A Schematic Model of Dispositional Attribution in Interpersonal Perception

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Previous research on dispositional attribution has failed to take into account how the inference process may be affected by variations in schematic representation of dispositional attributes. A schema is defined here as a set of implicational links between dispositional levels and categories of relevant behaviors. Three general schemata are discussed—the partially restrictive schema, the hierarchically restrictive schema, and the fully restrictive schema—each having different implications for the rules of inference employed in making attributions based on observed behaviors. Relevant research on utilization of information regarding consensus, situational context, and actor's past behavior is reviewed in this framework.

Despite the extensive research undertaken within the framework of attribution theory since the appearance of the seminal papers by Jones and Davis (1965) and Kelley (1967), little attention has been paid to how the inference processes involved in dispositional attribution may be affected by characteristics of the particular dimension of judgment being utilized. Instead, very general rules of inference are proposed, as if the same processes were presumed to underlie the attribution of all dispositional qualities, from tennis skill to racial prejudice. As a result, the effects on attribution of informational cues such as situational context, consensus data, and past behavior have been studied without regard to potential interactions between these factors and the nature of the attribute being inferred. The purpose of the present article is to propose alternative ways in which the nature of dispositional attributes can be represented schematically and to demonstrate that differences among these alternative schematic representations lead to differences in the rules of inference invoked and the utilization of cues such as context and consensus in the attribution process.

Causal and Social Inference

Since Heider's (1958) provocative work first pointed out the importance of phenomenal social causality, attribution researchers have, for the most part, proceeded in two related directions (Ross, 1977). The first kind of research explores the causal judgments made by an observer in order to explain the occurrence of social events. Kelley (1967, 1973), for example, has described the way observers decide whether an actor's preferences and behavior are to be attributed to his or her unique internal dispositional characteristics or to external factors in the environment. Weiner and his colleagues (Frieze, 1976; Weiner, 1974) have continued in this vein by investigating the circumstances that lead observers to attribute the success or failure of an actor to alternative causal factors such as ability, effort, task difficulty, and luck.

The second type of inquiry, which logically follows from the first, focuses on social inference, or the process of drawing an inference from observed behavior to specific characteristics of the actor. Jones and Davis (1965) sought to specify the conditions under which behavior is considered to be informative about
relatively stable dispositional qualities of the actor. The concept of correspondence was introduced in this context and discussed in terms of three properties. First, an inference is correspondent "to the extent that the act and the underlying characteristic or attribute are similarly described by the inference" (p. 223). Thus, if an actor is perceived to behave in an aggressive manner and the observer then infers that the actor is an aggressive person, an inference of high correspondence has taken place. A second property specified that "an inference must characterize an actor's standing as high or low on an attribute relative to the average person in order to qualify as correspondent" (p. 227), and a third property was implicit in defining correspondence "in terms of information gained through the observation of behavior" (p. 234). Apparently, Jones and Davis perceived these properties to be mutually interdependent, but subsequent researchers have often limited attention to one or the other of the three properties of correspondent inference. Some researchers have relied upon the perceived congruence between behavior and disposition as the definition of correspondence (Reeder, Messick, & Van Avermaet, 1977; Trope & Burnstein, 1977), while others have employed the extremity property (Newton, 1974) or the information gain property (Ajzen & Fishbein, 1975; Miller, Baer, & Staggenborg, 1977). As a result, there has been some confusion in operationalizing the concept of correspondence and its relationship to other aspects of causal inference.

Jones and McGillis (1976) have recently revised the theory of correspondent inference. The revised version of the theory has a broader range of application, allowing the theory to account for dispositional inferences based on multiple observations of behavior as well as the single observation case. Nevertheless, the defining properties of correspondence are not altered significantly. Further, neither the original nor the revised version of the theory suggests that the rules of dispositional inference may vary depending on the nature of the attribute to be inferred. In the schematic model of dispositional attribution that will now be elaborated, several variations of schematic representation are proposed as generally applicable to different classes of attributes.

A Model of Dispositional Schemata

The model of dispositional attribution to be proposed here is intended to introduce greater precision to the concept of correspondence and the process of social inference. This process begins with the observation of an actor's behavior and the selection, on the part of the observer, of relevant attributes that characterize that behavior (Wegner, 1977; Wegner & Vallacher, 1977). It is assumed that salient properties of the observed behavior itself are the primary determinant of attribute selection. For example, if an observer were to witness an actor spill a drink at a party, it is likely that the observer would make a judgment about the actor's standing along continua related to clumsiness. Because of time and cognitive limitations, the observer will assess the actor's standing on only a limited number of such dimensions in relation to any particular behavioral episode. Of course, once a dispositional attribution has been made, any number of additional characteristics of the actor may be inferred, depending on the observer's implicit personality theory, but the present exposition is concerned only with the initial attribution process associated with the behavior observed.

The particular attributes selected for judgment may depend not only on the type of action observed but also on the observer's set. Stable individual differences in attribute selection probably exist, so, for example, a particular observer may evaluate almost everyone in terms of honesty–dishonesty, whereas another observer may rarely form impressions along this dimension (Dornbusch, Hastorf, Richardson, Muzzy, & Vreeland, 1965; Rosenberg & Jones, 1972). In addition, the observer's recent experience may render certain attributes more salient than others (Higgins, Rholeis, & Jones, 1977). Once relevant attributes have been selected, the dispositional attribution stage of the social inference process begins, wherein the observer determines whether to ascribe to the actor a specific position on the attri-
butedimension based on the behavior observed. The outcome of this attribution stage is a joint function of two separate decisional processes: (a) classification of the observed behavior with respect to the selected attribute dimension and (b) application of a set of implicit rules relating dispositional states to classes of behavior.

**Behavior classification** refers to placement of the behavior at some point along a continuum of the attribute under consideration. For example, our illustrative drink-spilling behavior may be classified with respect to degree of clumsiness along a bipolar continuum ranging from extremely clumsy at one pole to extremely coordinated at the other. The right side of Figure 1 provides a graphic representation of such a dimension. Each point along this continuum, symbolized as \( B \), represents a class of behaviors perceived as having a given level of the attribute in question.

Parallel to the continuum of behavioral classifications with respect to the attribute under consideration is a dispositional continuum, with a range of classifications isomorphic to those along the behavioral continuum, as illustrated on the left side of Figure 1. Each point on the dispositional continuum, \( D \), represents a level of the attribute in question as a property of the actor (as opposed to a property of the actor's behavior). Given that an instance of behavior has been classified as \( B \), inferences about the actor's position on the dispositional continuum would then depend on assumptions made by the observer about the probabilities that alternative levels on the dispositional continuum would give rise to Behavior \( B \).

<table>
<thead>
<tr>
<th>DISPOSITION</th>
<th>BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>( D_3 )</td>
<td>( B_3 )</td>
</tr>
<tr>
<td>( D_2 )</td>
<td>( B_2 )</td>
</tr>
<tr>
<td>( D_1 )</td>
<td>( B_1 )</td>
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*Figure 1. Parallel attribute continua.*

Defined here, **correspondent inference** refers to a decision that the actor's behavior and the actor's disposition are to be classified at the same point along their respective attribute continua. Thus, unlike that of Jones and Davis (1965), the present definition of correspondence does not depend on the extremity of the dispositional classification.

**Classification of Behavior**

Since classification of an actor's behavior serves as the initial basis for dispositional attribution, attention must be given to the determinants of the perception of behavior. According to the model being proposed, the observer classifies a particular episode of an actor's behavior with respect to only a limited number of specific attribute continua, selected according to salient properties of the behavior itself or an evaluative set of the observer. Subjective judgments about the locations of behavior along the selected continua are undoubtedly influenced by the context in which the behavior occurs. Snyder and Frankel (1976), for example, demonstrated that observers' ratings of the same videotaped behavior were affected by prior knowledge of the interview setting in which the behavior had supposedly been obtained. Similarly, Marston (1976) found that ratings of the friendliness of an actor's social behavior were influenced by situational information regarding the purpose of the behavior. However, information regarding the actor's dispositional friendliness did not affect ratings of the specific act, a finding that lends support for the assumption made here that classification of behavior is separable from judgments about the actor's dispositional characteristics.

Although behavior classification represents a subjective judgment on the part of the observer, it should reflect widely shared criteria.

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1 Whether many dispositional attributes can appropriately be represented as bipolar dimensions is a matter of debate. Bipolarity is reserved here for those traits where a greater degree of the property represented by one pole clearly implies less of the property at the opposite pole. Unless such mutual exclusiveness is clear, an attribute is best represented as unipolar, ranging from none or very little to a very high degree of the property under consideration.
for assessing strength and intensity of behavioral expressions. In particular, general expectations as to the overall frequency of occurrence of a given behavior should influence its classification. It is assumed that, other things being equal, the extremity of classification of behaviors will vary inversely with their perceived frequency (Brewer, 1977). Apart from commonly held beliefs about the probability of occurrence of a particular behavior, judgments of its likelihood (and hence its perceived extremity) may also be influenced by the observer's personal experience and expectations. Thus, classification of the same behavior along a given attribute continuum may vary across individuals (or across time within individuals) based on differences in adaptation level (Helson, 1964) or availability biases (Tversky & Kahneman, 1973), or because of the "false consensus" effect (Ross, Greene, & House, 1977) whereby individuals tend to assume that their own behaviors are relatively common and moderate and that behaviors that deviate from their own are less common.

Dispositional Inference

Once an observer has classified an actor's behavior (within a given situational context) along a social attribute continuum, the task of dispositional inference begins—the process of locating the actor's position along the dispositional attribute continuum. At this point in the attribution process, the observer brings into play certain assumptions and expectations, depending on the nature of the behavior and the particular situation in which it is observed. One basic assumption guiding the attribution process is the belief that persons will vary their behaviors, if possible, in order to best meet environmental contingencies and demands. Other assumptions reflect beliefs about how an actor's dispositional characteristics influence the manifestation of particular behaviors across situational contexts. These latter assumptions are incorporated in the observer's schematic representation of the attribute under consideration.

The concept of a schema has been rather widely used in social psychology recently (e.g., Kelley, 1971; Markus, 1977). As Singer (1968) puts it, schemata are "pre-existing assumptions about the way the world is organized" (p. 338). For example, observers may believe that a given effect such as success on a difficult task tends to covary with the presence of a particular pattern of causal factors such as ability, effort, and possibly even luck (Kelley, 1971), or that affective bonds between acquainted persons tend to be reciprocal (Desoto & Keuthe, 1958). In general, a schema describes a framework or network of implicational relationships that are believed to exist between the entities in a system.

In the present context, the term implicational schema will be used to designate an observer's preconceptions of how specific points along a dispositional continuum (D) are implicationally related to the production of behaviors (E) that can be classified along the corresponding behavioral attribute continuum. That is, the schema represents the observer's prior assumptions about the categories of behavior that are believed likely to occur given each of the various dispositional levels. The actual process of dispositional attribution, in effect, involves "working backward" through such a schema, from behavioral classification to dispositional inference. While the nature of the implicational schemata could conceivably vary from attribute to attribute, it is likely that certain general schemata are applicable to broad classes of attributes with some common features. Three such generalized schematic networks are elaborated below.

Partially Restrictive Schema

One feature that distinguishes some implicational schemata from others is the assumption that persons will vary their behaviors, if possible, in order to best meet environmental contingencies and demands. Other assumptions reflect beliefs about how an actor's dispositional characteristics influence the manifestation of particular behaviors across situational contexts.

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2 In this respect, the present formulation resembles the contingent probability (likelihood ratio) term in a formal Bayesian model, wherein \( p(D_i|B_j) \) is a joint function of \( p(D_i) \) and \( p(B_j|D_i) \) (Ajzen & Fishbein, 1975; Trope, 1974). Prior probabilities enter the present model as a factor in the extremity of attribute classifications, but their direct role in the attribution process is unclear (cf. Ajzen, 1977; Kahneman & Tversky, 1973; Lyon & Slovic, 1976). Also, the present conceptualization does not equate attribution with a revision of prior beliefs as does the Bayesian approach suggested by Ajzen and Fishbein (1975).
ation that every person occupies some fixed position on the given dispositional continuum. For instance, the observer may believe that each person possesses some specific degree of "friendliness," or some specific level of "curiosity." This dispositional level would be represented as a single point on the relevant dispositional attribute continuum. However, each such dispositional position may be implicatedly associated with behaviors across a rather wide range on the corresponding behavioral attribute continuum. Thus, regardless of his or her dispositional level of friendliness, the behavior of any individual may be expected to be friendlier in some situations than in others. Intraindividual variation on the behavioral continuum is expected, but persons with different dispositional positions will be expected to differ in the average amount of friendliness they show across a variety of situations. To say that a person is moderately friendly would mean in effect that over a range of situations, the average level of friendliness of that person's behavior is higher than that of a moderately unfriendly person.

The assumptions described above are represented graphically in Figure 2, which portrays the set of implicational relationships between dispositions and behaviors for the partially restrictive schema, given a bipolar attribute continuum. The presence of an arrow connecting a disposition (D) with a behavioral category (B) denotes that the disposition D does not preclude performance of behaviors classified B, that is, \( \rho(B|D) > 0.4 \).

The total set of arrows present in a schema such as that depicted in Figure 2 determines the diagnostic value of a single occurrence of any specific category of behavior for inferring the presence of a particular dispositional level. When no arrow links a given disposition, D, and behavior, B, the occurrence of B precludes inferring Disposition D. When an arrow linking D and B is present, exhibiting a behavior classified as B does not rule out an actor's having Disposition D. However, if B is linked with other dispositional levels as well, none of these is precluded, and the schema does not permit any inference to be made with certainty. On the other hand, if only one dispositional category is linked to Behavior B, the occurrence of B permits inferring that disposition with certainty.

The thickness of the arrows in Figure 2 indicates the relative degree of strength with which the specific dispositions imply a specific class of behaviors. Suppose, for example, that the schema illustrated represents the friendliness attribute, in which case D represents the dispositional position of extremely friendly, D represents a moderately friendly disposition, and D represents an extremely unfriendly dispositional state. Then the thick arrow linking D and B indicates that relative to other dispositions, an extremely friendly disposition implies occurrence of extremely friendly behavior more often (i.e., \( \rho(B|D) > \rho(B|D) \)). This does not mean necessarily that an extremely friendly person would be expected to behave in an exceptionally friendly manner most of the time, but only that behavior of this sort would be believed to be more common for extremely friendly persons than for less friendly persons.

The fact that not all possible arrows linking dispositional categories with behavioral classifications are included in Figure 2 indicates the relative degree of strength with which the specific dispositions imply a specific class of behaviors.
cates that there is partial restriction in the implicational relationships possible within this schema. In general, persons with an extreme disposition at one end of an attribute continuum would not be expected to manifest behaviors classified at the opposite extreme of the continuum. Accordingly, a single occurrence of behavior that receives an extreme classification is somewhat informative regarding the disposition of the actor in that it precludes a dispositional classification at the opposite extreme. Moderate behaviors, in contrast, are less informative about the dispositional position of the actor, in that under various circumstances, it would be expected that persons with a variety of dispositional states would manifest this kind of behavior. Note that this is not the same as saying that only extreme behaviors can lead to correspondent inference, as implied by Jones and Davis (1965), but only that correspondent inference of moderate dispositional levels may require more than one occasion for observation.

The degree of implicational restriction within the partially restrictive schema may vary, depending on factors such as the duration and intensity of behaviors observed. For instance, the type of behavior involved in producing a lengthy and detailed attitude statement may generate a relatively restrictive implicational schema in which any particular dispositional level is assumed to allow for such behaviors only across a moderate range of attitude positions. Brief verbal statements of attitudes, on the other hand, may be assumed to be relatively unrestricted, so that a given dispositional level is linked to a broad range of potential behavior classifications.

With a schema such as that depicted in Figure 2, in which all behavioral classifications are linked to more than one dispositional category, the information value of a single occurrence of behavior at any level will be context dependent. The schema as illustrated represents the general implicational structure associated with a particular attribute continuum across situations. However, within any specific situational context, the structure may be altered, in that the strength of some implicational links is enhanced, whereas others are reduced or eliminated. The influence of context on the implicational schema includes the underlying assumption, stated previously, that actors will adapt their behavior to meet reinforcement contingencies in the environment. Thus, if environmental pressures call for behaviors classified $B_+$ and $B_-$ is within the behavioral repertory implied by Disposition $D_0$, then the probability of $B_-$ for an individual with Disposition $D_I$ would increase relative to other behaviors implied by $D_1$ (Ajzen, 1971; Snyder & Swann, 1976).

If the situational demands are sufficiently strong and salient, the perceived probability of all classes of behavior other than behaviors as close as possible to that demanded, or a behavior directly correspondent with the actor's dispositional level, will be reduced to 0. The effect on the partially restrictive schema of a demand for $B_+$ behaviors is illustrated in Figure 3. Note that while some of the arrows present in Figure 2 are altered or eliminated as a function of the context effect depicted in Figure 3, no arrows are added that were not present in the generalized schema.

Comparison of Figure 3 with Figure 2 reveals the effect of context on changes in information value of specific behaviors. In particular, since the probability of $(B_0|D_0)$ is reduced in Figure 3 and $p(B_0|D_-)$ is increased, the occurrence of $B_0$ is more likely to lead to a noncorrespondent ($D_-)$ attribution in this context than in the general case, but since only one arrow leads to behaviors classified as $B_-$, the occurrence of behaviors at this level should generate a confident correspondent dispositional inference. On the other hand, the occurrence of behaviors clas-
sifted as B+ would not lead to correspondent inference, since such behaviors are implied by more than one dispositional alternative (i.e., dispositions D+ and D0).

Messick (Note 1) pointed out a somewhat surprising consequence of this pattern of implications. In Figure 3, one dispositional level, D+, is linked to a single behavior category, B+, whereas other dispositional levels, including D-, are linked to more than one category of behavior. Yet the presence of Disposition D+ can be inferred with less certainty than the presence of Disposition D-... This occurs because no one behavior is linked to Disposition D+, alone, whereas Behavior B+ is linked only with Disposition D+. Messick termed this relationship the asymmetric certainty principle (Trope, 1974).

In general, with the partially restrictive schema, the information value of behavior for dispositional inference will be a direct function of the perceived discrepancy between the level of behavior observed and the level expected (normative) for the situation. In the absence of clear situational demands, moderate or neutral levels of behavior may be expected and, hence, relatively uninformative. However, when extreme behaviors are anticipated (as in Figure 3), the occurrence of more moderate behaviors can be informative as to underlying dispositions, even with the partially restrictive schema.

Another way of looking at the relationship between implicational schemes and the information value of specific behaviors is in terms of the components of Kelley's (1967) model of the causal attribution process, particularly in regard to the role of consensus, distinctiveness, and consistency information. Consensus information, indicating whether an actor responds to a particular stimulus as others do, may be used to classify the direction and extremity of behavior. Thus, failure to smile at a wedding may be classified as very somber, whereas the same act at a funeral would not be. Consensus information may also help define the context within which a behavior has occurred. The presence of a high proportion of smiling people implies a happy occasion, which in turn determines the expected level, on the cheerfulness dimension, of behavior in that situation.

Distinctiveness and consistency information cover multiple observations of the same actor's behavior, being based on the variability of behavior across stimuli and time, respectively. Given such information on the range of an actor's behavior on different occasions, the observer may be able to estimate the average level of behavior exhibited by that actor and, using the partially restrictive schema, make inferences about the corresponding dispositional level. Consensus information, on the other hand, requires only one occasion of observation. Deviation of an actor's behavior from consensus provides information that, in effect, substitutes for multiple observations of that actor's behavior. When an actor exhibits a behavior that is unusual for the situation, the observer can infer that such behavior is relatively frequent for that actor and, based on this implicit frequency information, make judgments about the average value of the actor's behaviors and corresponding disposition.

Hierarchically Restrictive Schema

The second generalized schema to be elaborated also starts with the assumption that each person occupies some specific position on the attribute continuum. The pattern of implicational relationships between dispositional and behavioral classifications is quite different, however, from that defining the partially restrictive schema. The hierarchically restrictive schema assumes that dispositional classifications at the upper extreme of a unipolar attribute continuum are not behaviorally restricted, whereas dispositions at the lower extreme of the continuum are behaviorally restricted. Dispositions occupying the middle ranges of the continuum are assumed to be restricted to the range of behaviors at and below that point on the continuum. This pattern of relationship is shown graphically in Figure 4. As in Figure 2, the presence of an arrow linking a dispositional and a behavioral classification implies that $p(B_B|D_D) > 0$.

The hierarchically restrictive schema is probably best illustrated by dispositional at-
Figure 4. The hierarchically restrictive schema. (Subscripts 2, 1, and 0 represent, respectively, extreme, moderate, and very low levels of a disposition or behavior.)

Attributes involving skill or ability, where the corresponding behavioral continuum reflects degree of difficulty of a performance on that skill dimension (Reeder et al., 1977). For any particular skill, an individual is expected to have a relatively stable dispositional level, or aptitude, ranging from little/none to very high. It is intuitively reasonable that those of high skill are expected to be capable of altering their performance across a wide range of difficulty levels, depending on motivation and task demands. Persons of lesser skill, however, may be expected to achieve performances commensurate with their ability level, or of lower difficulty, but are not expected to achieve at levels above their aptitude. Because of this asymmetry, dispositional attributions for poor performance will be more context dependent than those for excellent performance. Exceptionally good performance is always informative of a corresponding disposition, but poor or mediocre performance can lead to correspondent inference only under circumstances that provide both motivation and opportunity for high-level performance. This representation of ability dimensions is very similar to Kelley's (1971) description of the multiple necessary schema relating effort and ability to performance outcomes.

The hierarchically restrictive pattern might also be invoked in the case of attributes that relate to immorality, such as dishonesty-honesty. Suppose, for example, that $D_2$ in Figure 4 represents a highly dishonest disposition, $D_1$ a slightly dishonest disposition, and $D_0$ the absence of dishonesty, an exceptionally honest disposition. Then $B_2$, $B_1$, and $B_0$ would represent highly dishonest, slightly dishonest, and nondishonest behavioral classifications, respectively. The schema then reflects the fact that by definition, honest persons ($D_0$) are expected to refrain from dishonest behaviors in any situation. A slightly dishonest disposition, on the other hand, implies both slightly dishonest and honest behaviors, depending on the situation. Finally, the exceptionally dishonest disposition implies behaviors spanning the entire attribute continuum. Thus, the observer might expect a ruthless con man to behave honestly under most circumstances, obeying traffic lights and paying for tickets at the theater. Yet when high rewards are offered for the performance of criminal behavior such as embezzlement, the highly dishonest person, but not the slightly dishonest or honest person, will be expected to commit the crime.

The hierarchically restrictive schema dictates that the actor's dispositional position on the attribute is determined by the most extreme behavior the actor exhibits. Thus, although the observer may judge the con man's behavior to be perfectly honest 99% of the time, the presence of occasional ruthless criminal behavior will insure the attribution of the dishonest disposition. A single dishonest behavior is sufficient to produce a confident attribution that the actor is dishonest. Honest behavior, on the other hand, will be informative in some situations but not others. For example, where honest behavior is rewarded or where dishonest behavior is not rewarded, the performance of honest behavior will be expected of persons with all varieties of dispositions and will, therefore, be dispositionally uninformative. Where rewards are present for dishonest behavior, however, an honest act may be somewhat more suggestive of an honest disposition. In general, however, multiple observations of behavior may be required before an honest disposition is inferred with any cer-

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6 In the educational literature, it is interesting to note that the concept of "overachievement" has occasionally been attacked as inherently contradictory, whereas the phenomenon of "underachievement" has generally been accepted as valid.
In summary, if dishonesty is represented as a hierarchically restrictive schema, contextual factors will be important determinants of attributions in the case of observed honest behavior but less so in the case of observed dishonest behavior, because, regardless of the situation, the occurrence of dishonest behavior precludes dispositional classification at any lower level of dishonesty.

Given the hierarchically restrictive schema, information about consensus may influence dispositional attributions indirectly by affecting judgments about behavioral classification. Consensus information has been demonstrated particularly to affect judgments of task difficulty (Ajzen, 1977), and consensus information may, under some circumstances, lead an observer to classify a given behavior as less dishonest than would be the case otherwise. For example, in a situation where moral standards are ambiguous, information that a majority of persons acted in an unlawful manner might suggest to the observer that the behavior itself was not particularly dishonest.

The effect of distinctiveness and consistency information on dispositional attribution would be expected to differ depending on which pole of the attribute continuum were being considered. At the pole for which behavioral implications are restricted (e.g., high morality) the necessary condition for a confident dispositional judgment is that the actor's behavior be invariably moral across time and stimulus configurations (high in consistency, low in distinctiveness). A behavioral pattern short of consistent morality is unlikely to produce an inference that the actor is highly moral. On the other hand, a single highly immoral behavior, such as placing razor blades in children's Halloween apples, will likely lead to the ascription of an immoral disposition, even if the behavior is inconsistent and highly distinctive (Birnbaum, 1973). Thus, Kelley's (1967) model of causal attribution would be expected to apply only partially to attributes represented by the hierarchically restrictive schema.

**Fully Restrictive Schema**

The final schema to be discussed in this article refers to attributes on which some persons are judged to have stable dispositional levels while others are not. In this case, possession of a specific dispositional position on the attribute continuum implies performance of only a narrow range of behavior that is congruent with that disposition. The link between dispositional level and behavioral classification is, thus, inflexible. If the actor is believed to vary attribute-relevant behaviors at different times and in different places, the actor is judged not to possess a dispositional position on that attribute at all. These assumptions are represented graphically in Figure 5. This schema introduces a new symbol, $D$ to represent the absence of any stable disposition relative to the selected attribute. $D$ is distinguished from possession of a moderate, or neutral, stable disposition, $D_M$, which would be associated with invariant performance of behaviors classified as moderate on the attribute continuum (cf. Sorrentino & Short, 1977).

Certain dispositions such as preferences, values, and personal styles may be conceptualized in accord with the fully restrictive schema. For example, an observer might believe that persons who are invariably neat possess a disposition at one extreme of such a continuum ($D$, in Figure 5) and that perpetually sloppy persons fall at the opposite end of the dispositional continuum ($D$). Persons who are observed to be neat on some occasions and sloppy on others would not be assumed to possess a dispositional position on the neatness dimension ($D$).
Given the fully restrictive schema, contextual factors will exert a powerful effect in determining whether behaviors will lead to dispositional attribution, much in the manner proposed by Jones and Davis (1965). When strong social pressures are present for a particular behavior, such as keeping a tidy desk at work, the observer would expect the performance of this behavior by both persons who are dispositionally neat and those with no dispositional position, so such behavior would be dispositionally uninformative in this context. If the actor were to keep a messy desk at work, however, the observer could infer that the actor possesses a correspondent disposition, since the lack of a disposition (D) would imply the performance of more socially desirable behavior in keeping with the situation. In summary, when the fully restrictive schema is invoked, the performance of socially undesirable behavior will be dispositionally informative, whereas a single performance of socially desirable behavior will not.

In the case of desirable behaviors, multiple observations of the actor in different situations would be required before a confident dispositional inference could be drawn. If the actor consistently performs in a particular manner over multiple observations, the observer will ascribe a disposition to the actor that is congruent with this narrow range of observed behavior. The mode (most frequent) level of behavior will most likely serve as the basis for this dispositional attribution. Thus, distinctiveness and consistency information (Kelley, 1967) are particularly relevant to the inference process when the fully restrictive schema is invoked.

As with the other schemata, consensus information (Kelley, 1967) is likely to influence dispositional attribution indirectly through its effects on behavior classification. Consensus data also provide information about situational constraints or the social desirability of a given behavior. Thus, information that 9 of 10 desks in the department are impeccably neat may suggest that keeping a neat desk is socially desirable, and, as a consequence, neat behavior in this context will be less dispositionally informative than the one instance of messy behavior.

When the Various Schemata Will be Elicited

The three schemata described represent alternative ways of conceptualizing the implicational relations between dispositions and behavior. No claim is made that they provide an exhaustive description of available schematic representations, but these three cover a broad range of psychological attributes. The structure of each schema reflects definitional properties shared by attributes of a particular type.

The partially restrictive schema is applicable to those traits for which corresponding behaviors can be expected to vary in both directions around some characteristic level. Moderate dispositional levels are associated with a wide range of variation in behaviors, whereas more extreme levels are somewhat more restricted in behavioral expression. Personality characteristics that have no clear skill component—such as friendliness, curiosity, cooperativeness—are most illustrative of this class of attributes.

The hierarchically restrictive schema applies to attributes for which variation in behavior is restricted to a level correspondent to the actor's dispositional level or levels requiring less of the attribute in question. As a result, persons at the low end of the attribute continuum are assumed to be limited to behaviors in the correspondent range, whereas persons at the high end are capable of behaviors across the full range of the attribute continuum. Traits involving skill or ability provide the clearest illustration of this schema, including dimensions reflecting social skills, such as extraversion and leadership. It has also been suggested on conceptual grounds, and supported by some empirical findings (see below), that attributes involving a morality component are also represented in terms of the hierarchically restrictive schema, in that an actor's dispositional level of immorality is set at the level of the most extreme behavior engaged in, rather than at the most typical behavior.

The fully restrictive schema is distinguished from the previous two in applying
to attributes—such as preferences and values—for which the absence of any stable dispositional level on the part of any particular actor is a possibility. For such attributes, the presence of a dispositional level implies a consistent characteristic orientation toward a particular object or condition (e.g., seeking, avoiding) with a narrow range of variation of behavior. An actor who manifests a wide range of attribute-relevant behaviors across time or situations would not be ascribed a disposition within this schema.

Although an a priori relationship is assumed between the implicational schemata and definitional properties of specifiable classes of attributes, a particular trait word may elicit different schematic representations depending on the type of behavior observed or the inference task involved. For example, if an observer were to be expected to infer an actor's level of artistic ability based on the actor's brief self-descriptive statement ("I paint like Renoir!"), it is likely that the inference would be based on a partially restrictive schema. If, however, the observer's inference were to be made after viewing a painting actually produced by the actor, an inference based on the hierarchically restrictive schema would be more likely.

Review of Related Research

Among the numerous studies conducted within the attribution theory framework, several inconsistencies in both theory and data can be identified. Most of these have to do with the utilization or weighting of particular classes of informational cues such as situational context, consensus, and information regarding the actor's past behavior. For example, many studies have supported the proposition that "in-role" behavior that is consistent with situational rewards does not lead to confident dispositional inferences about actors (Jones & Davis, 1965). In contrast to this proposition, Heider (1958) maintains that "behavior tends to engulf the field," and several studies provide evidence that attributors sometimes ignore or appear to give little consideration to situational variables when judging an actor on the basis of a sample of his or her behavior (Jones & Harris, 1967; Snyder & Harris, 1974; Reeder et al., 1977).

Inconsistent findings have also marked research investigating the effect of consensus information on attributions. Kelley (1967, p. 194) has argued convincingly that to the extent an actor responds in agreement with a consensus of other persons, causal attributions are directed toward the stimulus environment and away from intrapersonal characteristics. On the other hand, both theory and data have been offered in support of the contention that people are largely uninflected in their causal attributions by knowledge of the behavior of others (Nisbett & Borgida, 1975).

Yet another set of diverging theory and empirical findings can be found in studies concerned with the effect on attributional judgments of behavior that is inconsistent with an actor's past behavior. A common finding is that inconsistent behavior tends to be discounted. Attribution studies on the perceived causes of success and failure indicate that unstable factors, such as luck and effort, are reported (as causal factors) when an individual succeeds after never having succeeded in the past or fails after having a history of repeated success (Weiner, 1974). In contrast, research also indicates that certain types of information about an actor are rarely, if ever, discounted. For instance, socially undesirable behavior by an actor, even if inconsistent with past behavior, generally exerts more powerful influence on attribution than does socially desirable behavior (Jones & Davis, 1965; Kanouse & Hansen, 1971). In the following sections of this article, each of these anomalies from the attribution literature will be reviewed to illustrate how such empirical inconsistencies can be resolved by appropriate application of the schematic framework.

**Context Versus "Behavior Engulfing the Field"

In attributional studies of "role playing," clear context effects are generally obtained when an actor provides a verbal description
of his or her standing on an attribute continuum (Jones, Davis, & Gergen, 1961; Mills & Jellison, 1967). Although the information value of situationally appropriate verbal behavior for inferring the dispositional state of the actor is perceived to be low, the occurrence of verbal behavior that is inconsistent (out of role) with situational pressures is believed to be likely only for persons with congruent dispositions (Trope & Burnstein, 1975).

Verbal statements that merely assert a particular attitudinal position or the possession of a particular personality characteristic should elicit a partially restrictive implicational schema, with relatively little restrictiveness. Any dispositional level (except those at the most extreme ends of the continuum) would be linked to potential behaviors across a wide range of attribute levels. The perceived probability that any given actor would produce a particular level of such behaviors would then depend heavily on the situational demands. The effects of contextual factors for such behaviors would also be expected to be symmetrical, in that an actor with a given dispositional level could be equally likely to perform behaviors above or below that level, depending on situational appropriateness.

A well-known experiment by Jones et al. (1961) best illustrates the context dependence of inferences based on self-descriptive statements. In that study, observers were given varied information as to the job requirements for which a tape-recorded respondent was purportedly being interviewed. Based on a series of brief self-descriptive statements, in which the interviewee described himself in ways that were either "inner-directed" or "outer-directed," the observer was to rate the interviewee's actual level of "affiliativeness" and "conforming-ness." The resulting ratings were context dependent; if the actor's self-descriptions were consistent with presumed job requirements, trait ratings were less correspondent than when the actor's statements were demand inconsistent (out-of-role). The effect of context on correspondent inference was equivalent for both types of actor behavior.

In many "role playing" studies the actor does more than merely make or endorse a verbal assertion about his or her standing on an attribute dimension. Observers may watch and listen to the actor on videotape for several minutes (Miller, 1976) or read a lengthy essay prepared by the actor (Jones & Harris, 1967). To the degree that the period of behavioral observation is of extended duration, and the actor displays extensive knowledge or familiarity with issues or shows a degree of enthusiasm, implicational links between dispositional levels and such behaviors are likely to be more restricted than in the case of brief verbal assertions. That is, each dispositional level is likely to imply only a limited range of such intensive behaviors along the attribute continuum. The result of this relative constriction of implicational links is that context effects should be more difficult to demonstrate, because the inference from a given behavior classification to a specific dispositional position will be less context dependent. Indeed, a series of studies (Jones & Harris, 1967; Miller, 1976; Snyder & Jones, 1974) indicates that when an actor writes an essay or gives a speech, even under powerful constraints, observers still tend to attribute behavior-consistent attitudes to the actor. Although situational demands do have some influence on attributions in these studies, the most striking effect is that behavior tends to "engulf the field" (Heider, 1958).

Whenever the partially and fully restrictive schemata are invoked, the relative impact of behavior and contextual factors on attributions will depend on the extent to which the behavior is perceived to deviate, in either direction, from situational expectations. In general, the more extreme the behavior, the more constricted the range of alternative dispositional positions that will be perceived as likely to have given rise to it, particularly if the behavior is evaluated as more extreme than the situation demands. Thus, any factors that lead to classifying an actor's behavior toward one extreme or the other of the attribute continuum will promote correspondent dispositional attribution, even in the face of salient situational constraints (unless the situational demands are
perceived to promote very extreme behaviors).

When a speech or essay has been prepared by the experimenter, it seems especially likely that it will be classified by observer-subjects as toward the extreme end of the attitudinal issue (e.g., Jones & Harris, 1967; Miller, 1976). However, even when essays have been prepared by actual subjects in an experiment, the attitude of the writer is rated by observers as significantly higher (in the direction of the essay’s position) than the attitude the actor attributes to him- or herself (Snyder & Jones, 1974). An explanation of this tendency of observers to rate the behavior of others as extreme may be derived from research on the “false consensus bias” (Ross, 1977). This bias refers to the finding that individuals tend to view their own behavior in a particular situation as relatively moderate and appropriate to circumstances and to evaluate behavior of others that differs from their own as “uncommon, deviant, and inappropriate” (Ross, 1977, p. 188). If we assume that an essay or speech prepared by another person is likely to contain arguments that are novel (i.e., different from the ones that would be generated by the subject him- or herself), then the false consensus bias would operate in the direction of making that essay appear more extreme than necessary. Once the behavior has been classified as more extreme than that called for by situational demands, application of the partially or fully restrictive implicational schema dictates that such behavior is unlikely except in the presence of a correspondent dispositional state.

Another line of “role playing” research (Messick & Reeder, 1972, 1974; Reeder, in press) illustrates how context effects are altered when the hierarchically restrictive schema is invoked. In the first study of this sequence (Messick & Reeder, 1972), observers watched a videotape of an actor who portrayed himself as introverted during a job interview. The context of the interview was varied so that the behavior appeared consistent with situational demands in some conditions and inconsistent with situational demands in other conditions. Consistent with past research (Jones et al., 1961) observers judged the actor to be more introverted when the introverted performance was inconsistent, as opposed to consistent, with situational demands. A follow-up study, however, did not corroborate these findings. Messick and Reeder (1974) presented observers with a videotape of an actor who portrayed himself as extraverted during a job interview. Once again the context of the interview was varied so that the behavior appeared either consistent or inconsistent with situational demands. In contrast to the previous work with introversion, the extraverted performance by the actor led observers to attribute a relatively high degree of extroversion to the actor, regardless of the situational demand variable. In other words, attributions based on an introverted performance were context dependent, whereas attributions based on an extraverted performance were not.

Since context effects occurred for behavior at one end of an attribute continuum (introversion) and not the other (extroversion), these results suggest that the extroversion dimension is conceptualized as a hierarchically restrictive schema. Specifically, observers may believe that an extraverted disposition implies a wide range of behaviors along the continuum, including nonextroverted (introverted) behavior, whereas an introverted disposition implies a very limited range of behaviors along the extroversion continuum. Such an implicational pattern could occur if observers view extroverts as more socially adept or skillful than introverts.

General support for this interpretation was provided in a questionnaire study by Reeder et al. (1977). Observers believed introverts to be less capable of adequately portraying (role playing) extroversion than were extroverts of portraying introversion. Other results from the same questionnaire suggested that a great number of attribute continua elicit the hierarchically restrictive schema. In addition to extroversion–introversion, significant asymmetries in perceived role-taking ability were found for attributes such as trusting–suspecting, relaxed–tense, and flexible–rigid, such that actors who possessed the first trait of each of these attribute pairs
(trusting, relaxed, flexible) were perceived as more capable of manifesting the opposite type of behavior (suspecting, tense, rigid) than vice versa. As expected, the largest asymmetries occurred on attributes most clearly related to skill or ability. A particularly large asymmetry in perceived role-taking ability was observed on the intelligent–unintelligent continuum. On a 7-point scale, an intelligent person was rated very capable of manifesting unintelligent behavior \((M = 5.3)\), whereas an unintelligent person was rated relatively incapable of manifesting intelligent behavior \((M = 2.3)\).

Because of the large asymmetry obtained from the questionnaire results by Reeder et al. (1977), the intelligent–unintelligent attribute was selected for further investigation in an experimental study. In one of the scenarios used in the study, observers read a two-page story about an actor named Bill who attended a Saturday-night high school dance party. During the course of the evening, he invited an attractive young woman to go out on a date with him. She responded by mentioning that she preferred either intellectual or nonintellectual (depending on the experimental condition) company and invited Bill to talk about himself. She responded by mentioning that she preferred either intellectual or nonintellectual (depending on the experimental condition) company and invited Bill to talk about himself. Bill responded to this manipulation of situational demand by describing himself as either intellectual or nonintellectual. A crucial aspect of this behavioral manipulation was that the actor provided convincing evidence for his intellectuality in the intellectual performance condition by citing and commenting upon various books he had read. The results indicated that, as expected, the actor’s intellectual behavior led observers to make dispositional inferences of high intellectuality across both demand conditions. The actor’s nonintellectual behavior, however, produced dispositional inferences of low intellectuality only when the situation demanded intellectual behavior. When the situation demanded nonintellectual behavior, the actor’s nonintellectual behavior produced moderate attributions (near the center of the intellectuality–nonintellectuality scale). This pattern of results is exactly what would be expected given the elicitation of a hierarchically restrictive schema.

A related study (Reeder, in press) offered additional support for the hierarchically restrictive schema, using an attribute dimension with clear skill connotations. Observers watched a videotape of a salesman engaged in a game of pocket billiards with a client. The actor (salesman) performed in a skillful, moderately skillful, or unskillful manner, depending on the experimental condition. Independent of the performance level, the demands of the situation were manipulated through a written scenario leading to expectations of a skillful billiards performance, an unskillful billiards performance, or no particular type of billiards performance. Observers’ attributions based on the moderately skillful and skillful behavior were relatively unaffected by context manipulation (i.e., were equally correspondent in all demand conditions). The unskillful performance, however, led to attributions of low ability in the presence of the skillful demand and attributions of moderate ability in the presence of the unskillful demand.

**Effect of Consensus Information**

The perceived uniqueness of an actor’s behavior is an important cue in the attributional process in a number of ways. According to Kelley’s (1967) analysis of causal attribution, if an actor responds to a particular stimulus in a different manner than do other actors (low consensus) the locus of attributed causality shifts in the direction of the deviant actor and away from the stimulus. If the actor responds to a stimulus in the same manner as other actors do (high consensus), however, attributions of causality focus on the stimulus. It follows from Kelley’s analysis that if an actor succeeds on a task that others fail, the actor will be judged to be the cause of his or her success and should be attributed high ability. On the other hand, if the actor succeeds on a task on which others also succeed, the task itself will be viewed as the cause of the actor’s success (the task was easy), and the actor may be attributed only a moderate
amount of ability. Studies of achievement attributions are among those that have supported this predicted consensus effect. A number of other studies, however, have found the effect of consensus information on dispositional attributions to be weak or nonexistent (Nisbett & Borgida, 1975).

One way that consensus information may be expected to affect the attribution process is through its influence on behavioral classification. An observer may employ consensus information as a potent cue in estimating the extremity of an actor's behavior along an attribute continuum. For example, if all an observer knows is that the actor succeeded on a task, insufficient information is present to classify the actor's behavior along the relevant ability continuum. Social comparison (Festinger, 1954) information is usually needed. For example, if the observer learns that the vast majority of others who have attempted the task failed, the actor's successful performance can be classified as extremely skilled, and on the basis of this extreme behavioral classification, an extreme dispositional inference may follow.

Consistent with social comparison theory, it is likely that observers will utilize (external) consensus information to the extent that firm (internal) standards are absent. Thus, if an observer is unsure about the degree of an attribute reflected in a given performance, information about the performance levels of other actors is likely to be influential. However, if the observer already has firm guidelines for judging the extremity of behavior, consensus information is unlikely to have much of an effect (Kelley, 1967, p. 213). For example, public reaction to the Watergate scandal indicates that the deceit of government employees is not viewed as any less despicable because it is widespread and not unique. Apparently, the public has a private standard by which the morality of politicians' behavior is judged, and that standard is not easily altered by consensus information.

When the observer possesses clear standards for classifying behavior, consensus information is unlikely to be influential. Miller, Gillen, Schenker, and Radlove (1973) presented what is, perhaps, the clearest evidence of observers' relying on their own standards when judging an actor. Observers were informed about the procedure of Milgram's (1963) classic study of obedience. Some subjects were shown the results of the experiment, including information that 65% of Milgram's subjects delivered the maximum possible shock (450 V) to an experimental confederate. Then all subjects were asked to rate two persons who had delivered this level of shock. In general, observers disregarded the consensus information and gave negative ratings to the two persons. The fact that administering the maximum possible shock was the modal behavior in this situation did not shake observers from their preexisting standards dictating that such behavior is immoral. A similar study by Nisbett and Borgida (1975) also failed to find an effect for consensus information.

When observers lack clear internal standards for behavior classification, a salient manipulation of consensus is likely to have a significant effect on attributions. Hansen and Stonner (1978) had observers view an actor (who was also a subject in the experiment) discriminate between pairs of tones on the basis of loudness. All subjects were told that the actor made 7 correct discriminations during the 15-trial sequence. Further, all subjects were shown a graph indicating that the actor's score was either superior or inferior to that obtained by prior subjects. Neither the actor nor the observer is likely to possess clear prior standards for behavior classification in this situation. In this case, a strong effect of consensus information was found: The actor's level of ability was rated higher by both actors and observers when the actor's performance was purportedly superior, as opposed to inferior, to that of other subjects.

In summary, the evidence is consistent with the idea that dispositional judgments are influenced by consensus information to the extent that a salient manipulation of consensus is employed and observers lack clear internal standards for classifying the actor's behavior. In addition, when observers are allowed to generate their own estimates
of the commonality of a given behavior (Ross, et al., 1977), estimated commonality and extremity of trait inference (based on the actor's behavior) correlate negatively (− .34). Within the present framework, the effects of such consensus estimates are presumed to operate indirectly on dispositional attributions through their influence on behavioral classification. Consensus information will be utilized to the extent that standards for classifying behaviors are needed. Once the extremity of behavior has been determined, however, consensus is no longer directly relevant to the attribution process, which will then be determined by application of an implicational schema.

Discounting Inconsistent Information

When forming an impression of an actor, observers show a tendency to discount, or attribute to temporary conditions, behavior that is inconsistent with information about the actor that they already possess. Frieze and Weiner (1971), for example, provided observers with information about an actor who succeeded or failed on a task. When this outcome was consistent with the actor's past performance, observers attributed the outcome to the causal factors of ability and task difficulty. When the outcome was inconsistent with past performance, observers attributed the outcome to effort and luck. In contrast to these studies, other lines of evidence indicate that a single inconsistent negative behavior can have an unduly strong effect on impressions (Jones & Davis, 1965; Kanouse & Hansen, 1971). A series of studies by Birnbaum (1972, 1973) is illustrative. Observers were provided with information about actors who were described by various behaviors differing in morality. Preliminary scaling insured that positive and negative behaviors were equally polarized on the morality scale. In one set of conditions, the actor was described as performing either three highly moral behaviors and one highly immoral behavior or three highly immoral behaviors and one highly moral behavior. Consistent with the findings of previous research, an inconsistent moral behavior was discounted by the observer: Morality ratings of a person described by three immoral and one moral act differed only slightly from ratings given to a person described by four immoral behaviors. Immoral behaviors, however, were never discounted in the overall impression. A person described by three moral behaviors and a single immoral behavior received ratings on the negative side of the morality scale.

It has already been suggested in discussion of the schematic model that for behaviors involving morality attributes, a hierarchically restrictive schema is likely to be elicited, which dictates that immoral behaviors are believed to be performed only by immoral persons, whereas moral behaviors are believed to be performed by both moral and immoral persons. It follows from the schema, therefore, that a single highly immoral behavior will imply the presence of an immoral disposition in the actor. A single highly moral act, however, may (depending upon the situation) imply a range of dispositional classifications. Only a person whose behavior is consistently moral in the face of contrary situational pressures will be ascribed a moral disposition. Consistent with these assumptions, Birnbaum (1973) concluded that “bad deeds have an overriding impact on the overall judgment. A person may be judged mostly by his worst bad deed” (p. 399).

A hierarchically restrictive schema is also especially likely to be elicited when dispositional inference focuses on attributes concerned with skill or ability, such that unskilled persons are believed to be behaviorally restricted, whereas skillful persons are not. Since skillful behavior implies a skillful disposition only, and unskillful behavior may imply a range of dispositions depending on the situation, an inconsistent highly skillful performance would be discounted less than an inconsistent unskillful performance. For example, suppose that a previously unaccomplished athlete were to break the world's record for the mile run or weight lifting. It is unlikely that observers would ignore such an inconsistent performance in judging the overall ability of the athlete. Running and weight lifting are relatively "pure"
ability attributes, and extremely successful performances on these attributes are unlikely to be viewed as "one in a million" runs or "lucky" lifts. Heider (1958) seems to have anticipated this point, proposing that in contrast to failure, "success even when understood as due to a transitory positive state in the person, often leads to the conclusion that the person can do the task" (p. 95). This difference in the discounting tendency between success and failure should increase directly with the perceived skill involved in the successful behavior. Thus, the asymmetry that has been observed in the attribution literature, whereby success is attributed more consistently than failure to stable causes such as ability (e.g., Frieze & Weiner, 1971), follows directly from the hierarchically restrictive schema for skill-related dispositions and can be accounted for without recourse to motivation biases.

Conclusions

Application of the schematic model provides an integrative framework for studying utilization of various sources of information in the attribution process. Separating the locus of effects into those related to behavioral classification and those affecting dispositional inference directly serves to clarify the processes involved and to make salient the relevance of social judgment research in general to social inference.

By specifying the implicational schema employed in a particular judgment, it is possible to predict what types of information will carry the most weight in dispositional attributions. Basically, each schema places emphasis on a different aspect of the distribution of an actor's behaviors across levels of the attribute in question. With the partially restrictive schema, for instance, dispositional inference requires knowledge of the relative frequency of occurrence of behaviors at each level, since the actor's dispositional level corresponds to the average level of behaviors exhibited. The fully restrictive schema, on the other hand, focuses attention on the variance of the distribution of behaviors, since dispositional inference depends on evidence for a modal level of behavior with very small variance around the mode. Finally, dispositional attribution based on the hierarchically restrictive schema relies on knowledge of the most extreme behavior in an actor's repertory. Thus, depending on what schema is invoked, any information that carries implications regarding the relevant feature of the actor's distribution of behaviors will affect the inference of correspondent attributions.

In this article an attempt has been made to specify attribute domains for which each schema is most likely to be appropriate. The utility of the hierarchically restrictive schema for representing attributes involving a skill component has been tested directly, and further research is needed to assess the applicability of other schemata to given attributes and to determine whether additional schemata are needed to represent the full range of dispositional attributes. It is clear, however, that such specification will improve the precision of existing models of the social inference process.

Reference Note


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Received March 22, 1978
Revision received October 5, 1978

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