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The Situation[1]

Geraldine Fennell[2]
Fordham University, Lincoln Center

A formulation for the explanation of behavior is needed to guide the work of the applied psychologist whose first task is to explain behavior. It can also serve as a coordinating framework for the basic research that centers around each of psychology's many constructs. This paper puts forward the notion that the appropriate framework reflects the intersection of numerous person and environment systems; in other words, that it is found in the structure of a situation. Continuity within the science of psychology is promoted if an appropriate structure is found in the classic situations of the experimental laboratory. A prototypical situation that is based on the major paradigms of instrumental learning is described. It has already shown considerable utility in organizing the investigation of behavioral determinants in a real-world setting, and its ability to clarify interrelationships among psychology's constructs also looks promising.

Most research and theorizing in psychology owes allegiance to one of the major perspectives on the study of behavior that constitute the traditional subdivisions of the discipline. In numerical terms, a majority of the research projects that are being conducted at this time will likely have been conceived within the domain of "learning," "attitude," "personality," "perception," or one of psychology's other major subdivisions. Within any of these areas there are enough unresolved issues to keep scores of psychologists absorbed and busy for their professional lifetimes. The subject matter's intrinsic interest effectively monopolizes the attention and creative energies of its scholars and serves as powerful insulation in the face of diverse criticisms that may be directed at the outcome of so much effort and

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[2]Address all correspondence to Geraldine Fennell, Department of Social Sciences, Fordham University, Lincoln Center, New York, New York 10023.

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involvement (e.g., Gibbs, 1979). In the normal course of their endeavors, psychologists have little reason to step back from the perspectives of psychology's traditional subdivisions to consider how they relate one to another and, more particularly, how they contribute to the explanation and prediction of real-world behavior. There are very few examples of a different approach, one that starts with a behavior and addresses the question how best to conceptualize the determinants of that behavior. Irwin's (1971) SAO formulation and Lewin's (1936) formulation that behavior is a function of the situation exemplify an alternative approach, but it is a decidedly minority tradition within the study of human behavior.

In the applied fields of psychology, the nature of the task at hand commits the scientist first to the behavior to be explained rather than to one or other of psychology's traditional subdisciplines. For example, in that part of consumer psychology where the primary dependent variable is brand choice, the scientist's task is to conceptualize the determinants of the consumer's selection of one brand from those available and to do so in a way that provides guidance for the production and sale of goods and services. Other than the fact that research instruments and a body of literature are available relating to personality, attitudes, and other constructs, it is not clear why these constructs should be invoked in attempting to explain consumer brand choice; if brand choice is explainable in personality terms, for example, then why is attitude needed, and vice versa? When the task at hand focuses attention on a behavior that calls for explanation, leaving open the choice of explanatory construct, where does one turn either for a model of behavioral determinants or for guidance in selecting among psychology's traditional subdivisions? This is where a comprehensive framework has a role to play. As Boneau (1974) argues, "there are advantages to major frameworks, the perspectives or paradigms that relate to one another the major pieces of a science. The interconnections among the pieces become visible" (p. 298). The work of basic psychology flourishes without reference to such a paradigm, which is probably one reason why a comprehensive framework has been slow to emerge.

In a real-world setting the justification for the expenditure of research funds has to be the provision of currently useful information. Behavioral research in a business setting is expected to help in making decisions that affect the allocation of scarce resources and, not incidentally, the careers of the decision-makers. In these circumstances, no amount of intrinsic interest can compensate for a set of findings that do not shed light on the decision that occasioned the research in the first place. Along with other sciences, psychology may benefit from accelerated progress due to the urgency of addressing real-world problems at times of crisis. Perhaps it can also welcome the pressure to consider everyday applications that is routinely generated when decision-makers call on behavioral science for assistance.

The purpose of the present paper is to describe a comprehensive framework for identifying the determinants of real-world behavior, and to suggest ways in which a number of psychology's major subdivisions or constructs may be coordinated to the framework. The paradigm results from a conjunction of a number of viewpoints that are already familiar to students of psychology, although, as might be expected, none of the existing viewpoints survives its meeting with the others unaltered in some respect. The separate elements here brought together include (1) structural elements from animal experimentation in learning and motivation, (2) a phenomenological perspective, (3) the Lewinian (1936) notion that behavior is a function of the situation, which, in turn, is a function of the person and the environment, (4) research procedures based on empirical approaches developed for the study of consumer behavior in marketing practice, and (5) a role for the motivation construct that is new only in the sense of its being previously unarticulated. My original objective was to develop a way of conceptualizing motivation that would address some practical problems in the investigation of consumer behavior for a marketing application. The solution to that problem seemed to lie in regarding the structural elements of animal experimentation in learning and motivation, viewed from the subject's perspective, as describing a prototypical motivating situation. But the ramifications of this move are many, especially when viewed in the perspective of the Lewinian notion of person and environment as joint determinants of the psychological situation. The structural framework from the experimental laboratory unfolds the implications of the apparently simple Lewinian idea that behavior is a function of the situation, and the specification of person and environment as joint behavioral determinants makes the structure provided by the classic experimental situations accessible to the explanation of human behavior in a real-world setting. Finally, the empirical procedures developed by marketing research practitioners, the lessons learned there through trial and error, as well as the problems remaining, provided a real-world anchoring that guided the synthesis of the disparate elements. First, I shall outline essential features of the original applied problem, then follow with a brief sketch of the framework that emerged in response to that problem. Finally, I shall discuss some implications of the paradigm for topics of current interest in personality and social psychology, and for the role of the motivation construct.

DESCRIBING HETEROGENEITY IN DEMAND

From the practice and study of marketing there emerged, in the 1950s, the two related ideas of customer orientation and demand heterogeneity.

The preeminence of consumer wants in providing the impetus for the production of goods and services is embodied in what is often referred to simply as the "marketing concept" or marketing's first law: Don't sell what you happen to make; make what the consumer wants to buy. Since people differ in their personalities and in their life circumstances, it follows that demand is heterogeneous and that making "what the consumer wants to buy" will likely result in a number of different versions of the same product. Key tasks for the producer of goods and services who is guided by the marketing concept are to identify and quantify the different kinds of consumer wants that exist for the product of interest, and to assess the degree to which these wants are being satisfied by current market offerings. Marketers could reasonably address the question to psychology: What can you tell us about the different kinds of wants (motivations) that may exist out there, among our potential customers? In posing this question to psychology, marketing is not asking for an answer expressed in terms of the incidence of various wants in the population. Individual goods and services fit into people's lives in very specific ways and it is understood that the necessary match between product characteristics and consumer wants requires a process of successive approximation, typically realized in multistage research projects. What marketing is asking for, most basically, is a conceptualization of motivation for use in research that is undertaken to describe and quantify heterogeneity in consumer demand, bearing in mind that goods and services are created and marketed one at a time. The formulation the marketer needs should be able to reflect (1) individual differences, (2) a motivational influence on behavior (i.e., directed activation of behavior), (3) the full range of motivational influences, whether they arise from within the person or from the person's environment, and (4) a situational reference.

For a variety of reasons, such a formulation is not available in basic psychology and, in its absence, business practice has developed a number of empirical approaches for the description of heterogeneity in consumer demand. Known under the general heading of "segmentation research" (e.g., Lunn, 1978; Wilkie & Cohen, 1977; Wind, 1978), these approaches may be classified as product-descriptive or consumer-descriptive, depending on whether they favor the description of consumer reactions to goods and services or the description of consumers themselves from which wants may be inferred. In either case, there are at least two conceptually distinct phases to the research. In the first, the qualitative phase, a set of product or consumer descriptors is assembled by methods ranging from tapping the professional judgment of the marketing/R&D/advertising team to conducting extensive exploratory individual or group research with consumer respondents. In the latter instance, discussion guides or semistructured questionnaires are used that probe consumers' orientation to the condition (e.g., having a headache) or activity (e.g., doing the laundry) of interest, as well as their categorizations of and reactions to the available products and brands. In an informal way, this research explores the phenomenology of the consumer activity or condition under study. It seeks to understand the consumer's perspective and to identify the aspects of the external and internal environment that are salient for the consumer, always, of course, with reference to the specific consumer condition or activity under study. This information, subject to quantification in phase two, is obtained to aid the marketer's development of product characteristics appropriate to the consumer's circumstances. In the second, quantitative, phase the product attributes or consumer descriptors generated in phase one are included in structured questionnaires administered to large samples of qualified consumers. The internal consistency of the two-step procedure just described often breaks down when the researcher includes items from favored personality inventories in the phase two questionnaire. Demand heterogeneity is represented by performing cluster analyses on data obtained from the quantitative phase.

Even when the findings of this research are perceived to provide guidance for marketing action, a number of troubling issues remain. The absence of a conceptual framework leaves the research's users without objective criteria for assessing a study's success, and limits further development. A bothersome practical problem is that the researcher has no way of judging whether the set of product attributes or the item pool used for consumer description covers all the important motivational bases. Lacking a model of the sources or determinants of demand heterogeneity, items proliferate and the researcher is left without guidance as to the comprehensiveness or possible redundancy of the item pool.

However mundane and commonplace the purposes may be for which goods and services are used, the potential determinants of these consumer activities and conditions comprise an extraordinarily broad range of variables, including aspects of the physical environment (natural and constructed), the economic, political, societal and family environments, and the interior world of the individual consumer. The problem is not to specify possible influences impinging on the consumer but to devise a model for representing the determinants of these consumer activities and conditions in a way that facilitates the marketer's choice of characteristics for goods and services appropriate to consumers' worlds. In a different context, Neisser (1976) similarly appreciates the enormous complexity of the human environment:

> . . . the human environment is vastly complicated, and a huge array of disciplines from political science to traffic engineering has sprung up in an effort to understand

it. Few of these disciplines can claim any great success to date, but my purpose here is not to criticize them. It is to urge a measure of humility on the discipline that calls itself "behavioral science." The prediction and control of behavior in the real world requires detailed knowledge of that world to a degree that we usually do not have, and that in any case falls outside the realm of psychological expertise. (pp. 183-184)

The advice to the marketer to "make what the consumer wants to buy" simply acknowledges that the bulk of consumer activities for which products are created and marketed (e.g., meal preparation, household and personal care, clothing, home building, travel, temperature control, treatment of minor ailments) will occur regardless of marketers' actions. The determinants of consumer satisfaction do not originate with the marketer, who would offer goods and services as adjuncts to these consumer pursuits, but are to be found in the consumer's world. The goal of marketers, usually, is to secure repeat purchase of their brands and, more basically, repeated use by the consumer. If we think, then, of the marketer's task in reinforcement terms, it is to determine product characteristics that will be reinforcing to consumers, i.e., that will strengthen the behavior of using the brand in question. Phrased in this way, the task may appear familiar enough to experimentally oriented psychologists, except for one material difference: The marketer lacks the control over the situation that the experimental psychologist may take for granted. In the laboratory, a subject's external environment is controlled in large measure by the experimenter. The general character of an appropriate reinforcer is seldom less than obvious, because it is determined by the preceding experimental operations (i.e., the motivating conditions), and these have been selected by the experimenter. In contrast, it is the marketer's task to discover the preexisting motivating conditions for the consumer activity under study in order to obtain direction as to the product characteristics that will be reinforcing. Further, heterogeneity in demand presumably reflects heterogeneous motivating conditions.

A PROTOTYPICAL SITUATION

The experimental arrangements used to study learning and motivation in the laboratory provide a structure to which the numerous possible determinants of behavior in the real world may be usefully coordinated. The resulting model has horizontal and vertical aspects. As a first approximation, components of the *horizontal dimension* may be thought of as situation, act, outcome (SAO), to reflect the apparently natural division of the experimental procedures into those aspects to which the subject is initially exposed (S), the behavior of interest (A), and the stimulus events that the

experimenter makes available contingent on the occurrence of the behavior (O). Neither Irwin (1971) nor Boneau (1974), who have previously offered SAO formulations, appears to have emphasized the within-paradigm dependence of act (A) and outcome (O) on the characteristics of the situation (S). The point is crucial here where the behavior mode (A) and the external and internal outcome states (O) are selected by the characteristics of the situation (S). For this reason, I prefer to describe the entire SAO unit as a *situation*, and to distinguish three components of a situation—namely, the activating condition, the behavior mode, and the terminating condition. The activating condition selectively affects stimulation thresholds, initiates a behavior mode, and specifies the essential characteristics of the terminating condition.[1] What is activated is a particular *form* of behavior that will continue until terminated in a manner essentially dictated by the activating condition. This function of the activating condition is more readily seen, perhaps, with reference to the different kinds of activation.

The major paradigms of instrumental learning describe different types of motivating situations. Corresponding to each set of experimental procedures there is a behavior mode (e.g., escape, avoidance) and a class of stimulus conditions (e.g., shock termination, shock signal termination), the general form and attributes of which are dictated by the activating condition. These paradigms, of which five simple and two complex cases are listed in Table I, constitute the *vertical dimension* of the prototypical situation. Among "simple" cases, where the situation is characterized by only one source of behavior activation, the experimental models for the first three types shown in Table I need no further clarification; "exploratory incentive" (#4) is modeled on experiments in which exploratory behavior is studied in the absence of sources of reward or motivation other than that arising from exploration itself (e.g., Cofer, 1972, pp. 76-79); "signaled intrinsic incentive" (#5) is modeled on experiments that use nonnutritive, taste-appealing substances, or cues for sexual activity (e.g., Cofer & Appley, 1964, pp. 542, 549-550). Two complex motivating situations are included that involve more than one source of behavior activation; the first of these (#6) is modeled on approach–avoidance conflict (e.g., Miller, 1944), where the behavior instigated by one source of motivation leads to a second source of behavior activation, antagonistic to the first. The second (#7) is modeled on the experimental study of frustration (e.g., Amsel & Roussel, 1952) and extinction, where the behavior instigated by one source of motivation is no longer successful in neutralizing the activating condi-

[1]Herrnstein (1977), although using "drive" in place of "activating condition," makes a somewhat similar point when he says: "The level of each drive at each moment sets the probabilities for a class of behaviors and the strengths of a class of reinforcers" (p. 598).

Table I. Simple and Complex Motivating Situations

Activating condition	Behavior mode
Simple	
1. Unavoidable aversiveness	Escape
2. Avoidable aversiveness	Avoid
3. Deprivation	Maintain
4. Exploratory incentive	Explore
5. Signaled intrinsic incentive	Facilitate
Complex	
6. At least one of above (1-5) plus termination aversiveness	Resolve conflict
7. At least one of above (1-6) plus termination failure	Restructure situation

tion; the original source of behavior activation remains unchanged and a second source is added, arising from the aversiveness of failure to terminate the activating condition. When extinction eventually occurs, the subject has presumably restructured the situation.

Among the five simple activating conditions, note the structural difference between the first three and the last two, resulting in more specific behavioral control in the latter. Folk wisdom has, apparently, appreciated this fundamental distinction when it points to the stick and the carrot as alternative ways to motivate behavior. The stick instigates a general form of behavior, namely, away from itself, and leaves specific response selection to other determinants; the carrot, on the other hand, directs behavior very specifically toward itself. Folk wisdom's profound insight is further in evidence in that the selection of a carrot and not grass or hay, for example, captures very nicely the fact that the motivation of behavior in the "carrot" case is independent of the prior presence of a state of discomfort. A carrot is effective, presumably, whether the donkey is hungry or satiated.

The experimental paradigms differ from each other on a number of dimensions; for example, intensity, speed of onset, environment or organism as origin of the aversiveness (escape vs. deprivation), the actual or signaled presence of aversive stimulation, the absence or presence of prior learning as a prerequistie for behavioral activation (escape vs. avoidance), environment or organism as locus of the signal for aversiveness-to-come (avoidance vs. deprivation). Furthermore, the deprivation case, when implemented over a broad range of values, appears to be changing along a quantitative dimension only but may, in fact, change qualitatively also. Additionally, other dimensions come to mind for systematic investigation, for example, probability of occurrence of the aversive stimultion, as well as experimental arrangements that permit studying alternative forms of prepa-

ration by the organism under conditions of signaled unavoidable aversive stimulation (cf. classical aversive conditioning). While basic work proceeds along these and other lines, the experimental paradigms have heuristic value in orienting an investigator to consider systematicaly the major classes of influence that may have motivated a given behavior (Fennell, 1978). For example, the possibility that the behavior belongs in the *escape* mode leads to investigating influences that the subject could perceive as imposing unavoidable discomfort, physical or psychological (e.g., where values are being thwarted). As regards the *avoidance* mode, suggestions by Mowrer (1950) and Brown (1961) that much human activity is motivated by anticipation of privation and an attempt to reduce anxiety lead to investigating the subject's possible belief that affection, approval, praise, or prestige will be lost or not gained unless some action is taken. More generally, it is appropriate here to investigate the extent to which subjects take into account how behavior may register in the eyes of others, or conform to their self-concept. The deprivation case suggests investigating whether the subject regards the behavior as normal *maintenance* of a system that runs down and requires periodic attending, or as a routine aspect of a role. The *explore* and *facilitate* modes lead to investigating whether the subject performs the behavior for cognitive or sensory satisfaction, respectively, as ends in themselves, and not as incidental to the pursuit of other satisfactions.

It is not essential, for present purposes, to address the question of how motivation works, the question of underlying mechanism. It would be consistent with the present view to suggest that there is but one motivational mechanism. Adapting Peak's (1955) analysis slightly, an activating condition is present when the disparity between a present state and an imagined state reaches a threshold level favoring the imagined state (cf. "reference condition," Powers, 1973, pp. 45-47). The essential quality of the imagined state is specified by the particular kind of aversiveness currently experienced, as exemplified here by reference to the vertical dimension of the model. Note that in the case of motivating situations #4 and #5 (Table I), both of which are defined to rule out the possibility of a preexisting state of discomfort, the presentation of a positive incentive presumably induces discomfort when the present state is compared to the imagined state resulting from further commerce with the incentive. The sight or smell of a carrot (#5 here) makes it intolerable to be carrotless. The difference I am pointing to, between "stick" and "carrot" type activating conditions, may serve to clarify Kruglanski's (1975) exogenous–endogenous distinction without, however, endorsing his view that action in the one case is a means and in the other is an end in itself. Even in the "carrot" case, behavior has a consequence beyond itself, namely, a particular state of the organism.

DESCRIBING THE SITUATION AS PERCEIVED

Psychologists who work mainly in laboratory settings are well aware of the difficulty of adequately describing influences on behavior arising from within the person due to the individual's unique genetic endowment and learning history. In the real-world setting there is, additionally, the problem of adequately describing influences on behavior arising from the current environment. Furthermore, in an applied setting, where the task is to describe and quantify the way things are (cf. considerations of representative design, e.g., Petrinovich, 1979), the number of person or environment variables that can safely be excluded from consideration on a priori grounds is small relative to the number remaining. For these reasons, if for no other, a research strategy is indicated that attempts to describe influences on behavior as these influences are perceived by the subject. Instead of attempting to describe the person and the environment completely, a patently impossible task, a phenomenological approach offers the possibility of allowing subjects to tell us the elements they have selected from those available that are the ones that enter their definition of the situation under study. The vertical and horizontal dimensions of the prototypical situation provide a useful way to organize the investigation of the subject's perspective.

The Vertical Dimension

An instrument similar in some respects to a personality inventory is developed from preliminary research but, in contrast to personality research, it is intended to describe a *situation as perceived* rather than a person. In comparison with personality research, the description of a situation as perceived increases the range of psychological processes and constructs considered by the researcher and reduces the demand on the subject for abstraction. For example, a collection of items developed from qualitative research, in which the researcher has explored the specific manifestations of each of the activating conditions, and subjects' causal attributions associated with activating elements, reflects conceptualizations of psychological processes drawn from many of psychology's subdivisions. It is concept-intensive. Furthermore, subjects are made aware that the researcher is interested in having them characterize one activity or condition as they experience it in their lives today; accordingly, they are not required to abstract across disparate situations and over time, as personality inventories may implicitly demand. By limiting the focus of inquiry, the subject's task is made more concrete and the range of relevant instances is sharply restricted. The description of perceived situations rather than personalities

(e.g., traits, needs, values) sacrifices the goal of a once-for-all characterization of a person that can then be used to predict the person's behavior. Whether such a goal is attainable, even in principle, is a moot question. As demanded by the required response to each item, people answering personality inventories often are being asked to characterize their behavior in the many situations of their past and present experience. Putting aside the whole question of the ability of subjects to sample their behavior over time and across situations, as well as the frequency in that sample of the kind of situation in which their predicted behavior is observed, more basic questions concern the purpose for which a description of a person in the abstract would be appropriate, and whether it would ever be useful to describe anything short of a pure spirit without reference to the physical world in which behavior inevitably occurs. Stern (1964/1974) has expressed a similar reservation as follows: "The accuracy with which one can anticipate one's own typical behaviors depends in part on the level of self-knowledge, a facility likely to be distributed in the general population much like other cognitive skills. But the accuracy of these test respones is also limited by the fact that they must be estimates of the likelihood of self-actualization in an unspecified, abstract environment, a sense of one's most probable behavior 'all other things being equal' " (1974, p. 564).

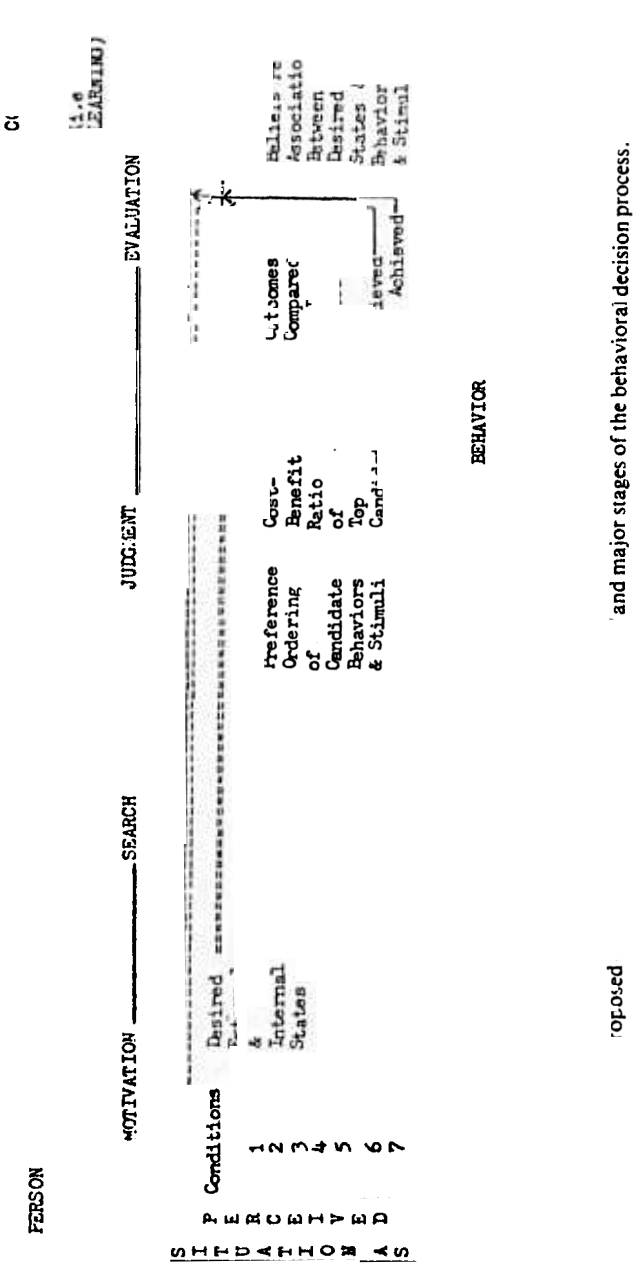
Kassarjian (1971) reports 10% explained variance as fairly representative of research in which the relationship of personality variables to consumer behavior was investigated, and thus appears to offer further confirmation of Mischel's (1968) personality coefficient of $r = .3$. Marketing research practitioners (e.g., Dhalla & Mahatoo, 1976; Pernica, 1974; Young, 1971; Ziff, 1974) have consistently advocated the use of items phrased in terms appropriate to the consumer condition or activity under study. Compared to the more global characterizations required by personality inventory items, experience has shown such situation-descriptive items as more likely to yield findings that provide guidance for making decisions. Commenting on the achievement of 20% explained variance in the study of motivation and job satisfaction in the sister applied field of organizational psychology, Cofer (1978) has called for methods that are "more individualized" and assessments that are "more extensive than they have been in the past" (p. 12). With restrained enthusiasm, Cofer proposes:

> more use of interview and case studies and less use of easily applied instruments like rating scales and questionnaires. At this point, the conduct of experiments seems less likely to produce interesting results than the more time-consuming and laborious procedures of interviews and case studies, carried out longitudinally.
>
> Unfortunately, there is no way to estimate the cost – benefit ratio of the use of this individualized, longitudinal approach which seems to me to be the consequence of a thoroughgoing cognitive, constructive viewpoint. It will not necessarily improve matters or improve them enough to be worth the time, trouble, and cost.

> It may be the case that we have expected too much of psychology. Perhaps we cannot achieve the precision of prediction and control that so many have pointed to as our goal. While we value this goal highly, perhaps our subjective probabilities of success have been too high (wishful thinking?) and our attributions concerning the causes of performance inadequate to the complexities of aligning the individual variations with respect to the causes. (pp. 13–14)

The tasks and problems of organizational and consumer psychology are sufficiently different so that the exact nature of appropriate research methods may well vary between these two fields, but Cofer's essential point seems to be the need to retreat from the use of highly abstracting approaches at the data collection stage. Too much information of possible systematic relevance is lost thereby when the candidate sources of influence are as numerous, in absolute terms, as they are in the real world. Abstraction and parsimony are the ultimate goals, and their achievement may best be fostered by an attitude of hasten slowly. An added benefit in the applied context is that comprehensive information on concrete, specific, instances is often useful in its own right in generating ideas that lead to solutions of the problem at hand, while a parsimonious scientific synthesis is awaited.

The Horizontal Dimension



and major stages of the behavioral decision process.

roposed

Memory and the current environment are the sources of knowledge and beliefs that are potentially relevant to neutralizing the activating condition (Beliefs). The person searches this information, intentionally and/or incidentally, for behaviors and stimuli with some likelihood of securing the desired states and terminating this particular situation (Candidate Behaviors/Stimuli). Conceivably the search mechanism is lowered thresholds for bringing relevant stored information and impinging stimuli to focal attention, so that the person is especially sensitive to information that taps feelings associated with the activating condition and desired states (cf. responsiveness to concern-related stimuli, Klinger, 1975).

Judgment. If two or more behaviors are being considered, the person needs some way of reducing the pros and cons of each to a single value for purposes of comparison. While the kinds of decision calculus used await clarification, the output of the person's decision process may be obtained directly (Preference Ordering). Costs of performing the most preferred behavior (or the sole candidate behavior, in the event only one is being considered) are assessed in relation to the likely benefit to be derived from performance (Cost – Benefit Ratio). Unforeseeable environmental events may, of course, intervene so that the person is unable to perform the behavior selected by the process just described.

Evaluation. Following performance, the person experiences and evaluates the external and internal outcomes relative to the desired states (Outcomes). Depending on the extent to which the desired states have been achieved, the person's knowledge and beliefs relative to one or more means of terminating this situation are confirmed or revised (Learning).

SOME IMPLICATIONS

The Person – Situation Issue

In recent years numerous authors have called for attention to be given to the study of situations. For example, Keen (1975) asks: "What are the situational features that make a difference? How the subject perceives the situation will matter, but how can we know *what* it is he perceives in a situation that matters? What are the 'dimensions' of situations? That is, what are the 'prototypical situations'?" (p. 124, original emphasis). There are ways to conceive of a "situation" other than the one I have described here (e.g., Argyle, 1977; Irwin, 1971, e.g., p. 109; Pervin, 1977; Ryan, 1970, in regard to his second level in the explanation of behavior). If nothing else, the desirability of promoting points of contact between the study of human

and animal behavior favors exploring my present strategy for the description of a prototypical situation. Beyond this, the horizontal and vertical dimensions of the situation as perceived are useful when it comes to designing research that is being conducted to explain real-world behavior, where prior commitment to "traits" or "values" or other conceptualizations of person influences is unwarranted. It may be necessary to emphasize that I am not using the term *situation* synonymously with *environment*. The clarification may be necessary because in the large literature on "persons" and "situations" as behavioral determinants (e.g., Magnusson & Endler, 1977) it has been nearly universal practice to use *situation* and *environment* (and, similarly, *trait* and *person*) interchangeably. There is much to be said for Lewin's distinction between "situation" and "environment":

> If one represents behavior or any kind of mental event by B and the whole situation including the person by S, then B may be treated as a function of S: $B = f(S)$. . . . One can hope to understand the forces that govern behavior only if one includes in the representation the whole psychological situation.
>
> In psychology one can begin to describe the whole situation by roughly distinguishing the person (P) and his environment (E). Every psychological event depends upon the state of the person and at the same time on the environment, although their relative importance is different in different cases. Thus we can state our formula $B = f(S)$ for every psychological event as $B = f(P\ E)$. (1936, pp. 11–12)

Clearly, according to these words of Lewin, it makes no sense to regard persons and situations as alternative or competing influences on behavior, or to talk about behavior as a function of the person and the situation as in Argyle's (1977, p. 353) formulation: $B = f(P\ S)$. Regarding the question whether studying different environmental settings is the same thing as studying different situations, consider the following examples of "situations" used in exploratory research where they were compared in terms of accompanying feelings.

> Presenting my ideas before a class.
> Arguing with my mother.
> Studying alone.
> Being at a big party.

If "presenting my ideas before a class" is a situation, what is a behavior? Presenting my ideas? Presenting? Neither "presenting" nor "presenting my ideas" ever occurs except in some environmental setting, and the same is true for the activity represented by the verb in each of the other "situations" listed above. Is the research in question studying different behaviors or different situations? The question is not a trivial one for a science of behavior. Consider, now, a study that compares the following, in term of experienced affect.

Presenting my ideas before a class.
Presenting my ideas before my co-workers and boss.
Presenting my ideas before a group of close friends.
Presenting my ideas in a signed article.

Are these different behaviors or different situations? Finally, consider a study that compares affect accompanying "presenting my ideas before a class" when the activating condition is perceived to vary as follows.

My values had previously been attacked or disparaged.
Not accepting this opportunity threatens my self-esteem.
It's a routine aspect of class participation.
It's an opportunity to explore complex ideas.

Just as "presenting my ideas" does not occur in the absence of an environmental setting, so also "presenting my ideas in class," or anywhere else, as well as "arguing with my mother," "studying alone," or "being at a big party," do not occur in the absence of a perceived context or meaning. Naturally, researchers are free to study behavior in forms and contexts they find useful, theoretically relevant, or interesting for whatever reasons. As a science develops, it is to be expected that it will evolve ways of viewing its subject matter that are helpful in ordering and comparing alternative approaches. It is not clear that psychology has developed any viewpoint on the systematic status, or purpose for which appropriate, of alternative approaches, such as those exemplified in the above lists of behaviors/settings. Yet it can scarcely be a matter of indifference which strategy is adopted. Experimenters who manipulate "situations," in the manner of the second set of behaviors/settings above, may in fact be attempting to manipulate the situation as perceived, although they may not express it this way, or check whether or not they succeeded, or inquire into subjects' overall perceptions of participating in the experiment, or articulate the systematic implications of the stage of the decision process their manipulation addresses. What is being attempted is even less clear when inventories of "situations" are administered in which the item set simultaneously varies activity and environmental setting in the manner of the first set of behaviors/settings above (e.g., Endler, Hunt, & Rosenstein, 1962). Such items leave ample opportunity for individual interpretation (Fennell, 1975b) so that "situations" likely includes an unidentified contribution from "persons." "To the extent that situations exist as perceived, the phrase "the situation." implying a consensual ontological status across actors, is essentially meaningless" (Golding, 1977, p. 406).

It is burying one's head in the sand to study behavior without taking into account the subject's perception of the situation. The entities that contribute the subject matter of the science of behavior are not interchangeable, not only by virtue of their unique combination of genetic inheritance and [redacted]experience but because each represents an individual selection of

influences from the current environment. From a perspective in which behavior is viewed as jointly determined by influences from within the person and from the environment, traits, motives, values, and other constructs are seen as conceptualizations of different aspects of person influences, none of which is expected to explain behavior on its own; neither is it expected that behavior is fully determined by aspects of the environment. Instead, both the person and the environment are viewed as consisting of numerous systems that intersect in different ways as the person engages in different behaviors. When the objective is to understand an example of real-world behavior, no generalized characterization of the person or enumeration of objective environmental features is adequate to the task, even in principle. What is needed is information on the situation that results from the intersection of person and environment systems, for this unique individual and his or her particular conjunction of influences from the present environment. Renewed attention is directed, then, to exploring the possible contributions of data based on introspective report (Lieberman, 1979) and to developing methods for overcoming the limitations of introspection.

Herrnstein (1977) muses about some awkward outcomes for "controlling agencies" should it be true that the "list of drives is long, not fully known, and, finally, somewhat variable from person to person and from time to time" (p. 598). It is enough, I believe, to give pause to any would-be controller that individuals are different one from the other, representing as they do a unique composite of genetic inheritance and life experience, and have different effective environments by virtue of their individual selections from the objective environment. Skinner (1974) appears to appreciate the significance of individuals' unique access to their particular worlds when he says: "It would be foolish to rule out the knowledge a person has of his current condition or the uses to which it may be put" (p. 209). But he appears not to have considered the implications for behavioral control of the individual's option to reveal or withhold information on the unique configuration of past and present influences in which individuality inheres. As Neisser (1976) has said: "The psychologist cannot predict and control anyone who knows more about the situation than he does, or who picks up information that he has left out of the reckoning" (p. 183). Human behavior's apparent resistance to explanation and, hence, scientific control is doubtless due less to inherent lawlessness than to the inaccessibility of its determinants to immediate observation.

A Purpose for Motivation

It has been suggested that psychology can dispense with the motivation construct (Bolles, 1967) and that the notion of [redacted]nforcement can ac

count for whatever aspects of behavior were previously regarded as motivational. A "reinforcement theory of motivation" would be appropriate because motivation and learning may be regarded as two ways of viewing a single set of phenomena: "There is just a single set of phenomena to be explained, and . . . it can best be explained as an effect of reinforcement" (p. 441). Such a position has some plausibility when one considers motivation and reinforcement *within* one of the motivating situations. Motivation's function as an explanatory construct is largely usurped by the decision to study *escape* behavior, for example; it becomes clearly visible only with reference to the vertical dimension of the prototypical situation. The activating condition procedures, which the experimenter selects, determine whether escape, avoidance, or one of the other forms of behavior will be activated. When these conditions are not under experimental control, as in real-world applications, the motivation construct may represent them in a model of behavioral determinants and guide their identification. Although Bolles (1967) saw the need for "analysis of the conditions under which reinforcers are effective as reinforcers" (p. 441), he apparently did not regard this analysis as a motivational issue. Bolles (1975) has reconsidered his proposal for a reinforcement theory of motivation, less, perhaps, because of conviction that the motivation construct has value in its own right than because of an accumulation of difficulties with the concept of reinforcement.

As between motivation and learning, the special function here assigned to motivation is that of explaining what is reinforcing for the individual in the situation under study, i.e., the essential conditions for terminating the form of behavior under way. A motivational analysis identifies the contemporaneous influences, whether from the individual's current environment or inner world, innate or learned, that predict the reinforcing conditions. When it comes to explaining the general class of conditions that will be valued in the situation, the identification of the activating condition is more significant than is the fact that prior learning is necessary for the activation of the avoidance, but not the escape, mode. Learning and adaptation-level considerations (cf. Appley, 1971) may account for variations across individuals and occasions in the particular stimuli and stimulus values that activate behavior and, within the general class selected by the activating condition, learning may account for individual differences in the behaviors and stimuli that are considered and favored. Finally, the individual experiences the external and internal consequences of the behavior, once performed, and assesses them in relation to what had been desired. The result may be new learning relative to the specific behaviors and stimuli selected and, possibly, to others that were not selected on this particular occasion.

Progress in a number of aspects of consumer psychology has been impeded by the absence of an intelligible way of designating motivation's domain of reference, i.e., the kinds of things one refers to, structurally and substantively, when one talks about consumer wants or consumer motivation. Conceptual approaches to positioning strategy, i.e., the marketer's response to consumer wants in a competitive environment, and to attentional strategy are two topics that depended for their treatment on prior progress in addressing consumer motivation (Fennell, 1978, 1979). Beyond consumer psychology's need for a conceptualization of motivation and for orientation to the different kinds of motivation, some taxonomic activity is to be found in organizational psychology (e.g., Campbell & Pritchard, 1976) and artificial intelligence (Schank & Abelson, 1977). There have been some scattered references in the basic literature to the desirability of classifying the different types of needs, wants, and drives. For example, Katz (1968) notes that "a functional approach [to cognition and behavior] would ideally require some definitive typology of human needs and their characteristic properties" (p. 179); Atkinson (1971) states that one "task for a psychology of motivation would be to devise a scheme for the classification of specific wants that seem to have much in common" (p. 202); and Herrnstein (1977) suggests that the "botanizing of drives . . . may turn out to be behaviorism's main hurdle before achieving effective behavioral engineering on a broad scale" (p. 598). That the response to such suggestions is less than a stampede probably reflects the fact that basic psychologists appear to favor detailed investigation of a fairly narrowly defined topic, can proceed without an overall classificatory scheme and, probably, still look askance at list-making as less than respectable in the wake of the instincts debacle of the early 1920s (Bolles, 1975; Cofer & Appley, 1964).

At the other extreme, some authors assign to the motivation construct what is more properly the task of the science of behavior: "[We may] define the study of motivation broadly as *a search for determinants (all determinants) of human and animal activity*" (Young, 1961, p. 24, original emphasis), and, "All investigators in this field [motivation] are guided by a single basic question, namely, Why do organisms think and behave as they do?" (Weiner, 1980, p. 1); more generally, Weiner seems to use interchangeably the phrases "theory of motivation" and "theory of behavior." Weiner's guiding question may be viewed from many perspectives—e.g., contemporaneous, historical, differential, behavioral, physiological—and it is probably not advantageous to subsume all the possible perspectives under one construct. Elsewhere (Fennell, 1975a), I have taken the position that motivation has a useful but limited role as a determinant of behavior. My present behavioral formulation indicates that search and judgment processes should be considered along with motivation in an explanation of

behavior. Accordingly, one answer a person may give to the question: Why did I do that? is: Because I wanted something, and among the ways I could think of to get it, that action seemed best and worthwhile. Implicit here is the notion that action is tailored, insofar as possible, to the requirements specified by the activating condition, as is appropriate for intelligent behavior.

A Context for Expectancy-Value

Expectancy-value formulations are intended to reflect the notion that organisms act intelligently: The organism takes account of (1) the expected consequences of behavior and (2) the value of those consequences to the individual. In the main, expectancy-value formulations have ignored the theoretical origin of valued consequences and the situational nature of value, and in doing so have failed to follow through on their own implications. Conceptual interest has focused on the expectancy and value variables to the neglect of the object of expectation and valuation—the expected and valued consequences that are obtained empirically with little apparent thought given to the theoretical implications of the procedures used. My proposed descriptors of the situation as perceived (Figure 1) open up a conceptual domain within which the expectancy (Beliefs) and value (Desired States) variables may be seen in perspective and that also suggests the theoretical source for the valued consequences (Activating Conditions).

Fishbein's work on attitude is often cited in the consumer psychology literature, and since I have elsewhere (Fennell, 1980) contrasted in some detail his approach and my own, I shall make my comments here brief. There may be some purposes for which it is useful to study context-free attitudes toward an object as suggested, for example, by Fishbein and Ajzen (1975): "If one is attempting to measure attitudes toward psychology, the first step involves identification of a set of attributes relevant for the subject population. . . . [A] person's beliefs about a given object or action can be elicited in a free-response format by asking him to list the characteristics, qualities, and attributes of the object or the consequences of performing the behavior" (pp. 60, 218). In contrast, the strategy that I am describing does not build its list of relevant attributes from descriptions of the attitude object but from a description of the perceived activating conditions and desired states for a behavior under study. Accordingly, a motivational analysis provides a systematic basis for generating the criteria on which attitude objects are selected for consideration and compared. Assigned to motivation is the task of explaining what a person wants, i.e., the characteristics of preferred goal objects in a particular situation; assigned to attitude

is the task of explaining a person's preference ordering of candidate goal objects that the person has selected and assessed in terms of criteria identified in the motivational analysis.

"Job outcomes" occupies a place in value-instrumentality-expectancy (VIE) formulations in organizational psychology that is comparable to that of "attributes" in expectancy-value attitude formulations, and its systematic status appears to have suffered similar neglect: "Since the available outcomes play such an important role in all the models we have discussed it is a bit startling that so little hard-nosed attention has been devoted to their description and definition. We are badly in need of both substantive and methodological innovation in this area" (Campbell & Pritchard, 1976, p. 122). Among their recommendations for remedial action, these authors suggest an empirical procedure for generating valued job outcomes that could lead to investigating activating conditions for the job choice decision: "Why doesn't someone . . . ask subjects to think of a time when they felt like changing jobs or to think of the time when they did change a job, accept an offer, work overtime, etc., and then describe what led to that feeling or decision?" (1976, p. 122). Campbell and Pritchard stress the desirability of distinguishing between the motivational and ability aspects of performance, with motivation referring to the direction, amplitude, and persistence of an individual's behavior "holding constant the effects of ability, skill, and understanding of the task" (1976, p. 64). The distinction may not be as clear-cut as they suggest. With regard to "understanding of the task," for example, participation in decision making may be beneficial (p. 123) precisely because the individual thereby gains more understanding than before of the activating condition for the decision, and can use that information to generate suitable candidate behaviors and to guide judgment among them. Intelligent, as opposed to robotic, behavior is the likely result. More generally, the motivational problem for organizations and individuals in organizations is to *create* perceived activating conditions that generate behavior appropriate to the tasks that need to be done.

Weiner's (e.g., 1980, Chapter 8) attributional theory of motivation elaborates some aspects of the expectancy-value framework. He has, for example, intensively examined the effects of subjects' causal attributions for their successes and failures on their expectation of goal attainment. Much of Weiner's work appears to address issues relevant to the search and judgment, rather than the motivational, stages of the behavioral decision process I describe. As I noted earlier, the dimensions of behavioral activation need further clarification, and as this work proceeds it may benefit from the accomplishments to date of Weiner's dimensional analysis relative to the expectancy variable.

PROSPECT

In much of the research within the expectancy-value tradition, and in psychology generally, researchers specify the behavioral alternatives open to the subject. They thereby effectively exclude from study the person's self-gererated behavioral alternatives for the particular situation, as well as elements of the behavioral decision process upstream, such as the cognitive and affective aspects of the activating conditions as perceived, and the process by which desired states are formulated. If behavior is to be usefully described and understood, the entire situation in which it is embedded needs to be elucidated.

Much work remains to be done in coordinating the fine grain of psychology's traditional subject areas to the situational structure I have described, or to one like it. It would seem, however, that the task was due to be addressed sooner or later. One purpose of the ingenious and marvelously variegated work in each of psychology's many houses is surely ultimately to address the explanation of real-world behavior. In that case, at some time the question would be asked: How do traits relate to self-concepts, to values, to attitudes, to roles, to beliefs, to environmental settings, to behavior? Unless the study of values, self-concepts, and the rest is to remain an end in itself, the question must eventually be addressed: At what points are such concepts most appropriately coordinated to the structure of the prototypical situation? Which is the same as asking: How do these constructs help explain behavior?

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