale attempt to define things into or out of existence, to "legislate facts", whereas a major point of that concern is to provide a corrective alternative to what is seen as our present widespread tendency to act as though saying that something is so makes it so (because "words mean what I want them to mean"). Or again, the reflexive character of the conceptualization generates considerable perplexity and suspicion of verbal sleight-of-hand. The presentation is a delineation of

a concept which subsumes (is instantiated by) a delineation of the presentation as one which delineates itself. That it is of this sort, however, is one of its most basic features and one which eliminates (rather than solves) some of our most perplexing present problems in formulating explanations of human behavior, for those problems are seen to reflect a verbal sleight-of-hand, and the method of resolution is to keep everything out in the open. For although the conceptualization which is presented could not itself be true or useful, since in one aspect it represents the general conditions for anything being true or useful, the presentation will be useful if, as now seems possible, it helps to eliminate a variety of problems concerning explanation and research in Psychology and suggests some novel procedures and practices with respect to both (illustrated with a substantive example in Part III).

The presentation itself must be understood as just that--as an action, or performance, associated with a product, rather than as a set of statements. (Analogously, one might think of a teaching device which provides reminders, illustrations, and evaluations and results, if successful, in the acquisition of skills rather than in the accumulation of information.) One of the presented concepts an appreciation of which is most strategic is that of human behavior as participation in some form of activity, or social practice. Both

the presentation and the reading of "Persons" are to be seen in this light. We have heard frequently about the "participant observer", but what we shall need instead is the concept a participant whose observations are already and literally a part of his participation rather than something that goes on surreptitiously (magically) and in addition. And as with observing, so with presenting. Accordingly, the irritation and impatience sometimes expressed in the presentation is expressive rather than merely symptomatic of a bad temper.

But the proper beginning for the presentation is an apology to the reader herewith for requiring so much more than usual, for not waiting until it could be done better, and for the suggestion, with respect to a report of this length, that a single reading might not be enough.

P. G. O.

Table of Contents

I.	Introduction.....	I-1
II.	Part I Intentional Action.....	1
III.	Part II Individual Persons.....	46
IV.	Part III Psychological Persons.....	82
V.	Part IV Theoretical Persons.....	119
VI.	Part V Ubiquitous Persons.....	183
VII.	Bibliography.....	235
VIII.	Appendix A Psychological Description and Philosophical Theory.....	A-1
IX.	Appendix B Normal and Abnormal Behavior.....	B-1
X.	Appendix C Psychological Theory, Persons, and Linguistic Theory.....	C-1

Introduction

I.	Advantages.....	I-1
	A. Coherence.....	I-1
	B. Comparability.....	I-3
	C. Cumulativeness.....	I-4
	D. Substantive Adequacy.....	I-4
	E. Autonomy without Isolation.	I-7
II.	Difficulties.....	I-13
	A. Theory vs. Description....	I-13
	B. What is Descriptive.....	I-19
III.	Descriptions and the Use of Concepts...	I-31
IV.	Evaluation of a Descriptive Account...	I-63

Introduction

The present monograph is the precursor of a more systematic effort designed to provide the initial substance of a new psychological discipline, designated as Descriptive Psychology.

The task of Descriptive Psychology is to delineate the subject matter of Psychology as a science. The recognition of this need is already a departure from existing psychological mores. For the standard way of handling the issue of subject matter has been, of course, to say merely that "Psychology is the study of behavior". From this starting point, the remainder of psychological activity has, by and large, been taken to be either (a) empirical, hence to be settled by experiment or (b) theoretical, hence arbitrary and binding upon no one. In light of a general acceptance of this dichotomy, it would hardly be surprising if an attempt to give a substantially articulated description of psychological subject matter were to appear arbitrary and presumptuous. Nevertheless, there are some significant advantages to be gained from any such description which is even approximately adequate substantively and which does more than to say, in effect, that the subject matter of psychology consists of the various topics that psychologists study. Several such advantages are suggested below.

I. Advantages

(A) Coherence

Any reasonably detailed description of the subject matter

would provide an overview which was independent of the variety of technical approaches to that subject matter. It would, for example, provide a means of identifying that portion of the subject matter which was dealt with by a particular theory or a particular investigator without requiring a prior mastery of the terminology of the theory or the investigator in question. At the present time an independent identification of this sort is well-nigh impossible. To be told, for example, that M has a theory of motivation is to be told next to nothing, because there is no descriptive framework within which motivation is distinguished from anything else or related to anything else. The restrictions on what qualifies as a theory of motivation are implicit, unclear, and apparently almost completely idiosyncratic. One theorist may deal in neurophysiology, another in biochemistry, another in explicitly normative concepts such as "guilt", others in quasi-normative concepts such as "self-actualization", "dissonance", or "guilt feeling", and another in quasi-physiological concepts such as "drive", "TOTE", or "mediating response". It is not clear why we call all of these theories theories of motivation, nor is it clear that there is any point in our doing so. And it is not at all clear what we have when we have such a theory. Similar considerations apply to our theories of "learning", "psychopathology", "personality", or "perception". We recognize that motivation, learning, personality, perception, and psychopathology are not unrelated, but it seems fair to say that no systematic account of the relations among these various

subject matters has been given. To be sure, it is sometimes claimed that some theories. e.g., of the psychoanalytic or the S-R variety, provide an explanatory account of the relations among motivation, learning, personality, perception, and psychopathology, but in the absence of a descriptive account it is difficult to make any guess as to what, if anything, is explained. No doubt the most overworked and least clear of our basic concepts is none of the foregoing, but rather, "behavior". Because of the central role of "behavior" in distinguishing psychology from other sciences, the present descriptive effort involves a primary focus on the concept of human behavior, and more basically, persons, as the subject matter of psychology as an autonomous science.

(B) Comparability

A second advantage provided by a descriptive account of psychological subject matter is that it makes possible the identification of alternative viewpoints and facilitates their comparison. For example, to have a descriptive account of "emotion" or "personality" as a subdivision of a psychological subject matter would make it possible to recognize when two theories dealt with the same subject matter, i.e. emotion, or personality. It would also provide a basis for assessing the adequacy of such a theory. That is, a personality theory would be adequate to the degree that it provided an account of the basic phenomena identified descriptively as "personality" and facilitated the empirical study of those aspects of the phenomenon which were both non-trivial and empirically decidable. In the absence of a descriptive

account, we are involved in the following sort of muddle:

- Q: Are Allport's theory and psychoanalytic theory competitors? That is, do they provide alternative accounts of the same thing?
- A: Yes. They are competitors. They explain personality differently.
- Q: What is it that they both explain differently?
- A: Personality.
- Q: And what is that?
- A: Well, of course, that has to be defined within a personality theory (cf Hall and Lindzey, 1957).
- Q: Then how can they both be talking about the same thing?
- A: They're both theories of personality.
- Q: What is that?
- . . . Etc. Etc. Etc.

(C) Cumulativeness

A third advantage of a systematic description of psychological subject matter would be to facilitate research and theorizing that was maximally cumulative by making research and theorizing more comparable, hence more significant. The present situation is one in which (a) it is difficult to compare theories except in respect to specific experimental paradigms, and (b) the relation of a theory or a finding of one kind (e.g., learning) to a theory or a finding of a different kind (e.g., personality) is unclear and uncertain. Because of this, it is relatively difficult for any investigator to make good use of work done by investigators who have different theoretical preferences or work in other substantive areas.

(D) Substantive Adequacy

A fourth advantage of an adequate descriptive account is that it would permit an individual investigator to pursue significant empirical questions independently of any theoretical formulation. He could do this without paying the price that is

now commonly thought to be inevitable, i.e. that of (a) fooling himself, because he really is using some kind of theory, only implicitly, and (b) achieving results which are divorced from the "main stream" of organized thought and empirical knowledge in psychology and therefore make no real or lasting contribution. For example, as soon as we have a descriptive account which says that we learn primarily by experience and only secondarily by inductive or deductive procedures, then a significant range of empirical investigation is identified by the question "Under what conditions does who learn what?" The question is significant because "learning" is not an isolated concept, but has a place in the systematic descriptive account of the subject matter of psychology, and so, when we find out something about learning, we know what we have found, and it is not a "bare fact". So long as the data is collected systematically and the systematization is expressed in terminology which has an accepted use, the data is the kind of data which has significance in that it adds to our understanding of human behavior, and it is the kind of data which other investigators may well make use of, because, among other reasons, they understand it. In particular, there is no basis for the assertion that unless the systematization is expressed in exotic technical terminology having a putatively explanatory value we have a "mere heap of facts".

To assert that a Descriptive Psychology would provide the basis for significant empirical investigations independently of any theorizing is to contradict the widely cherished thesis that

"Theories are necessary". However, the contradiction is to a large extent merely apparent. This is because the "thesis" that theories are necessary is to a large extent merely apparent. That is to say, nothing of significance is being asserted or denied when one asserts such a "thesis". For the "necessity" of a theoretical approach has to be defended by asserting that any systematization in description and any selectivity in collecting data is ipso facto a theoretical enterprise. Thus, to say in this sense that "theories are necessary" in psychology is to say roughly, that psychological investigation is not a senseless or random activity or behavior and that a useful scientific account of behavior is not a random collection of sentences, But that is not something which has been questioned by those who have questioned the necessity of theories. The genuine question about theories is a different one, and so the "thesis" is simply beside the point.

It is far from being the case that we consider every significant sentence about behavior to be a theoretical sentence or every thought about behavior to be psychological theorizing—we are only tempted to such extremes when arguing methodology. The accepted exemplars of "Psychological Theory" are moderately small in number, and could be given in a list. (Freud's theory and its modifications; Jung's theory; S-R theory and its variations; Tolman's theory and other Expectancy theories; Rogers' theory and other Self theories; Meyer's, Murphy's and other psycho-bio-social theories; etc., etc.) That such a list can

be given does not imply that it can not be added to in the future. On the contrary, there are few predictions that could be made with greater confidence than this: That at some future time we will refer to what Smith said as "Smith's theory" whereas Jones, who may have said as many thoughtful or useful things as Smith, will never have his words referred to as "Jones" theory". The fact that we find it impossible to say what it takes to be recognized as a theory, in this sense, does not prevent us from recognizing theories when we encounter them and it does not prevent us from distinguishing theories from non-theories. In connection with classifying something as a theory in this sense it would be a naive sophistication to say "But aren't we all a little bit theoretical", and it would be as otiose as saying "But aren't we all a little bit mad" to the admitting physician in a psychiatric hospital.

It is in this latter sense, the sense in which psychological activities and achievements are already divided into "theoretical and "non-theoretical", that a descriptive account would permit an individual investigator to pursue significant empirical questions without theoretical formulations and without penalty. With respect to the methodological "thesis" in which "theoretical simply distinguishes sense from nonsense, there is very little to be said, except perhaps to remind ourselves of how very little it says.

(E) Autonomy without Isolation

A more speculative, polemic, and no doubt, controversial

proposal is this: That a descriptive account of psychological subject matter would contribute materially to the establishment of psychology as an autonomous science, which it is far from being at the present time. In particular, it would help to free psychology from its present dependency on (and encumbrance by) both philosophy and physiology.

It seems safe to say that at the present time most psychologists accept some sort of account about "the place of psychology in the hierarchy of sciences". The autonomy which is apparently granted to the several sciences by the stipulation that they differ in their "level of description" is a spurious one, as it has turned out historically, because the de facto implication has been that the lowest level is "the real thing" and as we move upward in the hierarchy we are more and more dealing with "mere interpretation".

The connections here may be exhibited schematically: (a) the contrasting term for "interpretation" is "description"; (b) if there is no description of psychological subject matter, then that subject matter must consist of mere interpretations; (c) if that is so, then those must be interpretations of phenomena of a more basic sort (of a lower "level"), i.e. of a physical sort ("movement") or a physiological sort ("brain process") (d) and then psychological explanation must consist of showing these interpretations to be interpretations of those more basic phenomena, (Here "interpretation" is used descriptively, not in the technical sense in which models "interpret" theories.)

Thus, neurologizing, whether actually, conceptually, analogically, or in the guise of "performance models", has commonly been accepted as the mark of rigor and adequacy in psychological explanation and experimentation. Indeed, this tendency is so pronounced that a recent philosophical writer (Fodor, 1965) could seriously propose that "Explanation in psychology consists of a functional analysis and a mechanistic analysis: a phase one [functional] theory and a determination of which model of the theory the nervous system of the organism represents." and that "...it is sufficient to disconfirm a functional account of the behavior of an organism to show that its nervous system is incapable of assuming states manifesting the functional characteristics that account requires".

Since this account is proposed by Fodor as a piece of technical philosophy, not as a contribution to psychology, it might properly be dismissed by psychologists as an interesting curiosity, but psychologically irrelevant, reflecting the peculiar concerns, standards, and fashions of philosophers, as contrasted with psychologists. That it is not unlikely to be taken seriously by some psychologists reflects a second sort of constraint. That is that attempts to deal conceptually with significant psychological concepts such as "experiment", "observe", "say", "same", "response", or "person" are almost certain to be identified by psychologists as "philosophizing". This is not an accident, since the "empirical or theoretical" dichotomy leaves no significant room for conceptual analysis or for

description of anything other than apparatus and "operations" and "results". It is doubly not an accident, since it is a tendency that is fostered by philosophers, and most clearly so by those philosophers who are wedded to the "unity of science" viewpoint. An example is found in a recent paper (Feigl, 1965) by a philosopher who is one of those best known to psychologists. Here, he states that "The [mind-body] problems may be fairly clearly divided into scientific and philosophical components. the scientific task is pursued by psychophysiology, i.e., an exploration of the empirically ascertainable correlations of "raw feels", phenomenal patterns, etc. with the events and processes in the organism, especially in its central nervous system (if not in the cerebral cortex alone). The philosophical task consists in a logical and epistemological clarification of the concepts by means of which we may formulate and/or interpret these correlations".

It may well be questioned whether many psychological investigators would want to take "raw feels" and "phenomenal patterns" as their subject matter. What is disturbing is that it is not nearly so clear that psychologists would object to the suggestion that their task is limited to the collection of data, whereas the thinking is to be carried on by philosophers. Although the passage from Feigl may be counted as among the more overt expressions of this attitude, it is not difficult to descry the same attitude among both psychologists and philosophers. The result, historically, has been that psychological science

has been largely carried on as though commentary by the logical positivists and their philosophical heirs, the logical empiricists, were prescriptive rather than descriptive, interpretive, or merely fanciful in regard to the kind of conceptualization and explanation appropriate to psychology as a science.

We might well ask, thereat, "With friends like this, who needs subject matter?" And the answer proposed here is "With friends like this, we need a subject matter." To say this is not to propose a rejection of theses concerning the unity of science. On the contrary, in spite of what might on casual examination be taken as arguments or "assumptions" which rule out reductionism and the "unity" position, a careful reading of the descriptive account will show that every provision is made for the legitimate possibility of success in reducing psychological concepts to other kinds or in demonstrating any degree of dovetailing of the various "levels" of science. What the emphasis on descriptive basis for psychological science does represent is a prudential suspicion of "unity" as a self-fulfilling prophecy. It is to say that any "unity" which is demonstrated by following the prescription of unity, i.e. by deliberately stage-managing our psychological accounts of human behavior so that they do dovetail with current neurological thinking, is too methodologically cheap an accomplishment to view with professional pride as a psychologist.

It would seem to be a methodological truism that the only definitive standard for a psychological theory is that it should

be an adequate attempt (trivial or ludicrous attempts will not count) to give an adequate account of human behavior as such. To attempt to dovetail a psychological theory with the findings and theories of physiologists, or of physicists, or linguists, or economists, or any other discipline whatever is to impose an additional standard. To make a serious effort to meet the secondary standard is to take the serious risk of falling short with respect to the primary standard. If there were not a central core of psychological science as an autonomous science responsive only to the standard of giving an adequate account of human behavior as such, then there would be no adequate check on the psychological adequacy of a neurologized (etc.) psychological theory. No doubt we would have a tidier picture of something, for we could see to it that there were no loose ends on the behavioral side. But then, why should anyone feel inclined to refer to such functional neurology as "Psychology".

Since methodological theses generate considerable emotionality among psychologists, it is worth being repetitious in the interest of keeping these feelings on target: It is neither the possibility of a thoroughgoing unification of the sciences, nor even the avid pursuit of such a goal by some psychologists, that is seen as stultifying for psychology as a science. Rather, that danger is found in (a) the vehemence with which such secondary concerns as physiology are proposed as primary and as criteria for psychological explanation and (b) the degree to which these proposals have been so widely accepted by American psychologists without effective dissent that they have become the dominant view in psychology today.

II. Difficulties

Granted that there would be significant advantages in having a descriptive account of psychological subject matter, it is equally the case that a number of difficulties are to be encountered in an attempt to give such an account. No small part of these are the difficulties which may be anticipated for a reader who is attempting to understand such an account. These difficulties may be summarized by saying that whereas normal psychological communication consists roughly of 10% of content which is stated explicitly and 90% of content which is shared by reader and writer and is simply taken for granted by both, these proportions are more nearly reversed in the present monograph. What we normally take for granted is what has to be reexamined critically. Past experience has shown that certain kinds of misunderstanding are much more likely than others, and these are of such a kind that it seems more appropriate to take explicit account of them than to try to modify the presentation of the concept of a person in an attempt to minimize them. The relevant topics dealing with the relation of Descriptive Psychology to technical philosophy are discussed in Appendix A. The relevant methodological topics, having to do mainly with description, are discussed below.

A. Theory vs. Description

At the outset, there is some difficulty in distinguishing between observing, describing, and reporting on the one hand and inferring, explaining, and theorizing on the other hand.

Many psychologists would say that the distinction is an arbitrary one having no particular point. For example, a psychological theorist might say that his theory was simply a conceptually economical, higher-level description. And if the theory were a good one, very likely that would be correct. But it would not be simply correct. We should have to ask what it was a description of.

For the purpose of formulating some issues, it will be convenient to use as special-purpose terminology the locutions "theory of..." and "theory about". Ordinarily, when we say that Theory R is a theory about X, we do not distinguish this from the statement that Theory R is a theory of X. We use the two expressions interchangeably, but in either case there is an ambiguity—we may be referring to either one of two states of affairs. In the one case, X simply comprises the concepts of the theory. For example, in this sense, S-R theory is a theory of stimuli, responses, habit strength, drive, reinforcement, extinction, etc., and the theory provides an account, e.g., of particular responses coming to occur in the presence of particular stimuli. For the present discussion, this state of affairs is designated by saying that Theory R is a "theory of" P, where "P" is a surrogate for the theoretical concepts of Theory R. The second case is one in which X is not any part of the theory, but rather is an antecedently known and separately describable phenomenon, so that Theory R provides a second way of talking about that phenomenon. This second state of affairs is designate

by saying that Theory R is a "theory about" Q, where "Q" refers to the separately describable phenomenon. For example, S-R theory might be regarded as a theory about learning. Learning is separately describable as the fact that as a result of engaging in certain activities and not others and/or being exposed to certain circumstances rather than others, persons and most other sentient creatures come to be able to do certain things (rather than others) that they could not do previously. We may later wish also to distinguish cases where Theory R is merely a summary (a more economical description) as against those cases where it is putatively explanatory as well.

We may note in passing that a "theory" which is merely an uninterpreted calculus can have no scientific standing, though it may have some potential relevance. Only when there is some number of persons who know how to use the theoretical terminology to characterize observable phenomena does a "theory" become a theory, i.e. a part of the professional practice of science. (See Hesse, 1963, and Spector, 1965, for more extensive discussions relevant to this point.) The extent and degree of the competence to which theoretical terminologies lend themselves will vary. If the scientific practitioner knows how to use a given terminology only in very special circumstances (e.g., in regard to certain laboratory experiments) then, of course, he doesn't know much when he knows that (though it might still be important to know that). And if he knows how to use the terminology with precision only in those restricted circumstances

but can use it impressionistically or imaginatively in a variety of other circumstances, then very likely he knows a good deal less than he supposes. In any case, we shall need to consider only those theories that someone knows how to use.

If Theory R is merely a theory of P rather than a theory about Q, there does indeed seem to be little point in the distinction between theory and description, for in this case, they come to the same thing. We can have alternative theories about learning, but we can not have alternative theories about stimuli, responses, habit-family hierarchies, etc. so long as these are simply theoretical concepts. A theory of P defines its own subject matter, and so it can have no competitors unless it is also a theory about some Q.

Thus, as a description of Q, the subject matter, becomes more and more non-committal, the differences among a theory about Q, a theory of P, and a description of P approach zero. Clearly, a theory which is a theory about "some phenomenon" is merely a theory of P rather than genuinely a theory about some Q. A theory about "behavior" is not greatly different from this, though perhaps some commitment has been made. A theory about "learning" is apparently even more committed and even more clearly about some subject matter (assuming that we have an adequate description of it), though here it may be well to recall that our better-known "learning theories" are primarily theories about "behavior".

The distinction between a theory of P and a theory about Q

becomes particularly relevant when we try to assess the explanatory value of a particular psychological theory and its relevance to those other human activities which do not consist of psychological theorizing. It seems clear that a theory, R, which is merely a theory of P has no explanatory value relative to any preexisting Q (and human behavior antedates psychological theorizing) or relative to any Q which is not describable in terms which are equivalent to those of R. And if a theory of P is claimed to be also a theory about Q, the claim may be immediately discounted to the degree that the description of Q is ambiguous or non-committal (e.g., "Q"="behavior"). In general, any such claim has a dubious status until such a time as an acceptable description of Q has been given.

It might be supposed that the requirement for a description of Q could be eliminated so long as instances of Q could be identified. For example, we might identify instances of "behavior" by pointing to them. Could we not then take "behavior" as our subject matter without having to give any descriptive account? But pointing could only succeed in identifying a locus of study, not a subject matter, if the latter were not already known.

(a) If I point to an instance of "behavior", I also point to an instance of "organism", "object", "movement", "number", "physical object", and to instances of "cost", "color", "size", "heredity", and some unknown number of other concepts. Thus, pointing will not distinguish one subject matter from others.

But neither will it pick out any subject matter at all. For:

(b) I may point to city halls, university campuses, and railroad cars. If I have a theory of triangles, circles, squares, etc., I may study instances of these latter when I encounter them in city halls, in university campuses, or in railroad cars. That is, I restrict my study to the sort of thing I have pointed to, and I apply my theory of P (P=circles or squares or triangles) there. It would be pointless and misleading to say that what I had done then was to study city halls, or university campuses, or railroad cars. And it would be equally egregious to say that what I had then was a theory about city halls, university campuses, and railroad cars. Yet, it would seem that the same sort of claim is made by a psychologist who says that "behavior" is his subject matter when in fact all he has done is to study habit strengths, reinforcement, etc. as they occur (if at all) in instances of "behavior".

B. What is Descriptive?

In our less thoughtful moments we are apt to take it for granted that giving a description is the same as reporting an observation, and therefore, what is said is self-evident, so that (a) mistakes are ruled out and (b) everyone ought to agree. This kind of doctrine is sometimes expressed by saying that in giving a description one is "merely reading off the features of what is actually there".

No doubt in some cases "reading off features" is an informative way of characterizing what is involved in giving a description. "That's a red cup", "The cat is lying down", "The picture is hanging crooked" are examples which illustrate the fact that some of the judgments we make involve phenomena which we "can tell at a glance" and therefore might well be classified as cases of "reading off the features of what is actually there". We may move from these cases through a range of phenomena exemplified by "He drank deeply from the cup" and "The halfback made an end run" and pass on to more difficult cases such as "There's a knock in the motor", "He made a sarcastic remark", and "This is a defective memory unit from an electronic computer".

As we survey this range, several features of the phenomenon of describing become clear enough to be read off. First, what we can tell by observation is not always something that we can tell at a glance. It may require careful attention, particular sorts of competence, or more or less prolonged or repeated

observation. For example, the judgment that the halfback made an end run or that Big Ben chimed six times ordinarily requires attention and concentration over an appreciable interval. The judgment that this was a sarcastic remark frequently requires observation of the circumstances which provide the occasion for the remark. And the judgment that this is a defective memory unit for an electronic computer may require careful examination and certainty requires special experience or training.

Because some descriptions require careful attention, prolonged observation, or special training, an observation may be careless, hasty, or naive, and so the corresponding description might be incorrect or mistaken in any of these ways or for any of these reasons. From this alone, it would follow that complete or universal agreement among observers can not be a necessary feature of making an observation or giving a description.

There are other bases for disagreement, too. Recall the various descriptions of what I pointed at when I pointed at an instance of "behavior". Two observers might offer alternative descriptions, both correct, of "the same" phenomenon, and each might reject the proposition that the other was correct, especially if the two had very different training and ability. Again, if two observers differed in training and ability, or if their interests and preoccupations diverged markedly, one of them might be able to "tell at a glance" that here was a Ruy Lopez opening or that here was a sarcastic remark, whereas the other might have to be reminded of relevant features of the

phenomena in order to be able to make the same observation.

The preceding cases have taken an observation report as the paradigm of a descriptive account. But descriptions can be given when what is described is not present to observation at all, and it is clearly among descriptions of the latter sort that a descriptive account of psychological subject matter (or any subject matter) must be found. The foregoing examples are intended to serve as reminders that even in the simple case of observation reports it is seldom the case that giving a description is profitably characterized as "merely reading off the features of what is actually there". The latter terminology is a remnant of the Empiricist myth of "the given" in perception. Its primary virtue appears to be that it helps to keep clear the distinction between observation and inference. It does so by making metaphoric use of the word "read"—it directs our attention to the fact that what we establish by observation has the same immediate intelligibility as a verbal passage which we literally read and understand, hence it contrasts with what we establish by inference. But this metaphor, which might have remained harmless, has been put to the dubious use of referring to hypothetical ultimate constituents or ontological grounds for the very sorts of performance (the successful exercise of skills) from which the metaphor draws its sense. In its mythical use it implies a uniformity and universality which is simply non-existent. To recognize that one man's "given" may be another's laboriously achieved inferential conclusion is not to move in the direction

of eliminating the distinction between observation and inference (If one man buys an automobile and another man steals one, is there therefore any less reason to keep the distinction between buying and stealing?) Rather, it is to recognize that the judgment in question is an achievement (since it is necessarily subject to standards of correctness) rather than a gift, and that is to have reason enough to reject the concepts and terminology of "the given" as unserviceable for the present discussion. (See Walton, 1963, for a critique of perceptual "inference

To give a descriptive account of a subject matter is clearly not the same as reporting an observation, for what we actually observe is at most some illustrative cases, and those are not identical with the subject matter, which would have to include all cases of the kind in question. However, the description of subject matter could be related to the description of cases in the following way: The description of a single case would, for present purposes, be equivalent to the description of the general case, and that would be equivalent to a description of the subject matter, if it were a description of what it was about that case that qualified it as an instance of that subject matter. If I pointed to a pawn, or to a person, that would not be enough. I should also have to say what it was about that individual that made it a pawn or a person. To say that about a pawn would involve more than might be immediately apparent. In fact, it would involve the entire set of rules for chess, including those rules referring to other pieces, to the board,

and to the criterion for winning or losing. It would require all the rules which are constitutive of chess as a game, because what makes a pawn a pawn is that it is a particular element and has a particular role in that game. To say what makes an individual a person is one of the major concerns in the following chapters, and to do that is not less complex than formulating the rules of chess.

We may say, then, that to give a descriptive account of the subject matter of psychology is to formulate the conceptual system which is constitutive of that subject matter in the way that chess rules are constitutive of chess facts. To anticipate a bit, that subject matter can be summarized as "persons and human behavior", or simply "persons". (But it should also be noted immediately that this description does not rule out the study of physiology or non-human behavior.)

This descriptive account is therefore characterized as a description of P (P=persons) which comes to the same thing as a theory of P (or, alternatively, a theory of P', P'=person concepts) which is not also a theory about any Q. The term "person concept" will be used primarily to identify those concepts the intelligibility of which depends on the concept of a person. Examples of this type are "intention", "action", "skill", "attitude", "wants", "human body", "believes", "self-concept", "afraid", "guilty", "surprised", "sick", etc. (Many such terms are not uniquely associated with references to persons, for they are also applied to other animals. However, one of the

claims made in the present account is that persons provide the paradigm, or "full-fledged" case with respect to which the application to other animals, infants, and non-verbal individuals generally, represents an intelligible extension.) Locutions involving terms designating person concepts will be referred to as being "person-descriptive" terms. In order to avoid excessive circumlocution certain other words and concepts will be included under "person concepts" and "person descriptions". These are concepts which pertain to the common world of persons and objects, hence are not distinctive aspects of the concept of a person. Major examples of such concepts are "state", "part", "episode", "history". Whatever controversy may exist with respect to statements which will be made later about person concepts and person descriptions will not hinge on the inclusion of these non-distinctive concepts, and this is the justification for not explicitly excluding them in talking about person concepts.

Philosophers have made proposals which amount to saying (in the present way of talking) that a description of persons or a theory of person concepts is a theory about movements (=behavior?). But when I say "He ran because he was afraid" I do not know, nor do I care, what movements occurred (in rare cases where I might care, that would be an additional issue.) And generally speaking, no observer of an action knows what movements occurred. In observing his fearful behavior I do not begin with a description of a movement which has occurred and then try to account for that movement. Thus,

irrespective of whether the movements might have been antecedently known and separately described (which is a much more dubious supposition than it appears to be at first glance) it is clear that our use of person descriptions in no way requires any antecedent knowledge of this kind. And that is taken to be reason enough to reject the notion that person descriptions involve a theory about movements.

In providing a description of persons, and a theory of person descriptions, we are providing the descriptive apparatus for specifying that the subject matter of psychology includes those characteristics which we have no reason to doubt have always been regarded as being distinctively exhibited by people as against other sorts of individuals. (Person concepts include what Strawson (1958) and others have called "person predicates", or "P-predicates".)

It is further the case that the descriptive apparatus for formulating a theory of person descriptions itself consists almost exclusively of person descriptions. This situation is a very unfamiliar one, and unfortunately, attempts to understand it by assimilating it to more familiar situations and terminologies is more likely to engender confusion than clarification.

For example, the fact that essentially no technical terminology is introduced in the descriptive account has led some readers to suggest that this is "merely folk-psychology...not scientific". But calling a descriptive account "folk psychology" will not make it disappear nor make it irrelevant for scientific

psychology. If "folk psychology" is what psychological theorists hope to supplant by a more authoritative "scientific psychology", then the relation between the two is that of competing theories—it is not the relation between a description and an explanation of the same state of affairs. Those who speak about "folk psychology" do appear to consider it a theory about human behavior rather than a theory of human behavior.

The reference to "folk psychology" is misdirected in almost every respect. The descriptive account is a presentation of the concepts which are constitutive of a particular type of individual, i.e. a person. "Folk psychology" is properly applied to commonly accepted empirical truths about persons. It would be suicidal to include under this designation the concept of a person and exemplars of that concept, for without these there would be nothing that warranted the title of "psychology" at all.

There is a further error implicit in the usual references to "folk psychology". A favorite pedagogical pastime for instructors in introductory psychology classes is to point out the "inconsistencies" in "folk psychology" as a preliminary to emphasizing that this is why we need psychological experiments—to find out what is really the case. An example of the alleged inconsistencies is "Out of sight, out of mind" vs. "Absence makes the heart grow fonder". When the occurrence of such pairs in a single community is placed in a semantic, or truth-seeking, framework, the conclusion that here is a contradiction seems inescapable. However, when the use of such locutions is placed

in a pragmatic or rule-following framework, that usage is entirely intelligible if the locutions are regarded as maxims rather than as statements embodying truth claims. Indeed, it is seen to be necessary for "contradictory" pairs to be available whenever possible, since the alternatives reflect the possibility of more than one course of action and the maxim gives the policy embodied in the course taken (as contrasted to giving evidence which justifies the choice). The assertion, implicit in many references to "folk psychology", that people who are not scientists are inconsistent, stupid, and conceptually confused may be emotionally satisfying to some scientists, and there may be some evidence to support it, but in the present case a more parsimonious account is available.

If the present descriptive account is rejected as descriptive by a psychological theorist, this will, on the face of it, amount to an admission that his theory has nothing to say about human behavior except incidentally and indirectly. There is an alternative, however—the present account is not stipulated to be the only possible one. The alternative would be for that theorist to present a different descriptive account which (a) would be recognizable as a descriptive account, and this would involve some already established terminology, and (b) depart significantly from the dead-level ambiguity of such subject matter identifications as "behavior". At the present time no such alternative is visible, but it would be a significant contribution for the present descriptive account if it brought

out into the open psychological disagreements (if there were any) as basic as those about the subject matter of psychology, and if it stimulated efforts to formulate the alternatives as clearly and comprehensively as possible. Such efforts would form the core of Descriptive Psychology.

The misapprehension of the descriptive account of persons as presenting a (disguised) stipulative definition and of "persons" and "human behavior" as (disguised) technical terms is a natural consequence of the earlier error of supposing that a description is a case of "reading off the features of what is actually there" and therefore is self-evident, infallible, and commands immediate universal assent. Since, so the thinking goes, these features are evidently absent, the so-called descriptive account is merely an arbitrary statement of someone's concept of psychological subject matter and is therefore more accurately described as a stipulative definition or just another psychological theory. But the fact is that in the descriptive account, every effort is made to stay within the limits of established usage for the person descriptions which figure in the account. This, and the fact that the possibility of the present descriptive account being corrected because it was wrong is explicitly admitted, distinguishes the present account from a definition and from a psychological theory of the usual sort. It would be particularly egregious to conclude

that if the descriptive account is mistaken in some respect this is evidence that it is something other than a descriptive account (e.g., that it is theoretical or definitional).

The converse error is to recognize the degree to which the descriptive account stays within the limits of established usage of person descriptions and to suppose then that what is being attempted is a philosophical analysis of person concepts. But there is a great deal of difference between (a) merely staying within the limits of established person-descriptive usage and (b) exploring the limits of such usage, minutely cataloguing its scope and variety. It is the latter which corresponds to philosophical analysis--the former is simply a reality constraint upon the effort to achieve a descriptive account of psychological subject matter. Far from being an analytic endeavor, the major effort and achievement of the descriptive account is that of organizing and classifying person descriptions in such a way as to exhibit perspicuously what we already take to be significant likenesses differences, and relationships. That we already take them to be significant is demonstrated by the fact that we have a long-established terminology for the classificatory, or "structural", descriptions in addition to having an established terminology for particular person concepts. One of the ends in view associated with the present descriptive account of persons is to ensure the significance of

psychological theorizing and psychological investigation by specifying a subject matter which is antecedently known to be significant as well as being what is generally considered to be distinctively "psychological".

III. Descriptions and the Use of Concepts

One of the most central, yet most easily misunderstood, features of the descriptive account hinges on the difference between descriptions and concepts and between the application of a description and the use of a concept. We give a description when we say that X is such and such, or that X's are such and such. Giving a description leads us naturally to making truth appraisals — "But is X such and such?"; "Is X really such and such?" In the past, a good many readers have taken the Person concept, delineated in Part I and Part II, as a simple description of persons, and it is on this basis that the issue of the truth of the descriptive account is raised (see Appendix A).

"When a description of X is given, all that remains to be established is whether the description is true". This is a rough formulation of our attitude toward description, but it is accurate enough to highlight two kinds of difference between the use of the Person concept and the usual procedure of describing something.

The first difference is that the concept of "description" is much the narrower of the two, and in fact, in the relevant sense, it is included in the concept of "use". Giving a description is one way of using a concept. To say that X is a such and such is to use the concept of a such and such in giving a description of X, and to use that concept in this

way is to use it in only one of the many possible ways in which it can be used. The range of possible uses of the concept will be a subclass of the class of intentional actions (presented in Part I).

Confusion arises because we habitually take the use of a declarative sentence as the mark of giving a description. As a heuristic example, we may consider the following statement: "A physical body will move in the direction of an applied force". This sounds like a description of physical bodies. However, taken as a description of the objects which we typically observe and treat as physical bodies, the statement is obviously false. In all likelihood it is universally false in that no one has ever observed anything of the sort to occur (the "Nth decimal place" argument). However, universality is not an issue at this point (but cf Part IV). As a description of the objects we observe, the statement is sometimes false because we apply forces to an object which is not then observed to move. It is sometimes false because the objects to which we apply forces do move, but not in the required direction. And, for example, when we observe the latter, we will say "There must have been other forces at work". What we do not do is give up the statement as being false. That is to say that we do not treat that statement as a description in the semantic sense.

The reason we do not give up that statement is that we have a use for the concept of a type of individual that moves in the direction of an applied force. That use is not primarily to describe what we observe, but rather, to guide our behavior, for example in deciding what forces to apply to an object or in deciding when to stop looking for forces that might have been operative on a given occasion.

The use of that concept may be codified by a more elaborate statement: "A physical body will move in the direction of an applied force—unless there is another force acting on it and tending to move it in a different direction". (Compare in Part II and III: "If a Person has a reason to do X, he will do it—unless he has a stronger reason for doing something else". That is not a description, either.) And the latter may be replaced by an unqualified universal statement: "The motion of a physical body is in the direction of the vector resultant of all the forces in the field". In the latter, however, the appearance of observational constraint has vanished. There is no possible observation which is logically incompatible with that statement. At most, an observation might lead us to conclude that there were as yet unidentified forces operating of that we needed a better way of computing resultants. (That we sometimes do give up such universal statements is another matter entirely—cf Part III.) But we see too, that

the first version, "A physical body will move in the direction of an applied force" will do every bit as well as this third version—there would be nothing forced or unnatural about using it in exactly that way rather than as a description.

We have a use for the concept of a type of individual that moves in the direction of an applied force because we have ways of behaving (including those we call "applying a force") which qualify as having treated an individual as being of this type. We have only one sort of fact here, not several. To say that on a particular occasion (a) we are using that concept, or (b) we are treating something as being of that kind, or (c) that concept guides our behavior, is to say the same thing, and it is to say that thing literally and precisely, not either metaphorically or loosely. (The elaboration of detail that might be required to clarify the negative case of (b), i.e. treating something as being not of that kind, is not at issue here.) The range of occasions on which it is appropriate to say that we are using that concept is far greater than the range of occasions on which it is appropriate to say that we are using that concept in giving a description of something. Both would include saying "The particle moved in direction $\theta_1\theta_2\theta_3$ under a force of N dynes", but only the former could include hitting a home run or asking "Which way did it go?". To repeat: giving a description only exemplifies a certain kind of use.

Since the qualifications on that moving object could be (and of course, are) extended to include all of physical theory, it should be clear that the use of theories by scientists is simply an instance of the use of concepts by persons, though it would not do to say that theories are concepts.

In general, an observer, O, describes a phenomenon, P, as "P". The physicist who describes particles, the biologist who describes nerve cells, and the psychologist who describes response acquisition exemplify this general form of human behavior. To date, no scientific description, "P", of some scientific object of study, P, permits the description of one particular object which calls for scientific study, namely the use of "P" by the user of "P". One reason for this is not far to seek. Our scientific behavior is guided by a concept of "objectivity" which makes it a virtue to be able to formulate descriptions without reference to people. For most sciences it is not specifically deleterious to let the person remain "understood", since P, their subject matter, does not include the use of concepts by persons. Here the major disadvantage of failing to mention that the application of scientific descriptions by scientists is a case of the use of concepts by persons is that, failing to mention it, we fail also to keep it in mind, and then that fosters the illusion that we have a kind of knowledge of the world that is independent of people and their activities. It is as though, having seen that the

rules of chess and descriptions of chess games could be formulated in terms of "Black" and "White" and without any explicit reference to players, we then concluded that we had finally achieved an objective description of the world independently of people and that chess is part of what the world would be like even if there were no people. With talk of physical bodies the difficulty is neither so simple nor so obvious as with talk of chess, but it appears to be the same difficulty.

There is one science, however, for which this phenomenon has a particular significance. For Psychology, the study of human behavior, it is *prima facie* a mark of failure if its descriptive resources do not permit the description of a very significant form of human behavior, i.e. giving psychological descriptions and using psychological concepts, and more generally, giving descriptions and using concepts.

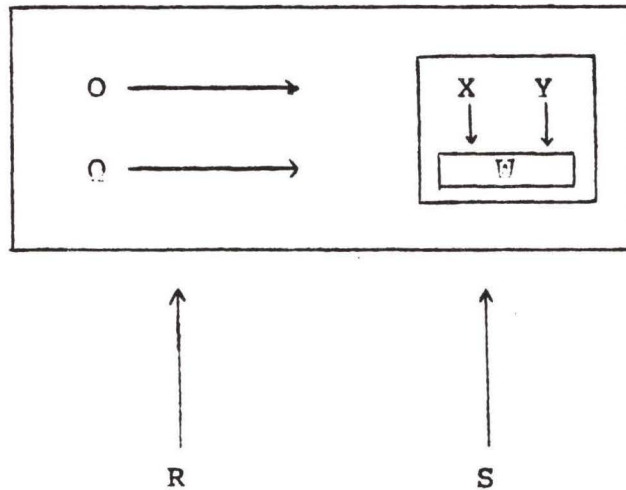
Here, then, is the second basic difference between (a) the usual notion of applying a description to a phenomenon and (b) the use of the concept of a Person, which is delineated in Part I and II and is the major constructive contribution of the present descriptive account. In contrast to the use of physical, biological, and neurological concepts, and in contrast to the possibilities afforded by currently available theories in psychology, the descriptive account, exemplifies the use of the concept of a Person in providing an account of P (human behavior) which is at the same time an account of

the use of "P" by the user of "P" (which is equally a case of human behavior).

Perhaps the clearest illustration of the significance of this difference lies in the contrast between the present descriptive account and other accounts of human behavior in regard to the phenomena of "error" and "individual differences". Figure: I. is designed to provide the relevant context for discussion.

X and Y, being behaving human beings, exemplify the subject matter of psychology. If O is a psychologist he is likely to apply a certain kind of description (in terms of "laws of behavior") to X and Y. He will discover that his description of X is different from his description of Y. He will then search for the "determinants" of these differences and regard his task as unfinished so long as X and Y have different descriptions. (Compare "The laws of motion apply to all physical objects" with "The laws of behavior apply to all behavior".) However, if O has been socialized by reference to a slightly different set of professional standards he will take individual differences as "given" and will be devoting considerable effort to the effective classification of such differences. As it happens, there is no end to classificatory schemes of the kinds which have been proposed. Nevertheless, it is likely that O will use one or another psychometric scheme in the hope that the measurement it permits may be used eventually

Figure 1. Inter-observer comparisons



W a phenomenon of some kind

X a person who observes and describes W and treats it as being of that kind

Y a second person like X

O a person who observes and describes X and Y and treats them accordingly

Q a second person like O

R A person who observes and describes O and Q and treats them accordingly

S a second person like R

to detect those determinants, and of course, in the interim it can be used to guide behavior in "practical" decision-making contexts. As it happens, schemes for classifying individual differences by and large involve the use of concepts which are quite different from those which figure in "laws of behavior". Not too surprisingly, "law-like" concepts and "individual difference" concepts have been taken to be competing alternatives in causal explanations. Nor is it surprising to find efforts to formulate one sort as being "really of the other sort (e.g., Allport's traits and, conversely, the psychoanalytic formulation of character structure as a "binding" of energy). Such efforts are not notable for either plausibility or effective coverage of the other domain.

The kind of individual differences which are ascribed to X and Y by either O or Q are intolerable when it comes to O and Q in their descriptions of X and Y. If O and Q differ in their descriptions of X and Y, then R (a psychologist, or possibly a philosopher) will conclude either (a) that O and Q are studying a different subject matter or that (b) either O or Q or both are in error, for there must be a true story to be told about X and Y about which all (qualified) observers will agree, or (c) et cetera. As it happens, R's description of the differences between O and Q involves the use of still a third set of concepts (philosophy of science, methodology) which is neither of the kind used in formulating laws of behavior nor of the kind used for formulating "individual

differences among X, Y, and others of their kind, nor yet of the kind used by X and Y for describing themselves and others differently. And so differences between R and S, when they describe O and Q differently, are of still a fourth kind (metaphysical? cf Appendix A).

In the light of the prior discussion of the use of concepts, there is nothing intrinsically puzzling or disturbing about this state of affairs. Certainly several types of concept are to be found here, and several kinds of individual differences. But then, each type of concept has its characteristic use, and the uses are obviously different, as noted above, and so what of it? Indeed, there are all manner of differences concealed in "the differences between X and Y". For X and Y represent both all the other sciences and the vast range of non-scientific activities, so that it is not four types of concept, but an indeterminately large variety that we are dealing with here. Of course, we have known this all along.

And of course, certain further conclusions will follow: First, all our systems of "laws of behavior" are fundamentally inadequate, and necessarily so. Second, our systems of descriptions of individual differences are fundamentally inadequate, and necessarily so. Finally, our "philosophy of science" is in all likelihood irrelevant at best and perniciously misleading at worst with respect to psychology,

since it is inductively based on a range of cases (other sciences—as noted previously, its relation to psychology has been prescriptive, not merely observational) which differ fundamentally from any adequate study of human behavior (i.e. in the need to account for the use of concepts) in a way in which they do not differ from one another. Our "lawful behavior" systems and our "individual difference" systems are inadequate because there is a significant range of human behavior and individual differences in such behavior which each must ignore, as is illustrated by the stratification of the X-Y, O-Q, and R-S pairs.

A reasonably decisive "quick test" of this conclusion with respect to behavior theories is that no such theory can be applied to the use of that theory as such. To characterize the user's behavior in terms of his own theory is to explain away his behavior, not to explain it. For example, the psychoanalyst has a theory of ego function and object cathexis, and he uses this in deciding what to say to a patient. Let us suppose that on a particular occasion his decision is a sensible one and the course of action he undertakes thereupon is successful. There is no way to give an account of that phenomenon by recourse to psychoanalytic theory (see Wick, 1965; and Griffiths and Peters, 1962 on this point also). In the latter there is a place for ego function, secondary process, object cathexis, and instinctual satisfaction, but there is

no place at all for decision, sensible judgment, and successful action. It is not that a successful action is an exemplar of "instinctual satisfaction" or any other psychoanalytic concept (for example, a successful action may be a case of instinctual frustration). Rather, it is we who treat this successful action as a case of instinctual satisfaction (if we are psychoanalysts), and we could not do this in the way we do if we did not already have and use the concept of a successful action independently of psychoanalytic theory in toto. Thus every use of psychoanalytic concepts presupposes the use of a different, non-psychoanalytic set of concepts by a user necessarily described in non-psychoanalytic terms. Hence the use of psychoanalytic concepts is inadequate to provide a general account of the use of concepts, hence inadequate to provide a general account of human behavior. And it is no different—or likely worse—if we substitute S-R theory, dissonance theory, or any other psychological theory in place of psychoanalysis.

It is commonly assumed that to give an adequate account of a phenomenon (e.g., making a sensible judgment) it is enough to be able to redescribe instances in terms of the particular conceptual system (e.g. psychoanalytic theory) which is involved. It is in this way that we "generalize" our behavior theories (cf Part IV), and it is in this sense that such theories have been claimed to give a general account of human behavior.

But if that were all that was involved, then we might as well advert to the more elegant and classic cases of "All is one", "Everything is either red or not red", and "What happened was the will of God". With such locutions and their systematic elaborations we can also redescribe all instances of human behavior, and do so more perspicuously and economically than by reference to psychological theories.

However, what is required for an adequate account of a phenomenon is an account of both relevant differences and pertinent similarities. Cases of sensible decision and cautious decision may be redescribed as cases of ego functioning (etc.), or of "not red", but the relevant differences between them are not differences of ego functioning—instead, those differences depend on certain standards which have nothing to do with psychoanalytic theory. This is why to give a description of either decision in terms of ego function (or habit strength, etc.) and to say that this is what is really happening is to deny the validity or relevance of the distinction between sensible decision and cautious decision. To do this is neither to contribute to our use of concepts such as "sensible" and "cautious" nor to explain the phenomena which we thus describe. Rather, it is to make a crude preemptive bid for the use of one sort of concept rather than another sort. Successful use of a different sort of concept is not explanation. For example, astrology and alchemy have

been superseded by astronomy and chemistry, but the latter do not explain astrological or alchemical phenomena. And if we sometimes deal successfully with a case of cautious judgment by treating it as a case of defective ego function (or as a case of economic behavior, or whatever), we have not thereby explained or better understood the cautious judgment.

The conclusion appears to provide a dilemma with respect to theory and explanation. In terms of the previous distinction between a theory of P and a theory about Q, where Q is a phenomenon of which we have independent knowledge and a separate description which—in effect—defines the phenomenon. But now it seems to follow that no theory about Q is possible at all, that if we meet the condition that Q is separately and definitively describable, then any other descriptive system will, when applied to instances of Q, be only a different way of talking, but not an explanation. It would follow further that the only cases which are cases of genuine explanation are those which occur within a theory of P. To this, we might answer, "No, but. . .", or, equally, "Yes, but. . .", and either would require an explanation.

The immediate conclusion is not that explanations which bring together two descriptive systems ("P" and "Q"; "sensible decision" and "ego function") are impossible, but rather, that no complete and explicit description of such a state of

affairs could be given without reference to a person whose use of "P" and of "Q" permits him to use "P" to give himself (or someone else) an explanation of Q. The metaphorical and elliptical aspect of "'P' explains Q" is emphasized if we compare it with the entirely analogous "'P' asks a question about Q". Without people, nothing explains anything. In most cases, as noted above, no difficulty in principle arises from leaving the contribution of the person "understood". (See also the discussion of "partial description" in Part I.) Psychology was identified as the exception just because it comprises the study of human behavior and the use of concepts by persons does fall within this scope, hence the latter is part of the subject matter and cannot be left merely "understood" in any adequate conceptualization of human behavior. Thus, one of those two answers is, "No, but it is the case for Psychology: an adequate theory about Q (an explanation of Q, Q being some form of human behavior) which is merely a theory of P is impossible".

Accordingly, any adequate psychological theory, "P", which is to explain a psychological phenomenon, Q, must involve a conceptualization of the use of "Q" (no less than of "P") by persons (note that if "P" is a theory about Q, Q is independently known and separately describable, so "Q" has a use). But if the use of "Q" is conceptualized as part of P, then Q is describable within "P", and then, simply, Q is part of

P and "Q" is part of "P", and so P is a theory of Q. Ordinarily, this would come about by virtue of "P" being a theory of a set of things, P' which included Q, with the user of "P" not knowing that it was so or how it was so. To arrive at an explanation of Q would in this case be to arrive at the point of being able to show Q as being part of P (or as a specific part of P), and to understand Q would, correspondingly, be to arrive at the point of being able to treat Q as part of P (or as that specific part of P designated in the explanation). And so "P" would have a descriptive use relative to Q. (Appendix B indicates why no restrictions relative to our present practices are thereby introduced.) Thus, the second of those two answers would be "Yes, but for Psychology that would not prevent us from giving adequate explanations of any of those phenomena (human behavior) which we have aspired to explain; nothing prevents us—we simply haven't done it yet, nor have we really tried".

We have not really tried, because we have accepted the stratification implied by a philosophy of science which casts science in the image of semantic theory (Compare: "object language", "meta-language", "meta-meta-language" with "thing language", "theoretical language", "philosophy of science"). As psychologists we have had to learn to be bored by otherwise disturbing facts, for example, the fragmentation of human behavior into disparate and incommensurable languages and

subject matters the coordination of which requires a mysterious, off-stage entity, i.e. a "scientist" or a "philosopher" or, more generally, a person: "Psychology ignores the person because Science is objective and abstract". "Psychology is piecemeal because it is empirical and complex". (But we think wistfully of another Newton.) "Better theorizing will do the job" (Or perhaps, better measurement). "When we know more about neurology (or genetics) then it will be different." But how could it be different then, except by accident?

By virtue of its widespread acceptance, the semantic model and its implications have been grafted onto our common practices and expectations with respect to the giving of descriptions. The present descriptive account is a rejection of that model. It is a way of being disturbed, rather than bored, by the view of Psychology as a Rube Goldberg collection of basically inadequate fragments made respectable by its dependence on more substantial disciplines. It is a way of treating that state of affairs as undesirable rather than explaining it away as inevitable. It is a way of trying to change that undesirable state of affairs by presenting, via the concept of a Person, a single conceptual system which does provide a general account of all human behavior, including the X-Y, O-Q, and R-S kinds, in which relevant differences of all kinds are genuinely accomodated rather than being explained away. It is hardly to be expected,

therefore that the descriptive account is a "description" in the highly simplified technical sense associated with semantic theory. "Description" here must be understood as a pragmatic, not semantic conceptualization. Roughly speaking, a descriptive account of X is the most conservative available account of X (but see also below). And roughly speaking, the contributions to a single general account come about in the following way (See also Appendix B):

(a) The delineation of intentional action in Part I introduces the use of concepts as an essential feature of human behavior (rather than, e.g., as a special kind of behavior or as the inner cause or hypothetical "determinant" of "visible" behavior). It also provides the equivalent of "the laws of behavior" (the demonstration of the equivalence is illustrated in Part IV and V).

(b) The delineation of the Person concept in Part II provides the integrated conceptual system which is used in describing individual persons and for identifying individual differences among persons. Since intentional action is the uniquely important element in this conceptual system, there is no forced division, and no competition, either, between general (lawlike) features of behavior and individual behavior—on the contrary, each contributes something essential to the intelligibility of the other.

(c) The further discussion of the status of the Person

concept and the interaction of Persons in Part II exhibits the reflexive character of the Person concept in providing an account of its own use. Given that the use of concepts is a logical component of the concept of intentional action and that the latter is a logical component of the concept of a Person, we need only to add that the use of a particular concept, i.e., the concept of a Person, by an individual is what is required in order for that individual to be a Person. With this specification, the basic formal requirements for an adequate general account of human behavior are met. If P does use the Person concept (if that concept guides his behavior) then he will qualify for recognition as a Person by another individual, O, who is also using the Person concept. It is because the behavior of both P and O is guided by the same concept that the behavior of each is in response to each and is relevant to each. Thus, human action and continuing interaction are exhibited as being mutually intelligible among Persons and actually possible for them without any implication that there are underlying causal processes which produce the behavior or that there is something called "the objective truth" about a person which we have to guess at (but never really know) in order have an effective basis or a rational basis for dealing with him. (Recognizably, the first of these two non sequiturs is the Excalibur which

theoretical-experimental psychology has aspired to wield, and the second is the Holy Grail that eludes pursuit by psychometric-experimental psychology). Given this as the paradigm case (see below), the remainder follows.

The general view presented of the interaction of Persons is that person descriptions are logically "richer" or "more powerful" than any other kind, hence cannot be empirically pinned down through the use of other kinds of description in which we might formulate our observations. The dilemma is the same as the one we face (1) in trying to solve three equations for four unknowns and (2) in having to make a move in chess, considering that the rules of chess do not determine that any particular move must be made. Note that the hopelessness of (1) in contrast to (2) is generated by the notion that there is a unique, correct answer. It is the logical discrepancy between types of descriptive resources which is prima facie incompatible with both underlying causal processes and "objective truth" formulations. It is this discrepancy which requires a contribution by an individual observer and makes possible different contributions by different observers. Since the participation of Persons A, B, and C in human interactions with one another are taken to be consequences of the person-descriptive appraisal of each participant by each participant, human interactions are seen as a multivocal lock-and-key phenomenon rather than a univocal

billiard-ball-collision phenomenon. Hence the mutual implication of "lawlike" and "individual difference" descriptions of human behavior, codified in the paradigms of intentional action and of the Person (Part I and Part II). In this formulation lies the potential for a deterministic account of human behavior but it would be of a different kind than that to which we have aspired. Hence the characterization (Appendix A) of the present formulation as Copernican and relativistic as contrasted to our current monolithic, building-block picture of the world. In this light, our present insistence on "observer agreement" as a condition for "objectivity" (see below) is seen as a vestigial anthropocentrism, for in a relativistic framework it amounts to the proposition that there is a correct point of view or that there is a unique individual difference description which is the right one. That the present formulation of Psychology as an autonomous science is not an insular approach may be illustrated by contrasting (1) present formulations of the relevance of genetics to human behavior as a case of "accounting for K percent of the variance" of particular classes of behaviors with (2) the formulation of person-descriptive individual difference parameters as discrete, identifiable loci of genetically "determined" variability and the mode of contribution of each such parameter to human behavior as the key "mechanism" of natural selection in human populations; in

conjunction with the potential for the computer simulation of human activities implied in a previous report (Ossorio, 1964) and dealt with explicitly in a forthcoming report, we may conclude that by virtue of its autonomy, the Person concept formulation generates increased potential significance for cross-disciplinary investigation.

So rather than being a simple description of Persons, even a general description, the Person concept codifies the logic of descriptions of Persons. Since the basic phenomenon is the use of the Person concept rather than something called the "meaning" of "Person" or something else called its "referents" the use of the Person concept is the most that could be described. It is not as though there first are persons and then we "read off their features" or discover the appropriate descriptions for them (even children, in growing up, learn these rather than discover them). But also, it is not as though we first encountered something called "the use of the Person concept" and only later discovered what it was. It requires the use of the Person concept to recognize its use and to say what that use is, hence the "reflexivity" of the Person concept. To say what that use is is not a mere description, in the semantic sense, but carries authority, and this, too, is a function of the reflexivity of the Person concept.

Compare: An observer who describes the rules of chess

describes a set of authoritative statements, for the rules determine what a description must conform to if it is to be a description of a chess game and what a person's actions must conform to if what he does is to be a case of playing chess. That kind of authority goes with what is described as "the use of the Person concept". In the case of chess, we may agree that the rules of chess have that authority, but question whether the observer has described them correctly, and if he has not, then neither does what he described carry that authority. And the observer himself may be tentative or even diffident in his formulation. In contrast, since the description of the use of the Person concept is itself a case of the use of the Person concept, the description itself must have the same authority as what is described. It is because only a person who could claim that authority (intentional action requires both the relevant concepts and the competences necessary for their use) would be in a position to give that "description", that the only intelligible presentation is an authoritative one—there is room for disagreement, or revision, or for silence here, but not for diffidence or tentativeness.

In this connection we may consider the status of the publication of the final product of a constitutional convention, assembled under the laws of the land for the purpose of systematizing the laws of the land in a new constitution. That

product would be senseless if presented as the opinion of those men that this was in fact the law of the land. It would be equally senseless and much more objectionable if it were presented as merely those men's decision that this was to be the law of the land. (Compare "I am the law" with the theorist's "Words mean what I want them to mean—no more and no less".) Rather, it would have to be presented as the law of the land, with the presentation itself, no less than the codification, carrying the authority of that law by virtue of (a) being subject to that law and (b) the law being what it was, i.e. one which legitimized a constitutional convention. This analogy may come as close as anything else to summarizing how it is with the presentation of the Person concept. The frequent appearance, in the presentation, of the locutions "codify" (e.g., "language codifies what people know how to do") and "formulate" reflects the pertinence of this analogy, and it reflects, too, the fact that such apparent alternatives as the "descriptive-prescriptive" polarity is too simple, equivocal, and overly specialized to provide the descriptive resources required for general use in a pragmatic framework.

Because it is not simply descriptive, the Person concept formulation more resembles an axiomatization of references to human behavior than it does a general description (which would only be one kind of reference), and it does so for both first-person and third-person references. For first-person use,

the use of the Person concept is more aptly compared to the use of a maxim, whereas the third-person use is more easily assimilated to the use of axioms, and this is part of the complexity of the non-technical concept of "description".

(Compare: The chess player need not use the rules of chess to say what it is he does, though he may, and others may, but he must use the rules in this way: he follows them. What others describe and what he does is the same.)

Thus, if we made use of our familiarity with axiomatic systems in order to facilitate an understanding of the Person concept and its presentation, we should have to say at once that as an axiomatization it differs from all our other axiomatizations in that it axiomatizes its own use. Because of this, its use in no way depends for its intelligibility on any of the semantic and informal pragmatic props provided by philosophers of science for the users of other conceptual systems (e.g., other sciences, current psychological theories) which are fundamentally incomplete in this respect. On the contrary, one of the uses of the Person concept is as a philosophy of science, for after all, the various sciences are simply various forms of human activity (cf Part III), and the Person concept formulation subsumes the relevant differences as well as the similarities.

(d) As soon as the distinction between giving descriptions and using concepts is clarified, and more particularly when the systematic use of individual difference concepts is brought into play, the concept of "objective" and the methodological status of "observer agreement" in the practice of psychological science appear in a new light. For in the general context of human behavior it is the use of precisely those individual difference concepts which permit us to understand one another and interact effectively with one another without having to agree with one another. Finding such use to be implied by an objective, general account of human behavior immediately raises the suspicion that the requirement of observer agreement in the way we have understood it is simply part of the price paid for the absence of an adequate account of human behavior. The discussion of psychological research in Part III suggests that simple, explicit observer agreement is best regarded as a simplified limiting case, that although we could not carry on as we do if we never agreed in this way, the amount and kind of agreement required for carrying on various activities differs greatly from one activity to another and is never to be regarded as a poor substitute for an ideal of perfect agreement. The linguistic research used in Part III to illustrate the different flavor of Person concept methodology in psychological research provides some

sobering empirical evidence in support of this view. An effort is made in Part III and IV to illustrate and characterize a mode of communication (featuring maxims and decision messages) which offers some prospect of reducing the requirement of agreement in whatever degree is made possible by our current skills and psychological acumen. This is not a luxury. It is not that requiring agreement, though possibly uneconomical, is at least a way of "playing it safe", for the evidence presented in Part III strongly indicates that in actual practice, requiring agreement may prevent experimental access to significant psychological phenomena. In light of this, a new premium is to be placed on rigor and sophistication in methodology and psychological acumen for an evaluation of the agreement requirement in particular cases, in contrast to our present near-exclusive valuation of expertise in the computational and procedural technology of experimentation.

(e) One of the differences between giving a description and using the Person concept is that the latter generates an endless number of descriptions in much the same way that a recursive definition of "sentence" generates an endless number of sentences (another point of resemblance to an axiom system). Of particular interest and importance in this connection is the technical device of paradigm case formulation. Briefly, the latter consists of giving

an account of a "complete" or "standard" case, which is frequently relatively complex, and then using this as a basis for describing other cases by reference to how they differ from the paradigm case or how they illustrate it. Frequently, the reason for using the paradigm case in this way is that it is the one which we know by observation and understand best, because we learned about it first-hand, and so it can be used to understand other cases. In any case, the paradigm case approach is in most respects in direct contrast to an atomistic approach in which we try to build up complex cases out of elementary constituents.

The paradigm case approach permits the same concept to be used in describing and understanding a range of phenomena for which no single, simple description can be given. The difficulties in giving descriptions of human behavior which are both general and non-trivial are well-known to both psychologists and philosophers. They are genuine difficulties, which require for their resolution descriptive resources of the kind provided by the paradigm case formulation. Those who have been unable to treat the Person concept formulation as anything but a putative "statement of fact" have characteristically been quick to challenge its truth by reference to proposed counterexamples which apparently do not satisfy the "simple description" given in the descriptive account. For example, the analysis

of "basic human needs" as derivable from the concept of intentional action, hence non-empirical (Part II), was illustrated by a typical list of "basic human needs" which included "the need for security". The latter has been challenged on the grounds that some men court danger, hence it cannot be the case that all men need security. This is fairly well comparable to challenging the truth of the statement that "a physical object moves in the direction of an applied force" by pointing out that some physical objects are not observed to do so. (Compare: "There must have been another force operating" with "He must have had a special reason for doing that".) To date no "counterexample" has been suggested which is not disposed of readily by undergraduates having an elementary grasp of the explicit use of the Person concept. Ironically, it is generally the case that the stipulated conditions which generate the apparent counterexample (another example: the paralyzed man who "knows how" but cannot demonstrate it) are precisely the conditions which provide the point of application of the paradigm case technique—in effect the construction of the apparent counterexample is itself an exercise in the application of the paradigm case technique.

It is because the contrast between standard and non-standard is already embedded in the concept of a Person that most of the counterexamples fail. (Compare: "In

tennis the server stands behind the service line and. . .". "That's false—on some occasions the server has a foot over the line." "Oh, but that's a foot fault—that's different. On a foot fault the server loses that serve—that's the penalty." And contrast: "In chess, the bishop moves diagonally. . .". "That's false. I saw a game the other day where the bishop moved straight ahead." "Then it wasn't chess you saw." Finally: With Persons, it is as in tennis rather than as in chess. With Persons, non-standard "moves" are the rule, not the exception, and it is our individual difference concepts which determine their logic and permit us to deal with them.)

It is because the contrast between standard and non-standard is part of the concept of a Person that paradigm case formulations are an effective and economical resource for presenting the concept of a Person. The presentation depends heavily on paradigm case formulations, for much of the working out of detail or accounting for special cases is left "understood". Thus, it is highly unlikely that an understanding of the Person concept could be achieved if these paradigm case formulations were taken as simple, general, falsifiable descriptions in the semantic sense.

An important special case, introduced in Part I, is that of a "part-description". Here the reference to the standard, or paradigm, case takes the form essentially of

referring to something as an incomplete paradigm case, i.e. as being like the paradigm case, but with something missing. It is in this way that the Person concept formulation is able to subsume such diverse phenomena as animal behavior, infant behavior, abnormal behavior, and even the behavior of nonbiological individuals under the same account as that given for normal adult behavior. We simply identify these kinds of individual by reference to what they lack that the paradigm case Person has. The use of part-descriptions is the methodological mirror-image of atomism. But the former makes it possible to reach any "level" of description without any appreciable tendency to minimize or exaggerate either similarities or differences, whereas it has been historically the case that atomistic approaches make it virtually impossible not to exaggerate similarities and explain away differences (the "nothing but" phenomenon). Paradigm case formulation is therefore regarded as methodologically more conservative (see Appendix A).

And although it is not made explicit there, the concept of part-description is used in Part IV and Part V in accounting for such plausibility and apparent success as our current theories and methodological formulations in Psychology have achieved. That is, such theories are shown (in more or less detail individually) to be incomplete formulations of the Person concept, linguistically disguised

by virtue of being paraphrases couched in an engineering, biological, or phenomenological idiom. If the Person concept formulation is accepted as a description of the subject matter of psychological science, then our extant psychological "theories" of human behavior will be seen as having the methodological status of homunculus explanations. For the essential characteristic of a homunculus explanation is that the phenomenon we observe is explained as the outcome of something "else" which works exactly the same way but is invisible (e.g., because it is "inside"), and that is what our "underlying process" theories of behavior come to relative to the concept of a Person. This, too, is a sobering thought, and for those who would consider it prima facie incredible, an explanation is given in Part V of how 'this' could come about without supposing that psychologists have acted perversely or foolishly. But a reflection on the recent appeal of "existential" approaches in psychology and a perusal of such Zeitgeist barometers as the American Psychologist in recent years may suggest that this, too, is something we have known for some time.

IV. Evaluation of a Descriptive Account

Several features of a descriptive account of the subject matter of psychology have been mentioned. It was characterized generally as an effort to provide a non-trivial description of the phenomena which provide a meaningful subject matter for explanation, elaboration, and investigation by psychological scientists.

It has been noted that the account which follows is "descriptive" in two ways. First, it is a description of P, as contrasted with a theory about P. Second, the account is given with a terminology that has an established use, and it is given in accordance with that use. In addition, one of the theses of Appendix A is that although some of the concepts and arguments presented in the descriptive account are substantially "the same" as some which may be found in certain philosophical contexts, the material which is presented here is not to be justified by reference to a putatively conclusive prior philosophical argument which has eliminated any other alternative, but rather, by reference to its suitability for presenting the descriptive account and illustrating the use of the concept of a Person. Thus, it would be particularly desirable to indicate what considerations appear to provide appropriate bases for assessing the adequacy of the descriptive account.

One basis for such an appraisal, clearly, is the degree to which the descriptive account is descriptive in the sense of staying within established usage. (The danger of supposing that such an achievement is guaranteed by the use of familiar words is discussed in Part IV.) For example, to what extent does the concept of a Person correspond to what we would already have said a person was? To what extent do person descriptions, as identified in the present account, correspond to what we would already have said were the characteristically psychological phenomena? And to what extent does the concept of a Person get at what we would already have said were the important things to know about people?

A second basis for appraisal is the degree to which the descriptive account is seen to have (or have definite promise of) substantial advantages of the kind proposed above. That is, to what extent does it safeguard psychological investigation against triviality and confusion? To what extent does it facilitate the comparison of theories and support atheoretical research by providing a comprehensive and coherent delineation of subject matter? (With respect to "cumulativeness" and "substantive adequacy" no immediate appraisal is possible except in terms of consistency and plausibility.)

A third basis for the appraisal is the degree to which the subject matter identified by the descriptive account includes the problems, activities, and theoretical efforts which have gained acceptance as belonging to the technical subject matter of Psychology. Relevant material is presented in Part IV and V.

Finally, in the light of the previous discussion of the formal identity between a description of P, a theory of P', and a theory about Q, it should be clear that someone who rejects the descriptive account as descriptive is nevertheless free to take it as a theory about "behavior" or some equally ambiguous subject matter. In this case, the basis for appraisal would be the comparison of the descriptive account and existing psychological theories in regard to scope, substantive adequacy, economy of descriptive apparatus, methodological coherence, and an estimate of its empirical fruitfulness. A basis for concluding that the descriptive account does not suffer in comparison with existing theories in these respects is presented in Parts III, IV, and V.

Part I
Intentional Action

I.	Intentional Action—a brief description.....	8
II.	The Use of the Concept.....	13
III.	Confusions and Resources in Complex Systems.....	20
IV.	Criteria for PI Concepts.....	25
V.	PI as a Standard.....	32
VI.	Types of Action.....	35
VII.	Some Psychopathology.....	40
VIII.	Review.....	45

Part I. Intentional Action

In the recent history of psychology there have been a variety of methodological disagreements. One major current issue has to do with the feasibility and appropriateness of giving a central place in psychological theory and clinical practice to concepts such as intention, expectancy, self-concept, self-actualization, and belief (such concepts will be referred to as "person concepts", and their application or linguistic form as "person descriptions"). What is found objectionable about person descriptions is that person concepts are so vague and subjective that their scientific use is incompatible with the scientific status and standards of psychology, and therefore inappropriate.

On the other hand some clinicians and others have taken a positive stand on the matter. For example, Mischel (1964) has presented a rationale for a rule-following model of human behavior by reference to which we understand an action by seeing its choice as intelligible. This model is contrasted with the predictive, nomothetic model in which we understand behavior by seeing its occurrence as predictable. However, his explication of the logic of clinical activity seems likely to perpetuate the perplexity and dissatisfaction which it was designed to alleviate. The difficulty is illustrated by juxtaposing three of the points he makes:

- a) The clinician has the empirical task of construing the client's constructions (Kelly's theory [1955] is used as the primary vehicle for Mischel's presentation).
- b) "For it is not the clinician's criterion, but the patient's own construal (i.e. his use of rules) which determines whether what he says on one occasion is really similar to what he says on others."
- c) "It is not logically possible for the facts ever to falsify my construct—not even subjectively." (This goes for both client and clinician.)

Although none of these points is here taken to be literally incorrect, it is difficult to see how they could do otherwise than to mislead a psychological audience whose professional and historical bogeyman is the problem of "other minds". Because the picture which is evoked is that of each man standing isolated on the island of his own constructions: (1) Since each of us is the criterion, and the only one, for what his own constructions are, we are likely to be mistaken about one another (point b), yet our constructions can never get at the truth of the matter, because the facts cannot falsify our constructs (point c), and yet we have to understand each other, and do it empirically (point a).

At about this point the properly socialized psychological investigator wanders off to look for a meter reading or a test result. Because the foregoing is just the dilemma of "other minds" all over again. And that is the same as the dilemma of "direct experience" and the same as the difficulty raised by person descriptions. (For example, my "real intentions" and

my "real feelings" are just as elusive as my "constructions").

What keeps the problem of other minds on our consciences is that in ordinary circumstances, everybody talks that way, including psychologists, and although we sometimes encounter perplexities in the course of this kind of talk ("I wish, sometime, I could be sure what he thinks"), no one would seriously suggest that we now have anything other than person descriptions that can do the job that person descriptions do.

Not too surprisingly, our response to the bogeyman has been the creation of a mythology which comforts us by giving the bogeyman the status of something unreal. It is a linguistic mythology of a peculiar sort. The first principle in the myth is that "saying so doesn't make it so." Thus, just because in our talk, we mention, e.g., intentions, it does not follow that there are any such things. The second principle is that what is real ("what there is in the world") is what is both nonverbal and observable, i.e. physical objects and events, including human bodies and "behavior". That is not enough to support a science however. The basis for science is what is both observable and public (sometimes "observable" is taken to imply "public"). But then, it must be communicable, hence verbalizable. Thus, "physicalistic language"; and now the game of science is on. But we notice that the effect of this maneuvering is to sever the connection between language and reality. Now, the connection can only be arbitrary. Words mean what we want them

to mean. But we approve of that, because we want to use words in new and better ways. And so, dinosaur-like, we have developed an incredibly expensive and elaborate etiquette for talking about declarative sentences (for example, for calling them "true" or "false", or "probable", or "confirmed", or "implied"). And with that goes an elaborate ritual for making up declarative sentences and admitting them as counters in the game, which we have made primarily a theory game. Thus, paradoxically, what is commonly heralded as a hardheaded, empirical pursuit of factual knowledge, turns out to be almost exclusively a set of contemplative (observational) and verbal exercises.

But we do not need to free ourselves of our language (which would be impossible in any case) in order to be linguistically more effective. What we have to do is to become better acquainted with it instead of pretending to order it about. Becoming better acquainted with it is not like giving ourselves or others a proof that something about language is the case. Something like that could be done only if we took a great deal for granted, and so it would be to repeat past mistakes. As Carnap (1947, p.206) points out, only within a particular linguistic framework is anything like a proof or verification possible. And, we might add, only within a general linguistic framework is the distinction between verbal and non-verbal possible.

Let us begin by taking seriously something which we

evidently do not believe, though it is frequently said nowadays, and we usually give it some lip service. That is that we have no way of recognizing an object or an event for what it really is in contradistinction to what we could say about it (cf Rhees 1954). We do not first notice a bare event or object and then decide what kind it is—what we notice is that such and such event occurs or that such and such object is there. And to notice this always carries implications—for example, implications as to what that thing is not. This is one of the central principles of information theory, and it has sometimes been expressed by saying that "every description is theory-laden."

If we are still taking language for granted when we hear such statements, we will take them for a lament—a lament over what we are lacking, namely a genuine knowledge of objective facts, and a lament over our limitations, namely the limitations imposed by our having only "theories" rather than genuine knowledge. And if we do not like that prospect, we may refuse to take such statements seriously. As is the case. But these statements are not a lament for what we lack. On the contrary, what they tell us is that nothing is lacking here. (A cup of coffee that has no firing pin is not lacking anything, either.) There is no difference between a mere description and a real description. And so we are not always in doubt about what a thing is.

But how can that be, since we can be mistaken (and isn't that what science minimizes the risk of?). To be sure, we can be mistaken, but then, if we did not already have descriptions, we could not be mistaken in their use, either. This raises the question of what it is to have a description.

We recognize a thing as an X only in the light of a descriptive system in which X's are distinguished from Y's and Z's. But there are still two things left unsaid here. First, in order to have such a descriptive system, we must know how to distinguish between something which is a Y or a Z—it is not enough to have merely vocal distinctions among X's, Y's and Z's. (On the other hand, it does not matter how we are able to make the distinction.) Second, it must make a difference to us whether a thing is an X rather than a Y or a Z, otherwise it is only a mock distinction—a gesture, a pretense. It is only a mock distinction unless there is something we sometimes do differently when it is a case of X and because it is a case of X rather than a Y or a Z--there must be something we know of that would constitute treating something as an X, and something else that would constitute treating something as a Y, etc. (Calling a thing an X is a case of treating something as an X, but it is the "degenerate" case—if all cases of treating a thing as an X consisted merely in calling it an X, there would be no such thing as calling a thing an X, either. Thus, any account of language which makes it merely a tool for referring

to what we observe is one in which the basic phenomena of language are left unexamined.)

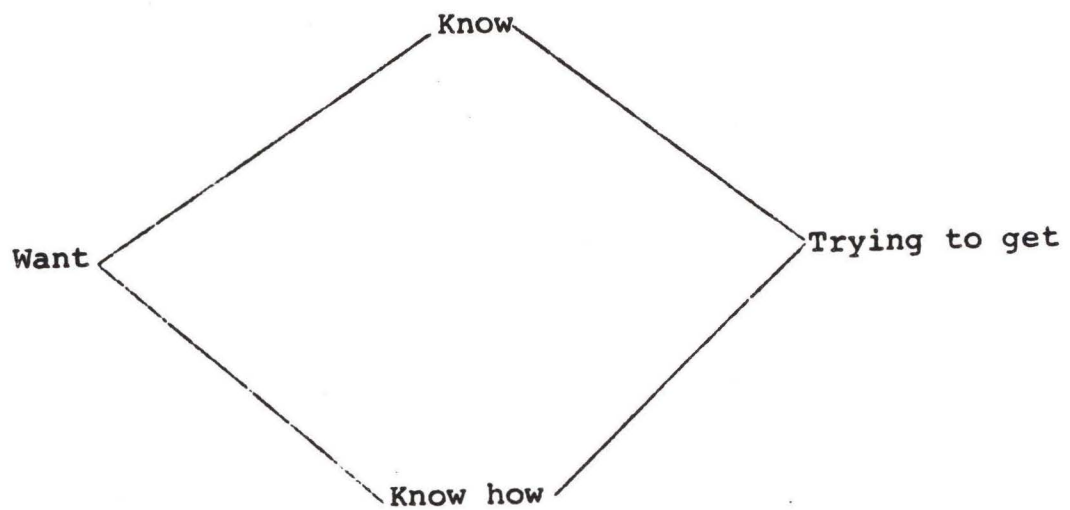
It is only when we have come this far that we have at all come to the position of being able to tell the difference between words and language, on the one hand, and, e.g., noises, designs, or marks on paper, on the other hand. If we have not come this far, then it will be surprising if we do not confuse sounds with words and if we do not confuse making a vocal distinction or a mock distinction with the fact of having said something. There is more to be said, of course, and it will be useful to examine (a) the use of a descriptive system, taking as basic the case where we need not assume the prior or auxiliary use of some other descriptive system, and (b) some of the features of complex descriptive systems which will be relevant to later discussions. First, however, it will be appropriate to present briefly a descriptive system within which we talk about intentional actions.

I. Intentional Action—a brief description

A paradigm for intentional action is shown in Figure 1. The paradigm, PI, is not a diagram of an intentional action (although used in this way it would have the merit of showing that there is not a direct connection between wanting and trying to get something.) Rather, the diagram is simply a convenient visual aid for representing "all at a glance" the descriptive system which accounts for the existence of intentions and intentional actions. A description of an intentional action is one that has the familiar form "X did A in order that B", "X's purpose in A-ing was to achieve B", or a recognizable variation of one of these. (See Anscombe, 1957, for a more extensive and rigorous account of the relation of "intention" to linguistic forms, especially "why" questions.)

To say that PI provides descriptions of intentional actions is to say that any instance of intentional action has five logically primary aspects: (1) An intentional action is always something performed by a Person. (This does not lend itself to visual representation. The concept of a Person depends fundamentally on the concept of intentional action, which it includes, and so the terminology is introduced here, although even the initial presentation of the Person concept is not completed until Part II. The capitalization of "Person" will be used to indicate an individual who represents an instance of

Figure 1. PI, a Paradigm for Intentional Action



the concept of a Person. When not capitalized, "person" will not imply that the individual is or that he is not a Person—that is left open.) (2) The Person wants something, or has a reason for doing something, which the action is intended to achieve. (3) There is an observable behavioral episode which constitutes an overt attempt to achieve the result. (4) The Person knows something relevant to the action. At a minimum, he knows the difference between what it is he wants and other things. (5) Finally, the overt attempt represents the exercise of some ability, skill, or competence. The overt attempt is neither accident nor coincidence, but rather, something the Person knows how to do—it is repeatable, with variations under various appropriate circumstances.

A distinctive descriptive system is one which cannot be translated into another descriptive system and cannot be replaced by another descriptive system. "Replacement" here is a pragmatic concept, not a semantic or logical one. A descriptive system is replaceable by a second descriptive system (or some combination, which would have the same result) when (1) a person who knows how to use both systems can use the second one in every case where he would normally use the first, (2) the use of the second marks the same differences for him on that occasion that the first one would (allowing for some additional contribution from the second system). And (3) the person knows ahead of time that he will be able to use the

second in place of the first (for example, if he knows that on each occasion the second descriptive system provides the description of the complete basis for the use of the first); that is, there is nothing ad hoc or post hoc about the use of the second in place of the first. Replacement is a weaker condition than translation, and most of the historically important theses concerning scientific terminology have been theses about replacement (with the notable exception of "operationism", which involves translation). For example, "construct validity" involves replacement in the pragmatic sense, because the conditions for the application of a theoretical term on a given occasion (and also, the observations which verify the predictions which validate the application of the term) must be completely statable, and statable within a descriptive system which is other than the system to which the theoretical term belongs.

Given two apparently different descriptive systems, the assertion that one is translatable into the other or replaceable by it has no initial plausibility whatever—such an assertion always carries with it the burden of demonstrating that that is so. There has been a good deal of effort directed toward the replacement of person descriptions, e.g. by physiological descriptions or physical descriptions. In spite of such efforts we have at the present time no reason whatever to believe that person descriptions are replaceable by any other

kind of description (cf Chisholm, 1955). Thus, until further notice which seems unlikely ever to be served (cf Part IV), person descriptions must be accepted as being generated by a distinctive descriptive system.

II. The Use of the Concept

The use of a distinctive descriptive system such as is implied by the concept of a Person, or of a physical object, or of an intentional action, constitutes a skilled performance on the part of the user. The ability to perform correctly in these ways is not directly inherited—it is something we acquire by learning. We learn here as we learn to play a game—not deductively, not inductively, but by experience. The learning of concepts and skills precedes other kinds and is required for other kinds. For example, to learn inductively is, basically, to count cases, but that requires that we know what to count and how to count, and that is the sort of thing we learn only by experience.

If a conceptual system provides a distinctive type of description, the applications of such descriptions cannot always be the result of an inference. The basic cases will be precisely those in which no inference occurs, because the pattern of inference is a pattern which generates an infinite regress of the "vicious" kind. To infer is to proceed from premises, which are something we already know about (e.g., as a matter of evidence, definition, or assumption) to a further conclusion. If all knowledge were inferential, then those premises must themselves be conclusions drawn from still other premises, and the latter would need still other premises preceding them, etc., etc., etc. There is no beginning to such a series and so nothing

can get started here—what such a series provides is a reconstruction of the process of extending knowledge; it cannot be a description of what we do in acquiring knowledge. The all-inference situation does not even provide a basis for conviction or belief, since it can provide a basis for nothing whatever. (In some current cognitive theorizing, "inference" is used in such a way that the premises need not be something the person knows about. For example, the premises might be causal conditions of perception or frequency data from which "correct" responses could conceivably be calculated with a high degree of accuracy. This technical use of a familiar English expression has the disadvantage of obscuring the fact that on most occasions to say that someone has made an "inference", in this technical sense, is to say that no inference at all has been made.) Thus, the "ground floor" of human cognition and behavior is not definition, not proof, and not inference machinery. It is, rather, the ability to recognize when something is so, and the ability to accomplish something. And the value of that is precisely: whatever difference it makes (information theory again).

If the paradigm, PI, reflects a correct analysis of intentional action, then it is something people use. And then there is a distinction made among "want", "know", "know how", and "trying to get" types of concept and there are criteria for applying the corresponding descriptions. These criteria must

be public. If it were a matter of one person's say-so, nothing he said could possibly be wrong. But then, just because of that, he could not possibly be right, either. There would be no difference between his being wrong and his being right. And so he could say nothing, even to himself, and of course, we could not understand him either.

In general, the criteria for the application of person descriptions, including descriptions of intentional action, are not explicitly statable. If they were, the descriptive system underlying person descriptions would not be a distinctive one. It would be replaceable by the descriptive system(s) in which the criteria were stated. (Any conclusion which follows from X will follow from Y if Y implies X, and this is what would be the case on each occasion where "Y" represents all those facts by virtue of which "X" is asserted on that occasion.) Even in those cases where we do speak of some evidence, Q, relevant to the appropriateness of a person description, the appeal is almost universally to agreement rather than to an inferential rule. That is to say, the things we bring in as "evidence" are brought in as a way of inviting agreement from someone who already has the ability to use person descriptions—it is not backed up by a rule of inference "Q implies X" (X being a person description) which could be used to demonstrate the validity of the judgment "X" to someone who had not the mastery of person descriptions. And if we call it an inductive inference,

"Q, so probably X" this will be like permitting the psychotherapist to "verify" an interpretation by using as evidence other, later interpretations—or earlier ones, for that matter (cf Wisdom 1962). The only facts that are established in this way are facts about what we are inclined to say.

Thus, like any distinctive descriptive system, PI depends fundamentally not on verbal links to other kinds of terminology, but on the existence of people who know how to use it, who have mastered the criteria (have the requisite skill) for applying the concepts which are involved—a set of people in whose lives the application of the system has a place. The sufficient condition for there being criteria, statable or not, is that there should be general agreement in judgments in individual cases and that another person should be able to learn to make correct judgments of that kind (Bambrough, 1961).

A brief note on "criteria": (1) To say that there are criteria for the application of some description, e.g. "He is angry" is merely to say that the concept is not a fictitious one—there are cases where "He is angry" would be correctly used, and there are people who would agree on that as well as on cases where "He is angry" would not be correctly applied, and it makes a difference to them whether or not a person is angry, and another person could learn to make correct judgments of this kind. "The criteria for P" refers to whatever is required in order for the application of "P" to be fully justified

(which is not to be confused with "true", "known for certain", or "highly probable"), and "statable criteria for 'P'" refers to any locutions other than "P" which designate the criteria for P. In terms of any description other than "P", what is required for the application of "P" to be fully justified will normally differ from one occasion to another. In general, there is no reason to suppose that the criteria for some P can be given in any way other than "P". (2) To say that a person has mastered the criteria for the application of "P" is simply to say that he knows how to use "P" correctly. (That is like saying that he knows how to do sums, or how to fix radios, or how to track a deer, or how to play chess.) Among other things, this implies that he can recognize when that description is fully justified, when it would be incorrectly applied, and when there is a question as to its applicability. (3) The "criterial use" of a description is the kind of performance which demonstrates the mastery of the criteria for that description. (4) To say that a person has mastered the criteria for "P" is not to say that he makes no mistakes and knows all there is to know about the use of "P". That would be like saying that a person does not know how to speak English unless he knows every word in the English language and never makes a mistake in usage or grammar. So there are criteria for "has mastered the criteria for 'P'", and what will count as mastery of some "P" will reflect what is a workable require-

ment for that specific "P". (5) Without the foregoing, we could not raise questions regarding truth or evidence and we would have no way to settle them—there would be no such question. To recognize what would constitute evidence, to recognize how much and what kind of evidence fully justifies saying that it is true that he is angry—these are all part of knowing how to use the description "He is angry." To establish some fact in evidence (which then involves the use of some other description) presents the same kind of situation as was the case for "He is angry." If I have not mastered the criteria for the application of that other description, then that will not be something I can think of as evidence or count as evidence. Thus, evidence and truth are special and secondary considerations for the behaving person and for the characterization of human behavior, whereas the mastery of criteria is a general and fundamental feature of both.

It is not on the basis of evidence that we count cases, and there is no evidence, either, that something is a pawn, or a person, or an action. Neither is there any lack of evidence—we are at the ground floor here. In the paradigm case, to call a thing a pawn, or a person, or an action, is an essential part of treating that thing as a pawn, or a person, or an action. The latter is the difference it makes to describe it as we do. There is constraint here, but it is one of ability, not evidence. Treating something as, e.g., a pawn,

is something I know how to do—or else I don't. What I designate as a pawn may be something that would more commonly be recognized as a penny or a piece of chalk. But if I know how to play chess, I will probably have very little trouble in treating those things as pawns. Whereas, if I designate that mountain as a pawn, nothing that could be expected to follow would constitute having **treated** something as a pawn, and if I know people, I will also know what to count as having treated something as a person or as an action. "An action is what a person does."

III. Confusions and Resources in Complex Systems

The simplest use of a descriptive system is to provide a set of verbal pigeon-holes for independently occurring phenomena. It is a taxonomic use. Color names, compass directions, and time measurement provide familiar examples which approach a simple taxonomy. This is also the picture most commonly associated with information theory, i.e., the picture of N independent categories to which an incoming signal may be assigned. Descriptive systems associated with complex, organized phenomena offer additional potentialities which may facilitate description greatly but sometimes also result in confusion. Two such features of descriptive systems are particularly relevant to person descriptions and the concept of a Person. They are designated here as "partial-descriptions" and as "part-descriptions". Both stem from part-whole relationships in the complex phenomenon which corresponds to the descriptive system as a whole. That complex whole will be referred to as the "primary context".

A part-description is one which refers to the separate or apparently separate occurrence of something which is normally found in the primary context; what distinguishes a part-description is that the object or event which occurs separately cannot be described independently of a description of the primary context. For example, "the kind of remark only an idiot would make", "the smell of bacon", and "the corner of

a brick building" are all part-descriptions. They all refer explicitly to the primary context in which such a remark, such a smell, or such a corner, respectively, would be found. What is not given is a direct, independent, "pigeonhole" characterization of the remark as such, and the corner as such. Yet each of these can occur in the absence of its primary context. The remark need not have been made by an idiot; the smell might have come from a bottle of perfume; and the rest of the building might have been destroyed or never have existed (e.g., a movie set). The important contribution of part-descriptions in the use of language is that they eliminate the necessity for undergoing a new set of learning experiences (mastering criteria) for every distinguishable element of the real world which can be talked about. In summary: In a part-description that primary context is mentioned explicitly, whereas the "part", though it occurs separately, is characterized only indirectly as the kind of thing which occurs in the primary context.

A partial-description is one which refers to an object or event which cannot occur except within the primary context; in spite of this, the partial-description provides a separate, explicit characterization of the "part" without mentioning the primary context at all. Partial-descriptions would be unintelligible except in their systematic use. They are frequently "shortcut" expressions which would properly be replaced

by more complete expressions. For example, "He bought Q" is an elided form of "He bought Q from A by paying P for it." "He bought Q" is a partial description because nothing of the sort could happen if that was all that happened. One cannot buy a thing, or even appear to, except from a seller and for a price. Similarly, one could not play a trump if that was all that happened. Only in the context of an actual game could that piece of cardboard be a trump, and only in the course of a game could I play a trump. The important contribution of partial-descriptions is that they "streamline" our language by permitting us to drop out of the conversation whatever can be taken for granted. To summarize: In a partial-description, the "part" is the only thing that is mentioned, and the primary context, though it is a necessary accompaniment, is left "understood".

Part-descriptions are a potential source of confusion indirectly, because they lend themselves to symbolic use (cf Part II). Partial-descriptions lead more directly to confusion and perplexity as soon as we treat them as "pigeonhole" descriptions and forget that the necessary context for what partial-descriptions refer to is always "understood". This is not to say that partial-descriptions refer to something fictitious. On the contrary, there is on each occasion an observable something to which the partial-description refers (e.g. a piece of cardboard that counts as trump, a set of motions that counts as a purchase). The observable something is

the referent of the partial-description, not its meaning, and its meaning is defined by the external relationships of the referent, i.e. by the part played by the referent in relation to the primary context. (Similarly, the role of, e.g., a policeman, is defined by the relations of a policeman to other individuals in other roles—it is not defined by the individual characteristics of a given policeman.) Thus, when we forget how much is taken for granted in using partial descriptions, and this is likely to happen if we are scientists, we are likely to treat partial-descriptions as pigeon-holes, and then we will ask what it is about the observable something that validates the partial-description. Whereas, there is nothing about that observable something that validates the partial-description. (And if I own some furniture there is nothing about those observable somethings, those pieces of furniture, which validates the description "my belongings".) So that, for example, to pick a known instance of a partial-description and use the description of that observable something as the "operational definition" of the partial-description would be pointless and misleading. It is not the kind of procedure that could be expected to lead to consistent results if one is interested in the phenomenon designated by the partial-description. (I can sit by myself and practice laying that card on the table all day long, but that will not be a case of playing a trump. And the way to investigate my belongings is not to examine everything that looks like furniture.)

Person descriptions, it seems clear, are like "trumps"—they are partial-descriptions. And because partial-descriptions are separable from the conceptual systems which give them meaning, one can learn to apply them in specific cases in the proper context without recognizing their necessary relation to their conceptual context, the concept of a Person. More than anything else, it is the translation of this ability into a "pigeon hole" investigation of person-descriptive phenomena that accounts for the "elusiveness" of person concepts and the perplexities encountered in dealing with them as psychological subject matter. What is required, then, in order to reduce the appearance of necessity in this linguistic shadow boxing is an explicit formulation of the concept of a Person. The major contribution of the present delineation is to permit the gross structure of the Person concept to become visible as a unit. It will be seen that both in the formulation of the concept of a Person and in the use of this concept in life situations the effective use of part-descriptions plays a crucial part.

IV. Criteria for PI Concepts

The criteria for "want", "know", "know how", and "try to get" concepts are permissive rather than prescriptive. That is, they select what is *prima facie* allowable rather than what is true or necessary. It is the PI system as a whole which comes into play in judging what is actually the case. The cases referred to below are intended to illustrate the different kinds of PI concepts and the different relevant criteria.

It should be made clear at the outset that it is the logical structure of the Person concept that is being illustrated here by reference to the more specific content with which we are familiar. Such content may be expected to vary on a cultural and subcultural basis, much as language does, although no simple parallelism between linguistic communities and Person concept contents is assumed.

WANTS (a): Not everything that a person may mention is intelligibly ascribable to him as simply "what he wants". I can be said to want to go hunting, without any further question being raised thereby. I can be said to want a million dollars, but only if I have a further end in view. Aside from the many further ends which would be like "to go hunting", I might simply want to have a million dollars, i.e., to be in the position of one who has as contrasted with the position of one who hasn't got a million dollars. In the case of "a million

dollars" we would have few qualms about treating it practically as an end in itself because it is so easy to think of many genuine ends toward which that could contribute. In contrast, I cannot without further explanation be said to want exactly two ounces of mud, or a twig of mountain ash three inches long, or the thigh bone of a hen turkey, or any of a wide variety of objects, events, or situations.

Some criteria apply to priorities among wants. These are generally less restrictive than the criteria for wants as such, but they are there. For example, I could be said simply to want to smell that rose, or to save that child's life. I cannot, without further explanation be said to prefer the former to the latter or allow it to take precedence in a choice situation. In general, the further explanation will consist of adducing other ends or a further end in view.

The employment of criteria for wants and their priorities embodies a view of human nature insofar as such employment constitutes a delimitation of what a person can be understood as wanting without any further end in view. Such a view is not a theory of human nature—it is not something we could discover to be wrong. It is part of the concept of a Person, and the employment of these criteria expresses our standards for what it makes sense to say.

What it makes sense to say is what makes a difference in our lives—the social practices involved in the use of words

are what give them meaning. If what we say makes no difference, then we have not said anything, and then there is no sense in asking, either. ("Is it five o'clock on the sun?" "Well, what time is it on the sun now?") The grammatical resources of our language make it possible to merely go through the motions of saying something. (Roughly: Like going through the motions of designating that mountain as a pawn.)

WANTS (b): We have criteria for what a situation calls for, i.e., standards for judging when the situation in which a thing is done is reason enough for doing that thing: If I pass an acquaintance some morning and he says "Good Morning," that is reason enough for me to reply in kind. It gives me a reason, and I do not need a further reason, and if I reply in that way, he need not then ask, "I wonder what he meant by that?" If someone insults me that is reason enough for me to become angry, and if the insult is freely offered, it is reason enough to reply in kind. If I see an automobile bearing down on me as I cross Broadway, that is reason enough for me to jump out of the way.

To say that a situation gives me reason enough to act in a certain way is not to say that it justifies my acting in that way, although the latter is a frequent concomitant. Rather, it is to say that one can understand, that it is the sort of thing a person would do in those circumstances. ("Shucks, m'am, any red-blooded American boy would have done the same.")

Conversely, if I did not say "Good morning", or became angry, or jump out of the way of the automobile, and if I did not do anything else that had the same significance, that would require some further explanation.

There is some degree of asymmetry between "having a reason" and "wanting". Of the two, having a reason appears better suited for use as the fundamental concept, since it is easy to see that wanting something gives one a reason for trying to get it, whereas it is not so clear what it is that a person wants on those occasions when he has reason enough to do something. However, it appears that one could plausibly say what he wants on any specific occasion when he has reason enough to do something. Thus, in the following exposition, "wants" and "has a reason to do . . ." are used as alternative constructions in order to take heuristic advantage of the familiar motivational connotations of "want".

TRY TO GET: To try to get something is to engage in overt, observable behavior which (a) could be expected to result in having that thing; or (b) is the kind of thing that is done with the aim of getting that thing: If there is a camera in the car, then walking to the car qualifies as trying to get the camera. (It also qualifies as trying to get anything else in the car, or the car itself.) If there is a glass of water on the table, then reaching toward it qualifies as trying to get the glass of water. If I am confronted by a

crocodile and I run away, this qualifies as trying to get away from, or trying to avoid, the crocodile.

Generally, "try to get" descriptions are clear cut cases of part-descriptions. The overt attempt, e.g., to escape from the crocodile is recognizable as such because it is recognizable as the sort of thing a person would do if he were deliberately trying to escape from the crocodile. We learn this kind of thing by experience, and the experience required is simply the experience of some number of instances which were accepted as actual cases of trying to get. (The beginner will normally take at face value the veteran's statement, e.g., that "that was a perfect overhead smash" or "that was an evasive response", especially if the activity they are engaged in is the teaching-learning activity. And the child will normally accept what parents and other adults say, at least until he has a reason not to. It is also convenient in this regard to have some conventional expressions, e.g., facial expressions signifying emotions. These, too, give us prima facie cases.)

Trying to get a million dollars illustrates an important class of cases in which there is no single thing that could be described as "the sort of thing one would do" to achieve that end. But we can take any overt attempt or series of attempts, and judge whether it is of a kind which could be expected to bring one closer to the given end. For example, investing one's money would pass the progress check; robbing a bank or

merely saving one's wages would probably be considered borderline; giving one's money away or becoming a beachcomber definitely would not qualify.

KNOWING HOW: To know how to do a thing is to have the capacity, the skill, the competence to do it. However, not all capacity concepts are "know how" concepts. Instinctive, reflexive, or in general, unlearned, capacities fall outside this range. (But native capacities developed through training do qualify.) To know how to do a thing is not merely to be disposed to engage in a certain sequence of motions. It is to be able to do so on appropriate occasions and to be able to adjust the performance in hitherto unpracticed ways to meet the exigencies of a particular occasion. (Think, for example, of knowing how to drive a car.)

In the paradigm case, a capacity is demonstrated through a performance. Sometimes more than one is needed, e.g., if luck or chance need to be ruled out (compare: knowing how to climb a ladder, knowing how to do arithmetic, knowing how to run a farm). Ordinarily, I will have some knowledge of my capacities and, for example, that will influence my choice of overt attempts, but that is another question. I may be entirely convinced that I know how to play chess, or tie my shoelace or conduct an experiment, but the criterion for whether I know is not my conviction, but instead, an observable performance.

KNOW: Here, it is important to distinguish between being

aware of something and being aware that something is so.

To be aware of something (e.g., a chair, a dangerous situation, the green color of tree leaves) is to be able to participate successfully in the standard social practices which turn on the distinction between that thing and other things. Except that what is specifically not implied is the ability to say what that something is. How much one has to participate successfully in is given for particular P by the criteria for "aware of P".

To be aware that something is so is to be able to say that it is so and to appreciate the difference it makes. It is to be able to engage in the corresponding social practices including being able to apply a certain description correctly. Thus, "being aware of something" operates as a part-description relative to "being aware that something is so". When one is merely aware of R, one does just the sort of thing one would do if one were aware that R was the case. We do not have a second way of recognizing what one does when one is only aware of something and is not aware that it is so.

The distinction between knowledge and belief is not central to the present discussion. Roughly: If what I take to be the case is appropriately grounded in observation or evidence, then I know it: Otherwise it is merely something I believe. Knowing something is not the same as either having a strong belief or having a true belief (cf Ryle, 1949).

V. PI as a Standard

PI provides the paradigm of intentional action. There is a logically necessary relationship among the quadruple of PI concepts (wanting, knowing, knowing how, and trying to get). It is like the relationship between buying, and selling—in our normal use of these terms, one implies the other. (And a pawn implies a bishop, rook, queen, etc., as well as a 64-square board and practices such as capturing pieces and checkmating.)

PI serves as a standard because any event, in order to be seen as human behavior, must be seen as falling within the limits of appropriateness determined by criteria such as those illustrated in the previous section. Any apparent exceptions must be merely apparently exceptions. (An apparently married bachelor must merely appear to be so—either he really is not married or he is not really a bachelor.

To try to reconcile an apparent exception is to try to provide an explanation, and to succeed in reconciling the exception is to provide an explanation. To need or want an explanation for a person's behavior is not a permanent condition. The acquisition of knowledge may remove the need or it may create the need

for explanation where none existed before.

"If I see a car bearing down on me as I cross the street, that is reason enough to jump out of the way." This is a situation which fits PI without apparent exception: What I want is to avoid the danger of the car, and that is something which a person might be said to want without any further end in view. My overt attempt is just the sort of thing one would do, having that end in view. What I am aware of is that the car is bearing down on me, which is something I could be expected to have observed, considering that I looked. And finally, there is no capacity involved in jumping out of the way that I have not demonstrated in performing the act.

"If I did not jump out of the way, that would require an explanation." Perhaps I simply stop and look casually up at the sky. Here, there is nothing I am overtly attempting except, perhaps, to see something in the sky. Since seeing the car bearing down on me is reason enough for me to get out of the way, to say, e.g., "He's looking for an airplane up there" is not to give an intelligible account of my behavior. And to say further, "He's more interested in seeing the airplane than in getting out of the way of the car," is still not to give an adequate explanation, because this order of priority would require further explanation. A different special explanation would be the following: (a) Special knowledge—I recognize the driver of the car, know that the car has special brakes

and can stop on a dime, and I believe that he is trying to frighten me; (b) This is reason enough for me to want to frustrate his attempt; (c) To stand in the road and show no fear is to do something incompatible with his intentions for me—it is the sort of thing one would do in order to frustrate that intention; (d) To stand idly in the street requires no capacities that I am not demonstrating thereby (including, for example, the capacity to inhibit fearful impulses). Now PI applies without apparent exceptions.

VI. Types of Action

Because of the quadruple differentiation of the concept of an intentional action there are many parameters which could serve as a similarity basis for classifying actions into types.

Among the aspects which could be so used are the following:

- a.) What the person is aware of
- b.) What he knows about
- c.) The basis for his relevant knowledge (e.g., knowledge vs. belief)
- d.) What he wants
- e.) The presence of a situation which provides reason enough
- f.) The function of the action (the further effects which are relevant to the person, e.g., related to his needs)
- g.) The discriminable features of the overt attempt (e.g., style, and omission vs. commission)
- h.) Present capacities, demonstrated or assumed
- i.) Antecedent conditions—capacities acquired or demonstrated, and dispositions, acquired or demonstrated.

It is of greater interest, however, to use these aspects in combination. Proceeding in this way provides an effective means of reducing the appearance of a Deus ex machina operating in the guise of "provides reason enough". More importantly, it permits a cogent formulation of some of the most important uses of intentional language. That is, cases that are explained by reference to fear, anxiety, guilt, anger, jealousy, etc.

For example, if we ask what must be assumed or known about a person in order for the attribution of fear to him on a given occasion to be intelligible, we find the following

(Gosling, 1962):

- a. He must have learned to distinguish between dangerous and non-dangerous situations, objects, events, etc. (And to know something as dangerous is to know it as something to be avoided.)
- b. He must have learned how to perform some actions which were effective in escaping or avoiding dangers. (This is not to say that he must be able to recognize or avoid all dangers.)
- c. He must have an acquired disposition to take steps to avoid danger in the absence of deliberation. The criterion for having such a tendency is to have exercised it in some past performances. (This third condition is what distinguishes fear from, e.g., caution or prudence.)

Thus, in saying "X did A because he was afraid of P," we are saying that (a) he is aware of a danger; (b) he wants to avoid it; (c) he knows how to engage in overt attempts to avoid danger, both deliberately and otherwise, and (d) what he is doing now is an exercise of that capacity—he is trying to avoid the danger he is aware of. In the simplest case, when the quadruple criteria are met, this is to describe X's action in a way that fits PI without apparent exception. (A more complex case is described below.)

This account makes clear why it is that "He acted fearful because he was afraid," is not a reification and why "X did A because he was afraid of P" makes X's action intelligible and intelligent instead of merely promoting the postdiction of a visceral event or a qualitative aspect of direct experience. It emphasizes the point that intelligent behavior is seldom accompanied by prior episodes in which the planning of the

behavior takes place (cf Ryle, 1949). It accounts for why we consider fear, anxiety, terror, apprehension, etc., to be the same kind of feeling (Gosling: The same kind of prior learning is assumed) and different from envy, anger, or others (different learning). Condition C also accounts for the fact that feelings generate impulses which must be controlled if we are not to be carried away by them, and it helps us to understand why it is that even though our feelings are ours, they also have the aspect of something that happens to us.

A parallel set of conditions can be advanced for attributing guilt. The following will indicate what changes need to be made:

- a.) He must have learned to distinguish between right and wrong actions and between good behavior and bad. (To see an action as right or behavior as good is to see it as something to be done; to see an action as wrong or behavior as bad is to see it as something to be avoided.)

And a parallel formulation can be given for anger:

- a.) He must have learned to distinguish circumstances which are needlessly frustrating and situations which constitute being attacked without sufficient reason. (To see something as a needless frustration or a gratuitous attack is to see it as something to be eliminated.)
- b.) He must have acquired some capacity for identifying sources of frustration or attack and some capacity for eliminating frustration or attack by means of an attack on the source.
- c.) He must have an acquired tendency to attack, without deliberation, sources of needless frustration or gratuitous attack. The criterion for having such a tendency is to have exercised it in the past. (This third condition distinguishes anger from, e.g., self-interest or persistence.)

Several remarks are to the point here: First, the point of the preceding exercises is not to exhibit elegant substantive analyses of these concepts, but rather, to illustrate the logic of such analyses and to show their place in relation to the concept of intentional action.

Second, it may be assumed that even exhaustive efforts along the lines indicated above will not succeed in delineating adequately all the significant features of "feeling" concepts. For this, additional resources are required. For example, to distinguish between "stronger" and "weaker" forms such as anger-resentment or fear-timidity, it would seem that we need to be able to refer to some degree of balance between wanting and wishing. (Wishing is conceived of as a part-description relative to wanting: Whereas wanting has three correlatives, knowing, knowing how, and trying to get, wishing has only the first of these. We wish for things without trying to get them and we can wish for things without knowing how to get them—for example, we can wish for impossible things. Cf Peters and Mace, 1962; and Webster, 1957.) Or again, for the ingredients required to distinguish, say, an angry action, an angry mood, a hostile temperament, and the direct experience of anger we need to go from the concept of intentional action (PI) to the concept of a person (PII—see below).

Third, it is instructive to review the characteristics

of the "standard form" common to the conditions for attributing feelings of anger, guilt, and fear: Condition (a) expresses a tautologous relationship and built-in significance. What is dangerous is what is to be feared, and what is dangerous is something to be avoided. Condition (b) describes the implementation of that significance, i.e., the acquisition of the capacity to act appropriately in the light of (a). And finally, condition (c) describes a tendency to act spontaneously in ways appropriate to (a). In the light of earlier remarks on the fundamentally public character of the concepts of "Person" and "intentional action" it is worth noting here that the fact that conditions (a) and (b) refer to learned discriminations and capacities has the consequence that these discriminations and capacities are public in nature since the criteria for these are public. Also the tautologous nature of (a) sheds light on how a situation can provide "reason enough", e.g., to be angry. And in the light of earlier remarks in regard to treating something as a pawn, it is also worth noting that the present formulation of feelings such as anger, fear, and guilt amounts to saying that (1) to have such feelings is a way of treating something as a dangerous thing, a frustrating thing, a wrong thing, etc.; (2) moreover, when we do this, we are doing what comes naturally; and (3) to do so is to exercise a capacity or competence with respect to which we may expect both individual differences and differences during the life of a single person. (We might anticipate, therefore, that this would be a significant reference point for conceptualizing psychotherapy.)

VII. Some Psychopathology

To be able to identify some intentional actions as, e.g., fear behavior and distinguish these from other significant types of intentional action contributes to a parsimonious account of the phenomenon commonly described by reference to ego defense mechanisms and unconscious motivation. The following is an example of such application.

Let us hypothesize a young mother with a two-year old son. The presence of the son severely restricts her freedom and she resents this strongly. She punishes him frequently and severely. When asked why she is so angry at the son, she replies in surprise, "I'm not angry at him. Really—a boy needs discipline or he'll grow up to be a juvenile delinquent."

If we do not take the mother's description of her own behavior at face value it is most likely because we perceive a discrepancy with respect to "trying to get". What she does is not "just the sort of thing one would do if. . ." The conclusion would follow, "The reason she gives can't be her only reason—there must be another one instead or, more likely, in addition. What could it be? Well, what is she overtly trying to do? Attack the boy? Does she have a reason for wanting that? Well, to be angry at him would be reason enough to want to do that. Does she have reason enough to be angry at him? Yes—he frustrates her constantly in significant ways. Does

she know how to express her anger? She surely does. Does she know she is angry at him because he frustrates her? No, unless she's simply lying to us. and we have no reason to think that."

At this point, the special explanation advanced to resolve the original "trying to get" discrepancy has succeeded, but at the cost of generating a new discrepancy in the "know" position of PI. Thus, neither description, nor the two in combination, provides an adequate account of this woman's behavior. It is here that we turn to concepts such as fear and guilt, the classic motives for repression.

We continue the explanatory account: For a person to be angry at another person is reason enough for him to know that this is so. (IN contrast, having, e.g., a high white blood cell count, or being in a state of physiological arousal, is not reason enough for a person to know that that is so.) If she is angry and doesn't know it, there must be a reason. Does she have reason enough for not knowing she is angry at him? Well, yes. Since the remainder of PI is satisfied, for her to know that she is angry would be for PI to apply without apparent exceptions, i.e., it would be for her to be attacking him deliberately. That would be for her to be in a dangerous position vis-a-vis her husband and the surrounding community. (Here is a case where having reason enough is not a justification.) And it would be for her to be doing something wrong. And both of these states of affairs are things we may assume she has an acquired

disposition to avoid without deliberation (i.e., the avoidance requires only the awareness of something but not knowledge of what is the case here.) At this point the mathematician would be inclined to say "and all the higher-order derivatives vanish." That is, as soon as a person has a reason for not knowing that he is doing a certain thing, he also has a reason for not knowing that that is the case, and a reason for not knowing that he does not know that that is the case, etc., etc., because otherwise the entire structure of ignorance would be subverted (and this may help us to understand a discontinuity in "availability" between what is "repressed" and what is merely hard to remember). Q.E.D.—Her behavior fits the PI without apparent exception.

On the bases of her further behavior and, e.g., the relative obviousness of the initial discrepancy, we would very likely draw further conclusions about how much she wanted to avoid the danger or avoid being wrong, or, how dangerous or how wrong she took it to be, or, conversely, conclusions about her capacity for treating her husband et al. as dangerous and herself as wrong, as well as her capacity for controlling her anger.

It is important to keep in mind that what is generated by removing apparent exceptions is an explanation, not as such, a "true" explanation. Our degree of conviction about any explanation is relative to what we know. If, for example, we

know that the mother in the example above had been socialized into a group which professed the same kind of belief that she expressed, then we would consider the application of the "ego defense" description to be questionable rather than fully justified, because there would be a plausible alternative in terms of "special knowledge" on her part. If we wanted to decide between the two alternatives we would probably pay particular attention to (1) the consistency of her behavior across situations, including what she says—does she consistently do just those things which a person would do who held that belief, and (2) her reaction to information about (a) the differences between her professed belief and the beliefs of others and (b) statistics about delinquency as a function of differential child-rearing practices. But we might proceed by treating her as though the one or the other explanation was the correct one, but taking care to make it as easy as possible to recognize whether and to what extent we had not succeeded in treating her in that way. And upon inspection, it should be clear, that the former approach is merely a special case of the latter.

In general, my unconscious motivations can be formulated as apparent PI exceptions which are explainable as the intelligent (but not deliberate) avoidance of knowing something that I am doing. It is because knowing what I am doing involves knowing what I want out of it that it makes sense to speak of

unconscious motivation. One might better speak of unconscious action here. It should be clear, however, that for me to avoid knowing that I am doing A is not for me to be unaware of what I am doing at the time when I do A—in general, I am doing B (the mother is disciplining the boy), and I may be able to describe my actions in great detail. The A-B discrepancy leads us to characterize B as a distortion, and the kind of discrepancy it is is summarized by the kind of ego defense we say is exhibited. (The mother is rationalizing, denying, repressing.)

In connection with ego defenses and unconscious motivation, asking about the function of an action or kind of action plays approximately the same role as is illustrated in the example by asking what the mother was overtly trying to do. Identifying functions appears to be most appropriate when no single or simple overt attempt is involved (like the case of trying to get a million dollars).

It is because there is no uniquely real description (as opposed to a mere description) of a thing that denial, repression, rationalization, etc., can be so easily accomplished. One need not be a liar or a fool or have empty places or submerged places in one's life history where the repressed events "really are". All that is required is a workable description of what one does. To say that a person distorts in an ego-defensive way is to say that he does not entirely succeed in treating himself or others in the ways that he describes. Between designating a penny as a pawn and designating that mountain as a pawn, there are intermediate cases.

VIII. Review

The problem of the use of person concepts in Clinical Psychology was discussed pragmatically, with particular reference to the methodological notions of "partial-description" and "part-description". Person concepts were identified as partial-descriptions, inasmuch as their use is intelligible only in the light of their systematic function within the more inclusive concept of a Person. Much of the perplexity generated by the use of person concepts was attributed to a general tendency to take both the use of language and the concept of a Person for granted.

Because "Person" is necessarily a public concept, to see an individual as a person does not imply any distinctively subjective or phenomenological procedure or outlook. It does not involve putting oneself in the other person's place, though it is compatible with that (indeed, it throws light on what empathy is and how it is possible).

In this initial portion of the discussion, the concept of intentional action was formulated as the key constituent of the concept of a Person. A preliminary measure of the descriptive adequacy of the formulation was provided by showing how "ego defense", "unconscious motivation", and various specific "feelings" such as fear, guilt, and anger can be derived by reference to the concept of intentional action. In Part II of the discussion, the concept of intentional action is elaborated into the concept of a Person.

Part II
Individual Persons

I	Types of Series.....	49
II.	Needs.....	55
III.	PI and PII Concept-types.....	59
IV.	Interaction of Persons.....	66
V.	Individual Persons.....	75

PERSONS: Part II. Individual Persons

In Part I the notions of (a) a distinctive type of description, (b) a partial-description, and (c) a part-description were presented as a basis for explaining the elusiveness of "person concepts" such as intentions, feelings, and self-actualization as objects of psychological investigation. Briefly: (a) A conceptual system provides a distinctive type of description when descriptions of that type are not replaceable by descriptions of some other kind. In general, criteria for the application of descriptions of a distinctive type cannot be fully stated. (b) A partial-description is one which refers to a phenomenon that could occur only within a larger framework, the "primary context"; in spite of this, the phenomenon is directly described without any mention of the primary context. (c) Certain phenomena can and do occur by themselves; however, they are not describable independently, but only as being the kind of thing which is found in some "primary context". A description of this kind is a part-description.

It was suggested that person concepts are elusive because they are essentially partial-descriptions relative to the concept of a Person, which in turn provides a distinctive type of description, and that the greatest present need is for substantial conceptual clarification in this area. Toward this end, the concept of intentional action, summarized

marized in the paradigm PI, which consists of a quadruple of concept-types ("what," "know," "know how," and "try to get"), was presented as the basic, distinctive element in the concept of a Person. The ordinary use of PI was presented as carrying with it (a) the ability to recognize when an explanation of a person's behavior is called for, (b) a procedure for constructing explanations from whatever information is available, and (c) the ability to recognize an adequate explanation. On this basis, together with some elementary formal features of PI which serve to distinguish types of intentional action (see Section VI, Part I) the following derivations were made: (a) behavior motivated by a feeling such as fear, guilt, or anger was derived as a species of intentional action, and (b) behavior in which ego defenses and/or unconscious motivation are exhibited was derived as a species of intentional action.

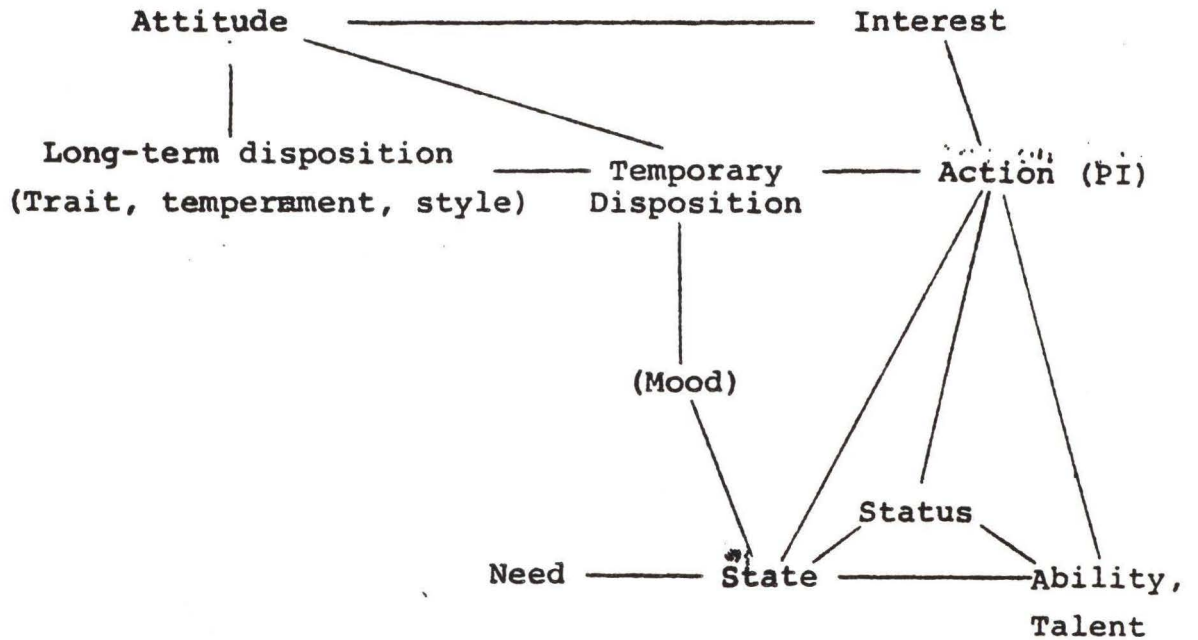
The present discussion deals with the derivation of PII, a paradigm for the concept of a Person, from PI, the paradigm for intentional action. In general, PII is derived from PI by constructing various series the elements of which are intentional actions each of which is of the same type, or species (see Section VI, Part I for ways of generating "types") performed by the same individual. Thus, in contrast to a type of intentional action, which designates an unlimited number of actual and hypothetical actions, the series in question consist of a finite number of actions each of which

is part of the life history of a single individual. (One exception to the foregoing, i.e. needs, will be noted below.) The concept of a Person is the concept of an individual whose history is represented by a collection of series of the kind shown on Figure 1, i.e. it is a history of intentional action, successful, unsuccessful, and abortive, the totality of which is articulated into the format labeled PII. As in the case of PI, PII as shown in Figure 1, is a visual aid for showing an overall structure and main lines of articulation "at a glance".

And as in the case of PI, the point of the following brief discussions of PII concept-types is not to present a definitive analysis of certain readily segregated descriptive units. Rather, it is an attempt to formulate an intelligible and maximally familiar set of interrelated reference points such that following the conceptual pathways for which they provide a paradigm will stimulate a heuristic recollection of—and summarize— what we all do in using various specific person-descriptive expressions on specific occasions. It is an attempt to "assemble reminders for a particular purpose". Any serious attempt to become more explicit about the concept of a Person requires that we throw off the trauma suffered in the freshman-year discovery that there are umpteen thousands of such expressions. The number of such expressions is of no great consequence so long as the principles according to which they are generated and the ways in which they are used can be effectively stated.

FIGURE 1

PII: Paradigm for the Concept of a Person



I. Types of series

If a single action is describable as, e.g., angry, then we can talk about the class consisting of all the angry actions of a given person. Such a class is also a series. A person's hostile actions will be datable and clockable. That is, they are episodes in his life which begin at one time, last for a certain time and stop at a later time. (Even acts of omission can be treated as episodes because the significant opportunity for the act which was not committed is both datable and clockable.)

We may now conceptualize an anger series which (a) contains an excessive number of elements, and/or (b) contains an excessive number of elements which satisfy the additional description that their occurrences involved an initial PI discrepancy of the "not reason enough" variety (Persons: Part I), (c) covers a long enough stretch of calendar time and (d) is not selectively associated with particular other individuals. (Note that (a) and (b) are analogous to White's (1964) criteria of "insatiability" and "indiscriminateness" as criteria of neurotic behavior.) These are the conditions under which we would say "This is a hostile person," and in so saying, we would be attributing a trait to him.

A trait has the logical status of a disposition. To avoid confusion, dispositions are here distinguished from tendencies. Descriptively, the dispositions involved in PII are merely summaries of frequency information, whereas a ten-

dency has the characteristic that when it is present it will be exhibited overtly unless something prevents that. In this respect, a tendency is like an impulse.

If a single action is describable as involving a particular object or type of object in the "want" position of PI, without any further end in view, this provides the basis of conceptualizing the series consisting of actions of this kind performed by a single individual. The application of standards of appropriateness and frequency will enable us to judge when such actions occur with excessive frequency or priority. These are the conditions under which we say that the person has an interest in that object or type of object (an interest in Jane, in chess, in politics, etc.). A derivative case is that in which the interest in the object serves a further end. Here, we would be inclined to say it was not a real interest. (For a more detailed account of the concepts of interest and attention, see A. R. White, 1964.)

Attitude concepts combine the logical features of interests and traits. That is, to have a particular attitude is to be disposed to engage in certain types of intentional actions with respect to an object of interest.

We may single out for special attention those portions of a series, e.g. an anger series, which consist of many members and few gaps over an appreciable period of time. These are the conditions under which we say that the person was in a certain mood during this period of time. To be in

an angry mood is to be likely to be angry and nothing but angry (or irritated, annoyed, etc.) with everyone and everything. To be a moody person is to have a particular trait, i.e. the disposition to have moods, especially those involving unpleasant feelings.

We may select a series of intentional actions which consists of those actions the performance of which demonstrates a certain capacity. If these performances can be graded according to difficulty (which they can be, if only by comparing across individuals) then we may characterize the series by reference to its upper range, and say that the person has that degree of the ability in question. We frequently say, "That took talent," and when we say this we are not speaking about someone's employment of a tool—it is to say "Only a talented person could have done that."

Some of the most important capacities attributable to a person have to do with inhibiting or controlling certain tendencies. Feelings, for example, were formulated as including a disposition to perform certain kinds of action without deliberation. In light of the further requirement that the disposition be demonstrated by performances, this is to say that feelings involve tendencies to act (impulses). Yet feelings are not always directly expressed; more often than not, a substantial amount of control is involved; and certainly, when feelings are not expressed, some control has been exercised. In turn, capacities are related to states, in that one of the most important ways in

which being in a particular state makes a difference is in regard to a person's capacities.

To say that a person is in a particular state is to say that overall expectations in regard to his actions are to be adjusted in a systematic way relative to his normal activity or else relative to the normal activity of others. The latter is particularly to the point in connection with permanent or quasi-permanent states. A state resembles a mood in that it pre-empts an appreciable interval of time and so is concerned with a series of consecutive actions the whole of which represents a discontinuity or displacement with respect to what was otherwise to be expected during this period of time.

In fact, a mood is a state. For example, to be in an angry mood is to be in an angry state, or a state of anger. In general, it appears that any feeling (analyzed previously with respect to PI as a type of intentional action) may give rise to a distinguishable "emotional state". We speak, for example, of being in a state of fear, or of bliss, or of being beside oneself with glee, or with jealousy, etc. One logical connection between feelings and emotional states is provided by the impulses (tendencies to act without deliberation) which are necessarily involved in having particular feelings. In some cases the emotional state represents an inability either to control the impulses or to give them appropriate expression in action. Being in a state of fear (frequently this corresponds to what many psychologists would call "anxiety") provides the classic paradigm here, and thi

corresponds to what Ryle (1949) has called an "agitation". In other cases the emotional state represents the uninhibited expression of the impulses (giving way to one's feeling). Here we may think of an outburst of anger or of the joy that reigns at the end of a winning football game. We may note, too, that part of the concept of being in an angry mood, not mentioned above, is to have a lessened inclination or a lessened capacity to control impulsive expressions of the feeling.

There ~~are~~ other varieties of states. To be in pain, or to itch, is to be in a particular state, one in which one's capacities for many kinds of performance are reduced. Pain differs from emotional states in that there is not a distinctive type of intentional action corresponding to being in a state of pain, whereas there are feelings corresponding to emotional states. This is not to say that there is no way that one could pretend to be in pain—there are recognizedly typical postures, gestures, and facial elxpressions for this, as well as typical manifestations of incapacity.

The direct experience, or the sensation, of e.g., pain or anger or itching is derived from the corresponding feeling or state. My direct experience of pain is the direct experience I have ~~when~~ I am in pain. But isn't pain or anger really a particular quality of experience? Well, perhaps any one person can discover some quality of experience that typically accompanies his being in pain, but his being in pain is not logically contingent on his having any **particular** sensation.

(Factually, we may note reports, e.g., by hypnotized or lobotomized persons, to the effect that "I feel the pain, but it doesn't bother me any more.") It is being in pain or being in anger that has significance, and so it is not as a peculiar quality of experience that pain or anger is of psychological interest.

In general, pathology concepts are "state" concepts. To be sick is for one's capacities to be reduced and for one's behavior proclivities to change. Likewise, for being, e.g., exhausted, intoxicated, maladjusted, or crippled. Being crippled, or maladjusted, or being mentally retarded are examples of permanent or quasi-permanent pathological states.

What a person expects is what he now believes will occur or fail to occur, and this is properly part of PI, since it falls under the "know" concept-type. But if he is waiting for something to occur, including, sometimes, when he is preparing for it, then he is in a particular state, a state of expectation, and he has an expectant attitude. If he discovers that what happens is different from what he expected, then he has received a surprise. If he is not merely surprised, then he is also thereupon in the particular state of being disappointed, or shocked, or aghast, or overjoyed, or relieved, or dismayed, or something of the sort. In general, expectation will serve as an initial basis for taking a course of action only insofar as the person can change what is expected. What is more important for selecting a course of action is what the person believes would happen if. . . . It is in the conditional

mode that alternatives are generated. Once a course of action is initiated, expectations become appropriate, and those expectations which serve as a basis for "progress check" feedback are particularly useful. But it is belief (PI "know"), rather than merely expectation, which is required for an adequate conceptualization of human action.

Certain conditions which would qualify formally as states are better described as statuses, mainly because they do not exhibit the kind of discontinuity or contrast which makes it informative in other cases to speak of "states." Examples would be: male, female, child, adult, aged person, blind person, mentally retarded person, and stranger, or foreigner.

II. Needs

One could say that to have a certain need is to be in a certain state, but the case of needs is distinctive enough to warrant separate discussion. Statements of the form "He has a need for A" refer to a state of affairs, A', such that if the person fails to achieve A' or, more generally, if A' fails to come about, that state of affairs will have one of the following consequences: (a) the person enters into a pathological state; (b) a pathological state of the person is maintained; (c) a pathological state of the person becomes worse. Thus, "need" is conceptually related to "pathology." In the positive cases (e.g. "He needed the queen of hearts in order to make a royal flush") the pathology may be merely a temporary frustration. A need involves some associated time period which is the latency period of the pathology in case (a), above--a need the satisfactor

of which could be postponed forever with impunity would not be a need. Also, the satisfaction of a need is accomplished in a certain degree, which may range from "completely" to "not at all". Differences between cases (a), (b), and (c), above, are associated with different degrees of need satisfaction.

Needs differ from states in that having a need does not imply a difference in behavior except via pathological states. Specifically, needs do not imply anything about motivation, though it is frequently the case that a person who has a need will try to satisfy it. Moreover, in the case of certain kinds of needs, which are of particular interest, there is no displacement or contrast involved either for one person or across people. These are the needs which are generally identified as "basic human needs" (cf Coleman 1964: Maslow and Murphy, 1954).

The following are representative examples of basic human needs: a) order and meaning, b) security, c) adequacy, d) love, and e) self-actualization. Such needs can be formulated in terms of PI as soon as intentional action is seen as a participation in a body of social practices, which it necessarily is. (For example, the criteria for the application of PI descriptions are necessarily public, and the differences that such descriptions make are knowable only through other descriptions the criteria for which are also necessarily public. And the learning of such criteria implies the social relationships within which the learning occurs.) We may therefore discuss these basic human needs in the following way:

1. The "know" and "know how" concept-types of PI directly imply that intentional action is possible only in an ordered and meaningful world, and it is possible only to the extent that the person's world is ordered and meaningful.
2. For me to be insecure is to act in the light of the belief that my overt attempts are likely to be unsuccessful in achieving what I want. Insofar as I am insecure I do not have a "know how" repertoire relevant to what I want. And if I am as insecure as a person could conceivably be, intentional action will not be possible for me at all.
3. Likewise, if I have no competence at all, then I cannot act intentionally. I might be said to make overt attempts and have them succeed but that would be luck. (And to the extent that I could come to know what kind of luck I could count on, I would then "know how".)
4. Love is rarely regarded as just another human relationship. In most cases it is regarded as either the prototype of all later relationships (initial object cathexes, terry cloth mothers, etc.) or the archetype or ideal type, i.e. other relationships are intelligible as relationships in the light of how they resemble and how they differ from this relationship. In either case, it would follow that my capacity to enter into the going variety of human relationships would be arbitrarily impaired in the degree to which I had not yet achieved a love relationship. And if the difference that intentional action makes lies in a human relationship that I cannot enter into, then I cannot perform that action either, though I might still go through the motions.
5. Finally, we may point to two kinds of criteria: criteria for successful performance (outcome) and criteria for excellence of execution (process, "good form"). And we can conceptualize a second-order capacity, that is, the capacity to act consistently in accordance with PI, being limited only by potential capacity, opportunity, and (to a minimal degree) priorities among wants, and not limited arbitrarily in any of the ways described above. A person might be successful in the exercise of this capacity and still be able to do better (outcome vs. process), so that there would always be something new to be tried. It is in such terms as these that concepts such as "personal fulfillment" and "self-actualization" may be analyzed.

In general, basic human needs are presented here as logical derivatives of the concept of a Person rather than simply empirical

insights into the nature of human beings. Such needs are basic, not because failure to satisfy them leads to maladjustment, unhappiness, or other forms of personal failure, but rather, because to fail to satisfy them is, in that degree, to be maladjusted, or unhappy, etc. i.e., to fall short of being a Person. (We would not say that an individual had failed to satisfy a basic need until we would also assess personal failure, and it would be on the same grounds.) This approach to "basic needs" has the advantage of employing a clearcut, ~~non-arbitrary~~ basis for distinguishing basic needs from other needs; it has the further advantage of being capable (or so far, apparently capable) of assimilating any of the commonly accepted "basic needs" to a single conceptual system which throws light on the relations among basic needs and on the question of how each one of several lists containing non-equivalent entries can legitimately carry conviction as being basic. It also clarifies the question of priorities among basic needs by implementing the distinction between logical priority and motivational urgency. For example, biological needs in general must be satisfied "before" psychological needs not because they generate stronger wants (though that may be true also), but because they have a shorter "pathology latency." And "order and meaning" is most basic among psychological needs because it is a prerequisite for any intentional action. And it is not the case that self-actualization (the other end of the line) can not be satisfied until after other psychological needs have been satisfied. Rather, success on satisfying this need can not be achieved except by achieving successes with respect to other psychological needs, whereas the converse is hardly the case at all.

III. PI and PII Concept-types

Since PII concept-types were formulated as series consisting of intentional actions of a particular type, it might seem redundant to characterize an intentional action by reference to its occurrence in a series. But to see this as redundant would be to overlook some important aspects of the situation.

An action is a particular and the series of which it is a constituent is a particular. A given action might be the first element in the series, or an element late in the series, or one preceded by numerous other elements, or a distinctive one, or a typical one, etc. Its having any characteristic of this kind in no way depends on its being one type of PI action rather than another. Thus, series membership gives rise to descriptions which are not redundant with respect to descriptions of distinctive types of PI actions.

The preceding would hold for membership in any series. There is a further contribution stemming from the multiplicity of PII concept-types. To describe an action, e.g., a "hostile action". as an element in one type of PII series is to offer a description which is different from what would be given by describing the action as a member of another type of series. For example, a sarcastic comment made by someone who was in an angry mood would be different from a sarcastic comment which was the typical mode of expression of an old grouch even if the observable characteristics of the episode (e.g., words, manner, circumstances) were the same.

Also, for example, the recognizable symptoms of an emotional state acquire a status not unlike that of an "overt attempt" in regard to describing intentional action. If I see his eyes narrow and his jaw thrust forward and his face flush, I will be inclined to say that what he is apparently doing is controlling his anger. (But I might say that what he ~~is~~ doing is showing his anger.)

Finally, it should be clear that to a large extent any of the PII concept-types can assimilate any of the others, either directly or by way of a part-description. For example, a trait may be the disposition to (a) enter into certain states, (b) express certain attitudes, (c) demonstrate certain abilities, (d) show an interest in certain types of objects, (e) satisfy certain needs, etc. This is direct assimilation. And the object of an interest might be (f) the kind of object toward which a certain attitude is directed, (g) the kind of activity which expresses a certain temperament or exhibits a certain kind of style, (h) the kind of object that would satisfy a certain need or would be expected to put a person in a particular state, or (i) the kind of activity that requires a certain talent or skill, etc. (And now, substitute cases (f) through (i) in (d), above.) The convertibility of one kind of series into another via direct assimilation or part-descriptive assimilation has no formal limits, so that PII is a recursive and "generative" system which provides an unlimited number of descriptions. And we do make some use of this added descriptive power in our normal social interactions,

although, as with language generally, we do not make much use of the more complex possibilities.

Perhaps the most significant consequence of being aware of the generative character of PII will be to help us to understand the pervasive sense of personal identity which we do have and which seems both inescapably private and yet in no way conceptually disconnected from the overt, easily communicable things that we do (which it seems would have to be the case if it were truly private). Neither the number nor the complexity of person descriptions is limited, but the use of person descriptions comes about through the skills acquired in participation in social practices and, like the use of language generally, is itself a participation in a set of social practices. But the exercise of these skills does have human limitations. Participation in situations of unlimited complexity seems quite clearly to be outside the range of human capacity (cf Miller, 1961) even when only familiar skill components are required, and this holds equally for description performances and for the performances which are described. Thus, it is not surprising that our self-knowledge should have much of the general character of "feelings", since the latter both are a critical aspect of person characterizations and, on the performance side, involve skills which can be exercised without requiring deliberation and thus could continue to be exercised past the point where deliberation was no longer possible. Participating in a complex of social practices is what a person spends his time doing, and so

it marks the difference between first-hand experience and what a person merely knows about. The person who knows himself is like the person who drinks by himself—the performance is solitary, but the practice is a social one. Better, the person who knows himself is like the person who works out a novel chess combination—here again, the performance is solitary and the practice is not only a social one, but is one for which the rules are reflected in explicit statements, but here, nevertheless, the achievement is a unique one. A Person has, not something simple like chess practices, but a life history of participation, decision, and expectation, and an impressive repertoire of skills to draw upon.

A further point, parenthetically, in connection with the complexity of PII: The notion of "symbolism" is frequently encountered in clinical theory and practice. It would seem that the general condition under which we speak of the use of symbolism is that some object, activity, or circumstance should be mentioned which both has a direct, and usually innocuous, description and in addition instantiates a significant part-description which refers to what is symbolized, and the part-description may be either the PI or PII variety. For example, a knife may be seen as a phallic symbol because (a) literally, it is recognizable as somewhat "the kind of thing which...", and this is to say that under some description it is "the same" as a phallus. Similarly, plowing a field can symbolize intercourse because to plow a field is to treat the earth in a certain way, and to do that is, in part, to engage in a certain

kind of activity, and this is "the kind of activity which ..."
is involved in intercourse. Thus, "symbolic satisfaction" is
not a substitution of thought for reality. Rather, symbolic
behavior has the same logical structure as intentional action.
It is not any "overt attempt", but rather, an overt attempt
under some intentional description which is the intentional action
of PI. So a man who is plowing a field is literally engaging
in the kind of activity which is involved in sexual intercourse,
and in one sense, this is no less than what is done by the man
who is engaged in sexual intercourse. But although he is doing
that, his participation is not of the same kind, since it re-
quires a different kind of skill, knowledge, and supporting cir-
cumstances. And so, on the face of it, he is not engaged in
the same social practice, and it would require a "special ex-
planation" to provide the basis for saying, in a given case,
that nevertheless it was the same or that the person was doing
that because of the way it was "the same". Since we do have
criteria for the use of person descriptions, we are able to take
account of symbolic behavior without having to suppose that
every such possibility is a fact, or that when it is a fact some-
thing very mysterious has happened.

The following sources contribute to the complexity of per-
son descriptions: (a) Each of the four PI concept-types has
a large number of instances (i.e., a large number of specific
concepts of that sort); (b) Types of intentional action are
determined by combinations of distinguishable features of the

PI paradigm, and the number of combinations is far greater than the number of distinguishable features; (c) An intentional action is placed in some set of PII series, or concept-types; (d) PII concept-types are further differentiated by virtue of their mutual assimilability. Since these sources combine multiplicatively, and in the latter case, combine without limit, it is clear that umpteen thousand descriptive terms come nowhere near exhausting the logical potential of this conceptual system. Yet the system and its logical potential can be represented in two relatively simple paradigms.

In general, the transition from PI to PII concept-types is the transition from class membership to part-whole relationships. In turn, part-whole relationships generate a new set of class memberships, or types of action. The transition could be described as a partial explication of the existential import of an action. Because a consequence of the transition is that actions which have identical PI type-characteristics have a different place in a person's life or in different people's lives. And if they have a different place, they may play a different part. To see an action in the light of PI is to see what action it is. To see an action in the light of PII is to see what person it is the action of, and this is to have a broader understanding of what action it is, also.

When we speak of what a person intends, what he is afraid of, what he is ashamed of, and what he expects or believes to be the case, we are talking about his "inner life". And there

is some problem with this "inner". Sometimes it seems as though one would need a crystal ball to have access to it—and then projective tests, for example, or "dynamic" theories take on the aspect of a crystal ball. Or else it seems that this is only an inferior, "commonsense", way of making reference to what goes on inside him—and then talking about his nervous system, for example, or about his body chemistry or about measurement and models, takes on the aspect of superior rigor.

But there is not something extra about a Person which requires such peculiar maneuvering. A person's inner life is a Person's life, and it is a Person's life.

IV. Interaction of Persons

"The queen of hearts is a piece of cardboard with distinctive red markings and a stylized figure of a woman." When I see these things, that gives me reason enough to call it that. But these features are not what I mean when I call it the queen of hearts--that belongs to the game. And if I see his eyes narrow and his jaw thrust forward, that may give me reason enough to describe him as "angry." But these features are not what I am talking about when I call him "angry."

The primary function of the concept of "Bridge" is to guide the behavior of one bridge player with respect to others. And the primary function of the concept of a Person is to guide the behavior of one person with respect to others.

When we try to become as explicit as we can about what actions and what circumstances provide "reason enough" to act in a certain way, the effort leads in the direction of social roles, social structure, and custom. For example, to learn to distinguish what is dangerous from what is not is to come to distinguish certain commonly recognized dangers, and the successful exercise of this capacity will largely consist in distinguishing other commonly recognized dangers. (cf the analysis of "fear" in Part I) And learning effective means of avoiding dangers will have similar characteristics. And so forth. So that, for example, what there is commonly reason enough for in one society, e.g., erecting crosses on graves, may require a very special explanation in another.

We give an explanation for the sake of someone who understands. Ourselves, for example, but also for others. To give an explanation is to remove some uncertainty. To explain what a person does is to characterize him by reference to PII, and to understand a person is to see him in this light. For an observer, to see a person in the light of PII articulates the situation for him, and this serves as a guide to action:

- a. by providing "reason enough" to engage in some action, or
- b. by contributing to what the observer knows, and thereby entering into his intentional actions, either currently or later on. Since what a person knows does not change unless he forgets or finds reason to change his mind, the contribution may occur at a much later date.

This description would apply to the person observed, also. The rules are the same for observers and those observed. The observer may, e.g., if he is a scientist, have special tools and modes of observation, but observation does not play a logically different role in his life than it does for the one who is observed. Observation works the same way for both, though they are pursuing different goals, perhaps. Which is only to say that, after all, observing is something that Persons do.

What is observed? Here, we must recall the important differences between (a) a class of actions of a given type, and (b) the series of actions of a given type which are performed by a person. The series is observable in a sense in which the class is not, though neither is observable in the way that an action is. When we have observed all the members of a series, we have observed the series. This means, roughly, there is nothing left to observe.

The criteria for the ascription of moods, traits, attitudes, etc., are characteristics of PII series (frequency, appropriateness, density, etc.). Like the criteria for the application of PI descriptions, they are permissive rather than prescriptive. This has the consequence that we may observe sufficient instances to constitute a trait, attitude, mood, state, etc., without having observed all of the instances. And even before we have reached this point, we will have passed the point where it would be equally appropriate to say either one of two things: "He used to be hostile, but he's changed" vs. "For a time, it seemed as though he were hostile, but it turned out that he wasn't" or "I started out in an angry mood, but it vanished almost immediately" vs. "For a minute I thought I was going to be in an angry mood, but it didn't happen." Sometimes, but not always, in a case like this, we try to decide which is the correct account by looking to see if there is a reason for the change.

To call him an old grouch on the basis of a sarcastic remark is like calling this the queen of hearts on the basis of its markings. Yet, unlike those markings, sarcastic remarks are the kind of thing we are talking about in calling him an old grouch. How is this possible?

To begin with, we should want to say that, even when we have an insufficient number of instances, to ascribe a trait on the basis of observing an action is not to make an inference. And the point of that is, the action is not a sign of the trait, because the element is not a sign of the series—it is a part

of the series. (The corner of a brick building is not a sign of the building, either.)

When we have observed enough cases, there is nothing left to be observed insofar as the ascription of a trait (attitude, mood, etc.) is concerned. Then there is no empirical gap to be bridged, and no inference, either. When we have not observed sufficient cases, we may be mistaken in supposing that other cases have occurred or will occur. That is all. And if we have observed sufficient cases, we may still be surprised (cf "He used to be hostile, but now he isn't"). No amount of cases will be enough to prevent that. It is perhaps in recognition of this point that we are inclined to say "We infer from cases—but we never really know." Whereas, it ought to suggest that the point of understanding a person is not to predict what he will do. (When I say, "I'm going out for a pint of beer," that is not a prediction, either.)

"He's the kind of person who would sell his grandmother down the river for a nickel." I am not making a prediction here, not even a conditional one, and so I need not be wrong in saying that, even if he never makes a sale. Rather, I have used these words to say something about the kind of person he is, and normally, I would thereby have announced my intention to treat him accordingly. If he does sell his grandmother down the river, then, on the face of it, he has shown himself to be the kind of person I have said. But only on the face of it. If there is a special explanation for what he does, then perhaps,

anyhow, he is not that kind of person. That is one way of receiving surprises. And this is the way with PII characterizations. They are part-descriptions. When I call him an old grouch on the basis of a couple of episodes, I am not making a rash guess at what else he will do, though I will, no doubt, have some expectations. The series which corresponds to his being an old grouch is not what I guess is going to happen—it is my conceptual representation of what his life now is like—he is "the kind of person who...". When I have observed enough instances, then, on the face of it, he has shown himself to be that kind of person. He does not just then become that kind, and I do not then know for certain that he is that kind. I can predict what he will show—that is like an "overt attempt" in PI. I cannot predict what he will be—but that is something I can understand, and when I am wrong about that, it is a different kind of mistake.

It is a mistake of a different kind because there are no criteria for what a person is in the way that there are criteria for what a person is apparently doing or for what he has, on the face of it, shown himself to be. This is part of the mystery of a person's "inner life". But this is a logical mystery, not a causal one. It is a real mystery, not the absence of facts—and this is also like saying, it is not a mystery at all. (Compare: The number of objects in a room is not something that can be settled just by observation and counting. We must first decide what is to be counted at all, and what is to be

counted separately. Many decisions are possible here even without supposing any knowledge or practices which we do not now have, and so nothing needs to be mysterious.)

PII is the conceptual domain within which a Person's behavior has significance. The logical complexity and descriptive power of PII is considerably greater than that of PI, which it includes, and what can be established by observation is only one of the four elements of PI, i.e. the overt attempt, including failures and mistakes. So there is an unknown number of PII descriptions which would be compatible with any given series of "overt attempts", and each of the PII descriptions would involve many more, and more complex, concepts than that of the overt attempt. So the "iceberg" image of human behavior has a point even when we do not confuse descriptions or explanations with causes.

The primary function of the concept of a Person is to guide behavior, not to establish facts about behavior (the latter is merely one of the things that Persons do). Descriptions which are of the logical complexity of PII cannot in general be established by observation. (If they could, we would have no need for language—instinct would serve just as well.) In the light of PII, we always act in the absence of proof. But we are not lacking something when we lack this, for we have no concept of proof here. (And a tree that has no carbureter is not lacking something, either.) So counting cases only summarizes what we are inclined to do—it does not approx-

imate or serve in place of a proof. PII guides our behavior even when we make a mistake and fail to understand correctly. We do not always pay for our mistakes, but sometimes when we fail to understand, we do the wrong thing. Here, again, the significance of doing the wrong thing is: Whatever difference it makes. So deciding, and making choices, is not something that could be avoided—it is something that Persons do. And so, also, it is neither stupidity nor perversity for a Person to make every effort to treat whatever he does as being successful, although often enough what he accomplishes thereby is what others describe as "distortion".

In addition to the various social practices which are "built-in" to specific person concepts or person descriptions, the general way in which PII guides a Person's behavior, and therefore also, what he concludes from other people's behavior, is illustrated by the following maxims:

- (1) A Person has reason enough to do everything he can to treat whatever he does as being successful. (A Person's life is not lived moment by moment—we "play to win", and each single action has a "follow through".)
- (2) If a Person has a reason to do something at a given times, he will do it, unless he has a stronger reason for doing something else.

Reasons, unlike causes (including motives, when these are seen as causes), require no maintenance. Nothing further has to happen in order for a person to continue having a reason. On the contrary, something further has to happen in order for him to stop having that reason (for example, the achievement of a goal, a change of state, a change in what he knows, the loss or acquisition of a skill, etc.). So there is no special problem of accounting for the persistence

of behavior, the resumption of periodic activities, or the continuity of a relationship with another Person.

Because a Person's reasons are temporally extended and stem from a diversity of sources, a Person generally could not possibly do all the things that he has a reason to do. Hence the importance of choice, the "overdetermination of behavior", and the lack of equivalence between what a Person is and what he shows himself to be. All of these may be regarded as reasons why there are in PI criteria of intelligibility for priorities among wants as well as for wants as such.

To see a piece of behavior as an intentional action, as falling under PI, is to have an account of why it took place. To see it in the light of PII is not to have a second account of why it took place. We do not need that. To say that an action "springs from" a particular attitude (trait, etc.) is to say something, not about its source, but about its significance.

We observe a churlish remark, and we say "He resents Bill's success." This puts the remark in the context of other hostile actions directed toward Bill. (The relevant circumstances, Bill's success, which is what he knows about, is the same each time, and so we sometimes speak of the reason for his attitude toward Bill.) To see a person as resentful of another's success makes a difference. We treat him differently, and this includes expecting differently from him also. If it did not make a difference, then there was not that uncertainty to be removed, and then, no such description could have constituted

an explanation. We do not first observe PII characteristics and then see what difference they make. These characteristics represent differences that we make.

The difference that is made by my knowing about his resentment of Bill's success is not determined by that knowledge. There are three other PI concept-types which play a part in the story of my reaction to him. And that reaction will play a part in my life and therefore will be intelligible to him and others in the light of PII. Etc.

It is in pursuing such accounts of human interactions in detail that we present the cash value of the statement that people's behavior follows rules and that the primary function of the concept of a Person is to guide the actions of one Person with respect to others. It is the kind of account that might be pursued in clinical practice.

V. Individual Persons

The concept of a person has a certain degree of complexity. Enough to make it plausible that a major source of confusion in connection with the use of person concepts is that they are learned in a relatively unsystematic way, so that we come to be able to use the terms more or less appropriately but are never very clear about how they interconnect with one another. Our usage exhibits the connections, but we cannot say what they are. Ordinarily, there is no reason to say what they are.

In the light of the magnitude of the complexity of person descriptions it is clear that there are quite enough descriptions to go around—each individual can have a unique description. But this very flexibility also contributes to the general impression that person descriptions are derived directly from the grammar of the natural language (here, English) together with person concepts (e.g., "angry", "stingy") as simple referring expressions, "pigeonholes", rather than being derived from the coherent logical structure which is the Person concept. Three of the sources of complexity appear to be particularly significant in this regard.

First, there is the variability introduced by the notion of states. Because of the multiplicity of kinds of states and the frequency with which one state or another is entered into, the conceptual unity of the person tends to be overlooked in favor of the succession of happenings in his life history, and then later on, when as psychologists we feel the need, we begin

to look for the causes of these happenings as a way of achieving conceptual unity.

Second is the fact that the same basic term, e.g., "anger", or "fear", is used for a variety of logical functions, or concept-types. For example, we have an angry action, a state of anger, the direct experience of anger, enduring anger at a given person, an angry mood, and a general tendency to become angry. Here, too, because the logical relatedness and differentiation of the various concept-types is generally overlooked or only partially acknowledged, instances of the various concept-types are likely to be lumped together into a single conceptual category for which no single account is possible. In the resulting confusion, it may well seem that the only way to make sense of the phenomenon, e.g., anger, is to regard all of the instances of anger concepts as being the outward effects of the same basic cause, with the variety being accounted for by the variety of intervening events. That is like saying that the similarity among "courage", "courageous", "encourage", "courageously", "discourage", "encouraging", etc. is that their instances all stem from the same basic cause.

Third, individuals vary in the degree to which they articulate the Person concept with a variety of specific concepts under each concept-type. All of these several aspects contribute toward making the Person concept well nigh invisible to the naked eye.

As clinicians, we have the distinctive task of identifying and dealing with persons who are in pathological states. These states involve failures in respect to meeting basic needs (and therefore, other needs as well), failures in respect to what the person knows how to do, and failures in respect to what he knows. Which is to say that we can treat him as a Person, but not as just any Person—rather, as one in a pathological state, as one "in distress". And this is not to say that there is a single way in which we always treat such a person. Rather, we understand him differently, and we try to understand the difference it makes. (Compare: how we treat a person who is in pain.) Or, we cannot treat him entirely as a person (we would fail if we tried that), because of the way he fails as a Person. Either way.

Curing neuroses or psychoses is like getting a million dollars—it is not something we know how to do, although often enough the outcome of therapy is the kind of change which one would count as a "cure". And so we need something other than we have now. We need an effective technology, and that may come about simply by the development of new practices in the light of the Person concept, together with what we already know or believe. Most likely, however, we will need the impetus of new knowledge. Because we already have the concept of a Person, the acquisition of such knowledge does not depend on theoretical developments to give it significance.

We would like, for example, to have some answers to questions of the following sorts:

1. What sorts of effects do therapist in general, or any coherent group of therapists, know how to achieve?
2. What sorts of correlational patterns exist among identifiable pathological states, either concurrently or sequentially? And non-pathological states?
3. Are there subtle, but dependable, symptoms distinctively associated with various feeling states?
4. Are there dependable procedures for surveying and summarizing a person's capacities, beliefs, attitudes, interests, etc.?
5. Are there identifiable aspects of peoples' histories which are substantially associated with later pathology?
6. How are a person's capacities related to one another, e.g., inclusions, exclusions, implications, correlations, additivity, interactions, etc.
7. What are some of the unusual, but surprisingly effective ways that people have discovered for satisfying familiar needs?
8. To what extent and under what conditions can beliefs, attitudes, and behavior be expected to change (a) simply by being exposed to a person model, or (b) in the light of some significant interaction with a person who may serve as a model?
9. Are there distinctive physiological states associated with pathological or non-pathological states of the person? If so, which go with which?
10. What sorts of things do people want? What objects, events, or situations are commonly the object of specific feelings, e.g., fear, guilt, anger, etc.

To say that we do not require theories in order to arrive at significant empirical results is far from saying that efforts in this direction should be drastically diminished. One of the most valuable features of theory-based empirical findings is that, in addition to what they contribute to what we know, they are likely to involve novel practices which augment what we know how to do. (The relation of theory and research to the Person concept is developed in greater depth in Parts III, IV, and V.)

In the last analysis, the question we ask is, what can be done, what can happen between us that will be of benefit to that person, that will enable him to be more successful as a person.

If we know how, we will use whatever empirical results of whatever kind are available, and in general, we will know how to use any information which is presented in terms of the concept of a Person.

V. Review

The concepts of (1) distinctive types of description, (2) part-descriptions and partial-descriptions, (3) intentional actions, as represented in the paradigm, PI, and (4) feelings, impulses, and defenses were developed in Part I. In Part II, the concept of intentional action was expanded into the concept of a Person (represented in the paradigm, PII) by identifying a set of concept-types each of which has a distinctive logical relationship to an intentional action, and therefore, also, a distinctive relationship to each of the other concept-types. The expansion of PI into PII is quite analogous to the linguistic variations through which a semantic element can be transformed (cf: Courage, courageous, courageously, encourage, discourage, was encouraging, etc.). Each PII concept, i.e. each example of a given PII concept-type, is a series of identically-describable intentional actions. It is the series of such actions which occur in the life of a person.

In PI, different intentional actions could be distinguished as being of one type or another; the relation of a specific intentional action to its type is the relation of class membership. In PII, the intentional action is already classified as to type; the relation of a specific intentional action to an

exemplar of a PII concept-type is the part-whole relationship—the intentional action is a member of a series.

The concept of a Person is the concept of an individual whose history is a history of intentional actions articulated into the series format of PII.

The PII concept-types correspond to what would commonly be called "personality variables". Because the relation of a PII series to the corresponding intentional actions is that of whole to part, and not either cause, determinant, or categorization, the series is neither inferred nor predicted on the basis of observing intentional actions. Instead, the totality of series, PII, serves as a conceptual system which gives significance to an observed intentional action, and this is routinely accomplished by characterizing an action by means of a part-description relative to PII.

The primary function of the concept of a Person is to guide the behavior of one person with respect to others.

Because the concept of a Person, PII, has a considerably higher degree of logical complexity and descriptive power than PI, whereas what can be observed is only one of the four necessary constituents of PI, i.e., the "overt attempt", the significance of an action far exceeds the scope of what can be established by observation. Therefore, we must always act in the absence of proof, and if there is any probability involved, it is in the sense of "degree of confidence" rather than a summary of case-counting.

The concept of "basic human need" was presented as a non-empirical derivation from the concepts of "need" (PII) and "intentional action". Another clinically significant concept, "symbolism" was presented as involving a literal description of an object, activity, or situation for which there is also a significant, unspoken part-description. The potential clinical value of "nomothetic, predictive" findings was indicated.

In Part III the linguistic basis of the Person concept is developed further, and some connections are drawn between the Person concept, language, and the concept of psychological research.

Part III

Psychological Persons

- I. Pragmatic Aspects of Language.... 85**
- II. Some Pragmatic Features of
 Psychological Language..... 90**
- III. Second-generation
 Psycholinguistics..... 106**

PERSONS: Part III. Psychological Persons

In previous papers (PERSONS: Part I and Part II) the concept of intentional action and its significance were developed on the basis of a pragmatic account of language and the methodological concepts of partial-description, part description, and distinctive descriptive system: (a) A distinctive descriptive system is one which cannot be effectively translated into another descriptive system or have its pragmatic functions duplicated by the use of another descriptive system. (b) In using a part-description, we refer to something which can occur by itself, but we do not mention it directly. Instead, we identify it as "the kind of thing which" is found in some other, primary, context (e.g. "the smell of bacon"). We do not have a distinct terminology for giving a non-relational characterization. (c) We use a partial-description to refer to something which can only occur in the context of a larger set of happenings or in a larger structure (e.g. "playing a trumpet"). But we do have a terminology for referring to them without mentioning the larger context. Because of this, partial-descriptions are misleading when they lead us to believe that what they refer to are independent phenomena which can be studied and identified separately from any larger context and can serve as "building blocks" for wider conceptualizations.

Intentional descriptions of behavior are seen as involving a distinctive descriptive system which is possible by virtue of our capacity to implement part-descriptions. The concept of intentional action is articulated into four types of logical components in the paradigm PI: These are the "want", "know", "know how", and "try to get" components.

The significance of intentional actions is summarized in a second group of logical components, or "concept-types", in the paradigm of the whole Person, PII. A concept falling under one of the PII concept-types is the concept of a series of intentional actions of a particular, distinguishable kind. The concept-types of PII correspond to what are commonly called "personality variables".

The concept of a Person is the concept of an individual whose history is a history of intentional action articulated into the series format of PII. The primary function of the concept of a Person is to guide the behavior of one Person with respect to other Persons. The meaningful ordinary language terminology referring to feelings, intentions, traits, interests, needs, and other human characteristics consists of partial-descriptions relative to the concept of a Person. Because the usual experimental approach is to interpret this terminology as having the pragmatic function of either summarizing or predicting observations, the Person descriptions of ordinary language have not provided a generally fruitful starting point for psychological investigation.

In the present discussion the pragmatic character of language is presented in somewhat greater detail than previously. The pragmatic character of the use of language by psychologists is examined, and this serves as a basis for formulating a paradigm for the scientific activity of psychologists. The new formulation is somewhat more general than the commonly accepted "verification" paradigm. The difference that the new formulation makes is illustrated by a series of psycholinguistic studies.

I. Pragmatic Aspects of Language

Language codifies what people know how to do. The meanings of the words we use and the social practices in which our lives are spent imply each other. It is not a simple implication.

The capacity which men have which makes them distinctively human is the capacity to implement descriptions, especially person descriptions. We implement descriptions in our knowing—in recognizing instantiations of a description ("He did it because he was afraid"; "He's an old grouch"). And we implement descriptions in our knowing how, i.e., in being able to do or accomplish what is described (how to treat someone as dangerous; how to be an old grouch; how to get a camera from the car).

Some of the basic capacities which are codified in language are of such a kind that their primary exercise (the performance which demonstrates the capacity) consists of verbal behavior. Although one person may know how to do something (how to tie his shoelace; how to treat an old grouch) without he or anyone else being able to say how, he could not know how to do this thing if no one could say that that was what he did. For in that case, there would be nothing of that sort that he did then, and nothing of that sort to be known, either.

To say this is to deny that "saying so makes it so". A familiar way of denying that would be to say "What happens happens, and its happening doesn't depend on what someone knows". However, the latter is free of paradoxes only in linguistically truncated contexts in which we do not mention human behavior, e.g., in talking about physical objects.

"Those people are playing Bridge, only no one knows anything of the sort." What is being asserted here? If what those people are doing is playing Bridge, then Bridge is something that people play, something they know how to do, and "Bridge" is the term used to refer to that activity. Then the word "Bridge" has meaning, and there are criteria for its application, and one who has mastered the criteria knows how to use the word correctly. That capacity is demonstrated only if the word has been correctly applied in the past. (Naturally, for defined terms, only the correct application of the undefined terms involved in the definition would be required.) Then there must have been other Bridge games—real Bridge games. So what is being asserted is that what those people are doing now is "the kind of thing which" those other people did then when they played Bridge (cf Rhees, 1964).

If no one played Bridge, then there would be nothing which was resembled by what those people are doing now — unless it were something other than Bridge — and in any case, there

would be no criteria for the application of "Bridge", so that to utter the words "Those people are playing Bridge. . ." would be to have said nothing, because making the sounds of these words would not succeed in distinguishing anything from anything else.

In general, to say that P is doing X but doesn't know it is to use "doing X" as a part-description. X is "the kind of thing which" is done deliberately on other occasions. This is why it would be paradoxical to say "Its happening doesn't depend on what someone knows". It might be said that some event took place there irrespective of what anyone knew, but for human behavior events, what makes it the case that an event of the kind described was what took place is events of the same kind in the primary context of the part-description. And this does depend on what someone knows.

It is the criteria for the application of descriptive terms which determine when events are of the same kind. I can say he is the meanest man in town, not because he is a copy of someone else I know, but because I know how to apply "mean" correctly, and that includes being able to distinguish between more and less mean. But there are limits of clear usage, and when we want to exceed them, we have to decide to use the same term anyhow. And then it will be appropriate to speak of extending the use of the expression rather than of merely using

it. And if we decide to extend it, still, it will be merely a different expression in disguise unless we succeed in treating the new "instances" in the way we treat the old instances. This point is relevant to the appraisal of the explanatory value of technical concepts.

Language codifies human knowledge and behavior by making it public. Being public, the varieties of each can be distinguished from one another. And if one variety can be distinguished from others, then it can make a difference, and if it does, then it has some significance and so has the terminology in which it is expressed. So it is not to say that first there is a phenomenon (the knowledge, or know-how), and then we put it into significant discourse, and then it becomes public. Quite otherwise. Roughly speaking: either all of these things happen or else none of them does. (Compare "First he brings it to us, then we take it with us, and some time later we enjoy the use of it" with "First he sells it to us, then we buy it from him, and some time later, we own it". The distinction between process descriptions and outcome descriptions is discussed in Part IV.)

Language makes human knowledge and behavior public. However, there are publics and publics. Bridge players are a **small** public. Their skills and interactions are something other people can identify and talk about, but not engage in.

The scientists in a given area of research and theory are a small public also, and sometimes what they do is almost as esoteric as what Bridge players do. Neither scientists nor Bridge players are primarily engaged in verifying predictions or discovering truths about the world. (This is to speak of the significance of what they do, not necessarily about their intentions.) Bridge players are participating in a known form of life. Scientists are, too, but part of their participating includes creating new forms of life (new activities, new practices) in a limited way. What they say, what they talk about, has no general currency unless it can be discussed entirely in ordinary language. But it does have currency among those scientists who have a common interest and understand one another; the practices associated with, e.g., operant conditioning, with small-group communication network research, with mathematical models of stimulus sampling, etc., etc., etc. are what give meaning to the discourse carried on with respect to these topics.

II. Some Pragmatic Features of Psychological Language

"If a person has a reason for doing X, he will do X, unless he has a stronger reason for doing something else." That is a mere common sense tautology. To be sure. Otherwise, it would be a mere matter of fact, and then it could not have the use that it does. It guides the behavior of persons, and it makes a primary contribution to the way they understand other persons. And when the person is a scientist, it does not cease to have this function, but here its use is not always as perspicuous as it might be.

(1) A survey of those psychological theories in which the determination of behavior figures explicitly indicates that every such theory contains an axiomatic principle of this sort, together with the theoretical equivalent of "the strongest reason at time T." The concepts of "momentary effective reaction potential," "the momentarily most probable response alternative," "the vector resultant of all the forces in the field," "the momentary maximum positive balance of object cathexis," and "the momentary magnitude of Expectancy X Value" all have this character. Each of these theory-specific paraphrases of the pragmatic maxim provides the theory with the basic formula for predicting behavior, and no one appears ever to have suggested giving up this feature of the theory in question, though other aspects of the theory have been questioned. But then, giving up this feature

would leave the remainder quite pointless and divorced from reality.

(2) "The rate of responding is inversely proportional to the ratio of reinforcement." (Here, any general or theoretical statement will do.) This means: whenever it makes sense to speak of a ratio of reinforcement and a rate of responding, this relationship will hold, other things being equal. It is the latter phrase which expresses the principle in question, and it is indispensable, because there are always the exceptions. If a stronger, countervailing principle is operating, then negative results are expected, but that is not counted against the validity of the statement in question.

Just as theories would be relatively pointless without the theoretical paraphrase, so laboratory experimentation would be relatively pointless (one might say, "non existent") without the "other things being equal" paraphrase. The thesis that "the basic principles of behavior should apply to all behavior" and the faith that these principles should be more clearly exhibited in simplified laboratory situations than in complex and poorly controlled real life situations is the combination which provides the basic rationale for laboratory research. But the first of these is misleading, though tautologically correct, and the second illustrates how it can mislead.

(a) "In order to exhibit the principles which operate

in chess play, I will remove all the pieces from the board except the king on each side. When play begins, they will be following all the rules to the letter, including those which apply to the moves of those missing pieces. Of course, there will be no occasion to illustrate those rules, but after all, the situation I have set up here is one which could come about in the course of a game, so it really is a 'real life' situation."

(b) "General Motors is rather too complicated a business enterprise to study effectively. Since the basic principles of business enterprises will apply to all business enterprises, I will study that boy who is selling lemonade, and there I will discover these principles more easily."

Here the relevant point is not that both the boy and General Motors could, without self-contradiction, be said to illustrate "the basic principles of business enterprises."

(And both skipping dinner and having one's pocket picked could be described as cases of "deprivation.") What is to the point is that the selection of the boy selling lemonade could hardly have been made except by someone who already knew what the basic principles of business enterprises necessarily are, i.e., who had mastered the criteria for applying the description "business enterprise". And it would be surprising if he could, from studying that boy, show anything relevant

to General Motors and other paradigm cases of business enterprises which he did not already know and use in his selection of the boy as a simplified case. We do not count cases on the basis of evidence, not even simplified cases. (And it is not in that other simplified case that the part played in chess by the king could be discovered.)

"Complex, real life behavior" is the paradigm case of human behavior, the case in which the phenomenon is most clearly and simply exhibited. It is the existence of that phenomenon that leads us to conduct experiments, and it is already intelligible by reference to the concept of a Person. So the "simplified" case is not unlikely to be also the degenerate case which only vacuously illustrates the basic principles of the phenomenon and is therefore the worst possible case for deriving an understanding of the phenomenon.

(3) "But laboratory situations are real life situations for the subjects—they do not behave in a peculiar way in laboratory experiments in contrast to the rest of their behavior."

The results of recent interest in the psychological experiment as a distinctive behavior setting (Orne, 1962) should discourage any primary reliance on this thesis. They are real life settings, and they differ significantly from other real life settings just as the latter differ among themselves.

However, the primary question here is not whether the

behavior of subjects is peculiar, but whether it is correctly described, and what that amounts to. Laboratory experiments resemble projective test situations in that in neither case could the subject's behavior be one of the paradigm cases for any ordinary description of human behavior (at least, none beyond the most nominal and innocuous kinds of description, e.g., "He said '...'" or "Then he put the paper in the third box"). With respect to such terminology as "anxiety", "hostility", "conformity", etc., the concepts and practices embodied in descriptions of this kind were developed elsewhere and have their primary use elsewhere. So in all cases their application in these technically psychological settings needs to be evaluated as to whether an application of existing linguistic usage or an extension or gross modification of it is involved. The latter would seem to be the rule rather than the exception, considering the emphasis put on "objective" and "precise" measures by psychological investigators. Whatever else may be involved here, these two terms generally imply a contrast with the standards of ordinary usage. In this connection, one thinks, for example, of (a) GSR or test measures of "anxiety", (b) paying money to subjects in order to achieve "ego involvement," and (c) guessing of test responses as a measure of "empathy".

The converse problem with respect to technical term-

inology which has its primary use in experimental settings is, of course, a familiar one. For such terminology there is no general reason to believe that it would be anything but an empty gesture to extend its use beyond these settings—empty because we have no effective way of implementing such linguistic innovations except, perhaps, by doing what we have been doing all along (Chomsky, 1959; Mason and Bourne, 1964; Jones, 1965). Ordinary prudence requires an appraisal of each such extension.

Because the role of the scientist involves linguistic and nonlinguistic innovation, the scientist as such has a warrant for deviating from accepted linguistic practices. He operates in a sphere of linguistic irresponsibility much akin to poetic license. But both poets and scientists are evaluated by how much they achieve that is not merely an exercise in linguistic irresponsibility. It is generally agreed (cf. Carnap, 1956) that this kind of achievement is in no way guaranteed if a scientist merely acts in accordance with the professional rules of thumb which are current among his fellow scientists, e.g., those rules of thumb associated with such terminology as "objective", "predictive", "construct validity", "operationalized", "repeatable", "confirmable", "statistically significant", "experimental controls", etc., etc., etc. There will be times when fruitful scientific endeavor requires some extension and innovation with respect

to those linguistic and non-linguistic practices. What counts is that the innovation should be more than a form of utterance (more, too, than merely chalking up a "+P" or a tentative "T" or "F" alongside some sentence or two) and that its significance should extend beyond the boundaries of psychological experimentation. The way it counts is, of course, whatever difference it actually makes. Naturally, the relevance of an innovation is generally not fully disclosed at the outset, but this is not to say that we should forbear to ask "what for?" To speak of "apparently worthless" in appraising innovations would seem to avoid both a "vulgar pragmatism" (Kaplan, 1964) and the equally and oppositely polarized notion that there is a peculiar kind of activity, "pure science", which consists in the unfettered search for truth.

Thus, the thesis that experimental situations are real life situations misses a second important point, that these situations are not "the real thing" for the experimenter, since it is only insofar as the conceptualization (law, theory, hypothesis, etc.) which is relevant to an experiment has at least a potential relevance beyond the instances of its experimental validation that there is any point in the experimental effort or the conceptualization itself.

The paradigm of psychological investigation which is most commonly accepted at present is a semantic paradigm ex-

pressed in the following sequence: theory - hypothesis - operationalization - confirmation. It is appropriately described as a semantic paradigm insofar as the primary concern here is with the appraisal of the truth value of statements. The fit of this paradigm to what psychologists are apparently doing is like the fit of a suit that is an inch too small in all dimensions--almost any single deficiency can be compensated for with a tug or a wiggle or an awkward posture, but it is fundamentally inadequate. For example, the psychological scene is almost totally devoid of anything that could be called a theory, if by "theory" we mean a set of statements that is necessarily logically incompatible with some statement describing an empirical outcome. What we do find are models and descriptive systems, both of which have the general characteristic of being linguistically insulated from descriptions of fact so that no report of experimental outcomes is more than informally related to a change in the model or descriptive system as such. The response to negative experimental results can perhaps best be described as the exercise of ordinary prudence in not continuing to make factual statements which contradict the descriptions of experimental outcome. If the conclusion is reached that a given model is not particularly appropriate to a given phenomenon, that conclusion is not particularly a matter of logic and it is only indirectly a question of evidence, and anyhow there

are always other phenomena on which the model can be tried out. In a word, the norm of experimental activity is not that of exposing theories ruthlessly to test the truth, but rather, that of demonstrating the successful application of a given model to one of the recognized "problem areas" in psychology , and of making whatever verbal and procedural adjustments toward this end are suggested by experimental outcomes.

That this should be so need not be regarded as the simple sociological consequence of existing norms concerning the publication of negative findings. It may be taken as reflecting an awareness that truths are cheap and infinite in number, that almost any theory could be kept alive indefinitely so long as words mean what the theorist wants them to mean, that one can always derive as "consequences" of a theory results that could have been predicted with confidence anyhow or follow up only the successful pilot studies, etc., etc., and all of this is formally impeccable. Nothing in the semantic paradigm of theorizing, hypothesizing, operationalizing, and verifying represents any safeguard against triviality, capricious practices, and other linguistic excesses. The considerable attention devoted to a formulation of criteria for empirical meaningfulness is relevant to only one of an indefinite number of loopholes associated with the semantic paradigm.

There are safeguards, of course, but these lie in the way psychologists are trained, in the restraint they exercise on

one another and the assistance they give to one another, and on their pragmatic appraisal of what the state of psychological science provides reason enough for psychological scientists to do. The criteria for what it is worth being successful at are not truth criteria. A psychologist, no less than other Persons, has reason enough to try to treat what he does as being successful.

It seems clear that even a minimally adequate codification of what psychological scientists do requires a pragmatic statement, not a semantic one. As an initial contribution toward this end, the following paradigm is presented as a simple generalization: Conceptualization—Decision—Action—Vindication. Each of these four terms is the pragmatic analogue of the corresponding term in the semantic paradigm, and each includes its semantic analogue as a special case: (a) To theorize about something is to conceptualize it as being a certain sort of thing, but not all concepts are theories. For example, the concept of a Person (or of an organism, or of a physical object) is as complexly articulated as many theories, but it is not a theory (no more than the rules of chess are a theory about chess). (b) To Form the hypothesis that X leads to Y is an instance of making a decision (the decision to treat X as leading to Y), but there is a whole range of other decisions also involved in conducting an empirical study. (c) To operationalize a description by engaging in specific experimental procedures is an

instance of following a certain course of action, but not all of an investigator's experimentally relevant actions are appropriately included under the heading of "operationalizing" (and under the pragmatic formulation, none of them have to be). Finally, (d) to verify a significant prediction to the effect that X leads to Y is to vindicate the decision and course of action involved in treating X as leading to Y.

The last point, (d), makes explicit the condition that standards of significance are applied at some time and that without such an appraisal scientific activity is unintelligible except as a fragment of a significant activity. To see such a fragment as a complete unit would be to see the actions of scientists as scientifically pointless, though allowing, perhaps, for some purely personal significance.

The third point (c) provides the linguistic basis for the explicit recognition that a variety of decisions and procedures on the part of the investigator are all relevant to the successful outcome and that it is this "package", rather than, e.g., simply the making of one prediction rather than another, that is vindicated by a successful outcome. In turn, such recognition may serve to motivate the formulation of more effective rules of thumb for what and how to change in the light of experimental outcomes. As matters now stand, the exclusive focus on the prediction can be implemented effectively only on the condition that experimental procedures should in general not be open to

question, and the predictable consequence of having to protect an over-investment in prediction has been that what would be appropriately used as procedural rules of thumb are elevated to the status of standards of acceptability.

The replacement of "confirmation" by "vindication" reflects an explicit recognition that an empirical procedure which is successful in contributing to our understanding of a phenomenon need not consist in establishing the truth or the increased likelihood of some statement, and this goes with the recognition that it is primarily concepts, rather than merely statements of theories, which guide behavior (Any statement of theory codifies the way certain concepts—primarily the "theoretical" concepts—are intended to guide behavior. But, of course, there is no guarantee that that will happen.) This conclusion is by no means peculiarly the outcome of the preceding discussion, but it probably does have a greater-than-base-rate association with a pragmatic outlook.

The investigator who acts in the light of this pragmatic paradigm will characteristically engage in the following procedures: (a) He identifies a significant goal toward which

his effort is intended to contribute. (b) In relation to that goal, he identifies an immediate objective, which is what he aspires to achieve in this effort. (c) He formulates his conceptualization of what the relevant considerations are—e.g., a description of the phenomenon under investigation and a specific identification of any features of the situation which are regarded as troublesome, problematical, significantly constraining, etc. (d) He decides upon a course of action for which the considerations given in (a), (b), and (c) jointly provide reason enough. (e) He implements this decision as well as he can, i.e., he tries to get what he wants in the light of what he knows and what he knows how to do. Finally, (f) he reappraises the significance of his action and its outcome. This includes not merely decisions as to degree of success, but also, a consideration of the potential relevance of his achievement to other goals that had not previously been brought into the picture, resolutions for what to do differently next time, what to do next, etc.

One of the distinctive features of this procedure is that the relation of (d) to (c) is not in general a deduction of any kind, e.g., a deduction of theoretical consequences via correspondence rules or operational definitions; although there is nothing to prevent a person from making deductions of this kind in going from (c) to (d), there is also no necessity for any deduction to be made. What replaces the deductive

aspect of the semantic paradigm is the application of standards of rational behavior, and the standards which will normally have the most immediate relevance will be those of the scientific "public" which is most immediately concerned with the subject matter of the experiment. If there were no such standards to be applied, no deduction could occur and no investigation would be informative or have any point.

A second distinctive feature is the use of maxims, particularly in connection with (c) and (d), above. Although they have not been explicitly mentioned previously, the use of maxims as part of the pragmatic approach seems inevitable because maxims provide a natural and effective way for an investigator to be both clear and specific in distinguishing between (a) what he is treating as obligatory and what as a matter for decision, (b) what he considers within his capacity and what he does not, and (c) which conceptualizations of phenomenon, procedure, or outcome he is treating as questionable and which he is not. In the semantic approach the burden of all of these pragmatic functions rests primarily on the statement of assumptions or postulates. The latter have some drawbacks in this regard because they are likely to imply more than is intended or needed, so that it is also likely to be unclear how they are to be taken. (This drawback is illustrated by a road sign which says "There are rocks on the pavement" when its intended function is directly accomplished by the familiar

"Watch for rocks on pavement," which involves no excess baggage in the form of factual commitments. It will be argued later that this drawback is also illustrated by a familiar conceptual road sign which says "Nature is orderly.")

If we act in the light of the pragmatic paradigm rather than the semantic paradigm we may be expected to do things differently in some respects. Of course, if we already have a reason for taking the pragmatic approach rather than the semantic, our doing so would not then also have to be justified by reference to what we came to do differently. Such a reason may be found in an appeal to the well established principle that if we are explicit about what we do we are better equipped to deal with new situations and to profit by experience. Because it is easy to see the point of claiming that the pragmatic formulation is more explicit and coherent one. A formulation in which conceptualization, evaluation, competence, and interpersonal agreement are given explicit and systematic connectedness in what scientists do is to be preferred to one which goes, roughly: "What scientists do is formulate theories and conduct experiments to find out whether they are true" "Oh, by the way—unless these truths are worth something, which may or may not be the case, its all beside the point" "Oh, and then, too, unless enough of them agree on which truths to talk about, you can't hardly tell the scientists from the patients, and it's even a bit of

a guess as to what the difference is between the truths and the non-truths." "Oh, and another thing, there are these criteria for meaningfulness . . ." etc. This is a pointed sort of vignette and perhaps it is overdone. But perhaps not—perhaps it only evokes an initial impression of indecent exposure, attributable to the centrality of our socialization into the multiple proprieties of covering up that last inch.

In any case, there is also some point in providing a concrete example to show that in some cases, at least, adopting the pragmatic approach does make a significant difference. The following is an abridged description of a series of five studies reported in detail elsewhere (Ossorio, 1964). The present description parallels the "characteristic procedure" described above in connection with the use of the pragmatic paradigm.

III. Second-generation Psycholinguistics

1. The significant parochial and non-parochial goals of the studies were: (a) to increase our technical psychological capacity for implementing descriptions of the form "He knows about X" or "He is treating something as an X"; i.e. the concern was with the form of cognition implied by the concept of a Person; (b) to contribute to the alleviation of a currently acute and constantly worsening social pathology, i.e., the choking up of the channels of communication between producers and consumers of (primarily) scientific and technical knowledge.

The connections between (a) and (b) are provided by the following maxims:

- A. If you want to find out something, the best thing to do is to ask a person who knows and who understands what it is you want to know and is willing to tell you. As a practical ideal for codifying what is known within a sizeable public, aim for a machine that behaves like a person in this respect, but which can also bring together the knowledge of many persons.
- B. Because the time and volume aspects of the communication problem (b, above) are so extreme, only a completely automatic, computer-based information processing system can provide a solution.
- C. What makes a document or piece of information relevant to, e.g., the design of an airplane wing section, is that the people who are involved in that set of practices (the people who know

how to do that) are willing and able to treat it as part of that set of activities: Therefore, don't waste time analyzing or classifying what are commonly called "objective" features or documents or messages; instead, try to duplicate the crucial features of what those people do with these documents or messages—that is what is both objective and significant about something that is a document. (In this respect, documents differ fundamentally from pieces of paper with marks on them.)

D. The construction of a physical system which demonstrably duplicates significant human capacities for treating something as being of a certain kind is at least as good as any other currently available method for demonstrating current understanding and furthering subsequent understanding of human behavior.

2. Thus, the immediate objective was to demonstrate the successful operation of a set of completely automatic procedures for storing and retrieving information "about" particular topics of interest; more specifically, procedures for doing this by duplicating the capacity of Persons for judging the relevance of a variety of information "packages" to specific topics of interest.

3. Relevant considerations included (a) the characterization of "relevance" as a primitive term for pragmatic discourse (b) a partial sketch of the scientist qua scientist as a Person, and of (c) the scientific community as being highly stratified into "publics", and (d) a description of the input-output

relations to be expected from the computations which are associated with correlating, factor analyzing, and measuring factors. (e) Maxim: The judgments of relevance made by persons who "know about" the subject matter in question are the only data that is criterion data other than data provided by observing them at work, which has its drawbacks. (f) Maxim: Don't try to program complex human judgments—almost any alternative will have greater long-range promise.

4. Decisions: (a) To make use of the organized storage of data as an alternative to programming a simulation of the "process" of judging subject matter relevance. (b) To accomplish this by factor analyzing criterion data, with the subsequent factor measurement providing the essential procedure for subject matter indexing. (c) To stratify the criterial judgments on the basis of what the judge knows, not on the basis of what he says. (Maxim: We do not count cases on the basis of evidence, and correlational evidence is no exception.) (d) To carry out the demonstration with a minimal data base. (Maxim: The demonstration of meaningful results with a minimal data base will ordinarily carry the same kind of conviction as the prediction of a surprising or counterintuitive result.

Assumption: If the stratification of the scientific community is as significant a social fact as it is taken to be, then the difference it makes should be readily demonstrable if the experimental approach taken is going to demonstrate a difference at all.)

5. Actions: Twenty-four subject-matter fields were selected for defining a subject-matter domain to be studied. These included such fields as "biosynthesis", "beam theory", "field theory", and "spectroscopy". The fields were selected from the four general content areas of physical chemistry, biochemistry, electrical engineering, and aeronautical engineering. For each of the four general areas, one or more "Experts" (persons competent in the area by virtue of academic training and/or professional experience) were assigned to identify and select a "corpus" for each field. The corpus consisted of six "documents", each consisting of a minimum of six consecutive paragraphs of text which was taken from the recognized literature of the field and was judged, upon inspection, to be part of the literature of the field. In each corpus, the technical terms were identified by the Experts. From each corpus, three terms were selected at random, making seventy-two terms in all. For each of the twenty-four fields, a set of three or more judges (experts in the specific field) was selected. A total of seventy-seven judges was drawn from graduate student and professional populations in New York, Colorado, and California. Each judge was given the task of rating the degree of relevance of each of the seventy-two terms to his field of competence. An ad hoc nine-point rating scale was used, similar to, but not identical with other scales previously developed and used in psycholinguistic studies.

Ratings by the several judges for a given field were averaged, giving a 72x24 data matrix. The twenty-four fields were intercorrelated and the correlation matrix was factored by Comrey's Minimum Residual method and rotated in accordance with the varimax criterion. The resulting factor space (seven common, seven unique factors) was designated as a Classification Space, or C-Space, because of its intended use in classifying documents as to subject matter.

A set of sixteen "test documents" (each consisting of one paragraph of text) was selected quasi-randomly from the corpora of eight of the twenty-four fields represented in the C-Space domain. From each of the test documents, four to six technical terms were selected as "vocabulary terms". Both the vocabulary terms and the test documents were rated by a set of judges with respect to the twenty-four fields. Approximately twenty-five per cent of these judges also served as judges for the factor analysis data. On the basis of these judgments, both vocabulary terms and test documents were assigned to locations in the C-Space (they were "indexed"), following the usual weighted average (third power) procedure for estimating coordinate values. These locations were designated as the "psychometric locations" of the terms and the test documents. Eight phrases designating some "topic of interest", e.g. "vector analysis", "the synthesis of fat", "types of fields", and "contraction

properties" were similarly rated and indexed in the C-Space.

A third set of judges was selected on the basis of their competence in the four fields from which the "topics of interest" were taken. This set of judges overlapped the factor analysis set of judges (thirty-three per cent) and the factor measurement set of judges (sixty-seven per cent). Each judge was presented with two "test packages", each consisting of six test documents and one topic of interest falling within his field of competence. Each judge was given the task of ranking the six test documents in the order of their degree of relevance to the topic of interest. These rankings were criterion data, and a consensus ranking was computed by averaging over the several judges for each field. Thus, a total of eight consensus rankings was obtained.

A relatively a priori computational formula, containing no empirically determined parameter values, was used to compute the C-Space coordinates of each test document as a function of four to six vocabulary terms appearing in the document. (i.e. the document was "read" and classified as to subject matter on the basis of words that occurred in the document and were "known" to the "reader".) For each test package the C-Space distances from the topic of interest to each of the six test documents were computed, and the test documents were ranked in the order of their distance from the topic of interest. This was the

"system ranking" of the test documents. Each of the system rankings was correlated with the corresponding criterion consensus rankings. A similar analysis was carried out using the psychometric locations of the test documents in arriving at a set of rankings designated as the "psychometric rankings".

6. Vindication: For seven of the eight "test packages", the correlations between the psychometric rankings and the criterion consensus rankings ranged from .896 to .984 (Mean = .939). The corresponding figures for the best six of the eight system rankings were .879 to .951 (Mean = .920). The seventh dropped to .690. This drop represents the main indicator of the degree to which there is still room for technical improvement in approximating human judgments by means of the completely automatic Classification Formula procedure. (All reported correlations above .690 were significant at the .01 level for $N = 6$.) In general, these results represented a higher degree of correspondence than that between judgments of relevance made by the individual judges who contributed to the criterion consensus (Mean $r = .829$). The negative instance ($r = .195$ and $r = .015$, respectively) among the eight test packages was of particular interest because it occurred under just those conditions where that result was expected, i.e. where the topic of interest was quite close to the C-Space origin. In such a case, the topic of interest is essentially outside the entire content domain of the C-Space (like asking for sheet music in

a chemistry library), which is always a possibility for a library of less than universal scope. Under these conditions a Person would say "I don't know enough about that to be able to help you", and the information processing system under consideration could do likewise, inasmuch as the distance from the origin to the location of the topic of interest is a piece of information which is automatically available to the system. Since both the positive and negative outcomes occurred in accordance with expectations and both are consistent with the successful functioning of a linguistic data processing system in an operational setting, the results of the study were taken to vindicate the decisions and procedures contributing to the results.

Here it is worth noting that what showed such a high degree of correspondence was, on the one hand, (a) judgments by individuals in one field of competence and, on the other hand, (b) a set of distances based on a factor analysis of ratings by twenty-seven other individuals and on factor measurement provided by ratings by still another set of some twenty-six to thirty individuals and on the use of a computational formula having no empirically determined parameters to provide a Finagle coefficient. That is, it was agreement between an essentially intrapersonal structure and an essentially trans-personal structure. (The criterion ranking judges for a given test package were treated as equivalent units—any one of them could have

been substituted for the consensus ranking without altering the results substantially. On the other hand, neither the factor analysis judges from different fields nor the factor measurement judges from different fields provided equivalent data.) This kind of correspondence is seldom sought and seldom found in psychological research (but cf Jessor 1964); it is a genuinely structural correspondence as contrasted with the commonplace finding that members of a group have similar attitudes, interests, beliefs, habits, etc. Thus, it is entirely consistent with the view, presented earlier, that what is special about linguistic behavior is its irreplaceable signalling function within a structure of participation in existing social practices which are themselves interrelated so that, for example, to engage in linguistic behavior as such is already to be participating in a special set of social practices. And it is entirely consistent with the thesis that what is constitutive of human behavior, including scientific behavior, is just that it is participation of this sort, codified in the concept of a Person.

There is more to be said about the relation of the preceding study to the pragmatic and semantic paradigms of psychological investigation. It should be clear that in fact the study could hardly have been conceived under the semantic formulation, although there is no logical incompatibility. It is also the case that once begun, it would have been quickly

abandoned in the light of some procedural rules of thumb which have come to be widely used as basic standards of "experimental rigor" in connection with the semantic paradigm. Specifically: The data matrix referred to above, consisting of 77 judges by 72 technical terms, is clearly recognizable as a multitrait monomethod matrix. (The study was designed to make use of three terms per field and was therefore presented in that form above; in point of fact, twelve terms per field, a total of 288 terms, was used for both the C-Space and the multitrait monomethod analysis—see below). The several judges for a given field would constitute different "tests" purporting to measure the same thing, to wit, the degree of relevance of those terms to that field. As a basic precaution, therefore, it would be important to examine the intercorrelation matrix for the 77 judges in order to establish convergent and divergent validity. Judges within a given field should correlate substantially more highly than judges in different fields. And it would be particularly important to establish this, considering that the number of terms used in the study amounted to a microscopic sample (this would hold for either 3-term or 12-term samples) from the vast, though finite, number of technical terms currently used in the fields of knowledge studied.

The correlation matrix failed signally to conform to the convergent-divergent requirements. Correlations between judges in the same fields averaged .45 and ranged from -.10 to .81.

Seventy-two per cent of the judges correlated most highly with a judge in a different field. The result of factor analyzing the 77 judges was as chaotic as the correlation matrix. Several paradoxical combinations of fields loading substantially on a single factor were found; in other cases the judges in one field split up into two or more factors; several other factors could be characterized in a vague way individually, but were difficult to distinguish from one another conceptually. Thus, on this procedural basis, the study was a clear and dismal failure. This appraisal was confirmed by several experimental and psychometrically oriented psychologists, none of whom (a) demurred at the multitrait monomethod characterization, (b) failed to take a dim view of the adequacy of the sample, or (c) knew of any basis for expecting any salvageable results from the data in the light of the pattern of correlations.

In contrast, the factor results obtained from the 72 x 24 matrix which resulted from combining the scores of those disagreeing judges within fields were eminently interpretable, with a gross structure conforming to what would be expected from a general knowledge of the fields in question. (The rejection of the multitrait multimethod approach in its entirety was implied by Decision (c), above.) Some minor surprises occurred, but they were readily interpretable and highly plausible. An example of such a "surprise" was the substantial (.635) loading of the Physical Chemistry field of "fluctuations and

Brownian Movement" on a factor which was designated as "molecular (Fluid) Dynamics" on the basis of its primary association with certain Aeronautical Engineering fields (Aerodynamics .848, Air Properties .844, and Aircraft Design .742). (In fact, the former does deal with the dynamics of molecular particles, primarily in liquids, whereas the three latter deal with the dynamics of molecular particles in gaseous fluids.) Six major common factors and one minor one were found. This factor structure was reproduced not merely substantially, but more nearly identically (i.e. not merely the same fields being associated with the same factors, but with identical or near identical rank order of factor loading on five of the six major factors and a surprising correspondence of the specific numerical values of the factor loadings) throughout a series of experimental manipulations which in terms of factor analytic rules of thumb could have been expected to result in some very substantial changes in factor structure. These manipulations included (a) replication with samples of four, six, and twelve terms drawn from the corpus of each field (so that the 77-judge matrix was comparable to the most adequate rather than the least adequate of these replications. In fact, the data for the 77-judge correlations was identically the same data that was used for the C-Space in which the relevance ranking study was carried out), (b) replication with a different set of judges who showed no greater apparent agreement than the initial set, (c) replication based

on a completely different corpus selected from the literature of the twenty-four fields by the same procedure (but some different Experts) as the first corpus, (d) reanalysis using a different and mathematically non-equivalent method of factoring (from Comrey's Minimum Residual method to Lawley's Maximum Likelihood method, and finally, (e) replication in which sample size, sample source, set of judges, and method of factoring were altered simultaneously. What was found to affect the factor results substantially was a thoroughly biased sampling procedure in which the terms judged were selected from only ten of the twenty-four fields.

The degree to which replicability was demonstrated may be illustrated by reference to coefficients of congruence (Harmon, 1960) which were computed for the corresponding factors in the seven analyses involving sample size variations. Six factors from each of the seven analyses were used, making a total of 126 coefficients of congruence. The lowest value among these 126 coefficients was .970. In comparison, a value of .90 is accepted by Harmon and others as providing an adequate basis for accepting the correspondence of factors.

The contrast between this set of results (together with the relevance ranking results based on these results) and the semantic approach needs no discussion. The adoption of the pragmatic formulation not only can make a different—it has made a difference. To be sure, this is only one example (a quite

different study identifying a kind of "placebo effect" of theory on therapists (Brittain 1965) could also have been discussed here), but it will serve to establish the principle if it is agreed that the results presented here do not suffer in comparison with typically reported experimental results in respect to carrying empirical conviction, opening up further avenues for investigation, and contributing to our understanding of human behavior and our ability to deal with it.

