Culture and the Development of Everyday Social Explanation

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The impact of cultural meaning systems on the development of everyday social explanation is explored in a cross-cultural investigation undertaken among Indian and American adults and children (ages 8, 11, and 15 years). It is demonstrated that at older ages Americans make greater reference to general dispositions and less reference to contextual factors in explanation than do Hindus. References to general dispositions also undergo a much greater developmental increase among Americans than among Hindus, whereas references to contextual factors show the opposite pattern of developmental change. Evidence suggests that these cross-cultural and developmental differences result from contrasting cultural conceptions of the person acquired over development in the two cultures rather than from cognitive, experiential, or informational differences between attributors. Discussion focuses on theoretical implications of such a demonstration for understanding: (a) the importance of integrating semantic with structural considerations in theories of social attribution, (b) the need to develop nonteological frameworks for interpreting age and cultural diversity in conceptualization, and (c) the role of cultural communication in the acquisition of everyday social knowledge.

Cultural influences on attributional diversity have been somewhat neglected by psychological theorists. In most cases, developmental and cross-cultural differences occurring in attribution have been interpreted as arising from differences in attributors' cognitive capacities to process information concerning the covariation structure of experience and/or from differences in the objective experiences to which attributors have been exposed. The purpose of the present research is to demonstrate the impact of cultural meaning systems as a third variable, independent of such subjective and objective determinants, which must be taken into account to explain age and cultural variation occurring in attribution. Such a demonstration is offered through a cross-cultural investigation comparing modes of everyday social explanation used by people in the United States, a Western culture emphasizing individualistic notions of the person, and by people in India, a non-Western culture stressing more holistic views of the person. Evidence is presented to suggest that various cross-cultural and developmental differences observed in attribution among Americans and Hindus result from divergent cultural conceptions of the person acquired over development in the two cultures rather than from cognitive or objective experiential differences between attributors. Discussion focuses on theoretical implications of such a demonstration for understanding the impact of cultural meaning systems on social attribution.

Interpretation of Diversity in Dispositional Attributions

Marked developmental and cross-cultural differences have been documented to occur in references to general dispositions of the agent in social attribution. References to general dispositions of the agent, it has been observed, increase significantly over development among

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Western populations (Flapan, 1968; Livesley & Bromley, 1973; Peevers & Secord, 1973; Scarlett, Press, & Crockett, 1971; Waern, Hecht, & Johansson, 1974). American adults typically emphasize dispositional qualities, in particular, personality traits, when making social inferences, for example, "She is friendly and gregarious" (Fiske & Cox, 1979, p. 148). In contrast, young Western children tend to stress actions, interpersonal relationships, and other contextual factors when describing others or giving explanations, for example, "She goes skating every Thursday" or "She has three brothers" (Livesley & Bromley, 1973, p. 123). Although no seminaturalistic data was available on a non-Western child population, evidence suggests that adults from non-Western cultures generally place less emphasis on dispositional properties of the agent and greater emphasis on contextual factors than do American and Western European adults (Levy, 1973; Selby, 1974, 1975; Shweder & Bourne, 1982; Strauss, 1973).

Cognitive Interpretation

A dominant interpretation offered to explain such attributional diversity focuses on differences in individuals' cognitive capacities to generate dispositional attributions (e.g., Livesley & Bromley, 1973). It is maintained that young children and certain non-Western attributors fail to emphasize dispositional modes of attribution because they have not developed the abstract classificatory abilities required for summarizing behavioral regularities by means of dispositions. Such attributors are seen as cognitively incapable of classifying diverse behavior observed over time and across situations on the basis of conceptual similarity. Support for such a cognitive interpretation may be seen in early research indicating that young children rely on more concrete modes of classification than do adults (Bruner & Olver, 1963; Inhelder & Piaget, 1964; Olver & Hornsby, 1966; Vygotsky, 1962). Whereas adults tend to classify objects on the basis of conceptual similarity, children show a greater tendency to categorize objects in a holistic structure on the basis of spatiotemporal and/or functional interrelationships obtaining between the objects.

Recent research challenges this cognitive interpretation of the observed attributional variation in dispositional attributions. Some ability to classify objects on the basis of conceptual similarity, for example, has been demonstrated in children as young as 3 years, using a three-member oddity task (Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976). Memory studies have documented that children as young as 2 years are able to make use of the categorical structure in lists to facilitate recall (Goldberg, Perlmutter, & Myers, 1974). The research suggests that at least part of the poorer performance of certain subjects on tasks assessing classificatory behavior derives from the complexity or ambiguity of the tasks rather than from deficits in individuals' cognitive capacities (see, e.g., Gelman, 1978).

Experiential Interpretation

A second related explanation that has been applied to explain age and cultural diversity in references to general dispositions emphasizes contrasting objective experiential conditions found cross-culturally and over development to which such modes of attribution are viewed as adapted. It is argued that young children and certain non-Western attributors fail to emphasize dispositional modes of attribution because they lack exposure to the more complex experiential conditions, associated with modernization, which make it functional to use taxonomic modes of categorization and lead to the development of abstract cognitive orientations (Goody & Watt, 1968; Greenfield, 1972; Horton, 1967; Scribner & Cole, 1973). It is asserted, for example, that certain attributors may not be exposed to sufficient diversity to require that they locate dispositional properties by which to distinguish an agent's behavior from that of others in the same context or by which to predict an agent's behavior across contexts (Super, Harkness, & Baldwin, 1977). Support for such an experiential interpretation may be seen in research demonstrating greater use of taxonomic modes of categorization on classification tasks among individuals exposed to modernizing influences, such as schooling, literacy, and urbanization, than among individuals not exposed to such influences (Bruner, Olver, & Greenfield, 1966;
CULTURAL EXPLANATIONS


Empirical as well as theoretical considerations suggest, however, that differential exposure to experiential conditions requiring taxonomic categorization cannot fully explain the observed age and cultural diversity in dispositional attributions. Some of the early findings, recent research indicates, may have resulted from the nonequivalence of research situations to individuals from different cultural backgrounds rather than from differences in individuals’ cognitive orientations (Labov, 1970; Shweder, Bourne, & Miyamoto, 1978). Recent work suggests that environmental conditions give rise to localized, not to generalized, differences in cognitive performance (Cole, Sharpe, & Lave, 1976; Scribner & Cole, 1981; Sharp, Cole, & Lave, 1979; Weisner, 1976). It has been demonstrated that subjects exposed to various modernizing influences, such as schooling or urbanization, display more abstract modes of classification only on the types of tasks emphasized in those settings rather than on all types of tasks. Such results call into question the claim that global differences in cognitive orientation result from exposure to modernizing conditions. It may also be noted that objects or events may be classified as similar because of their prescriptive cultural significance, even though they do not share a particular set of correlated attributes. The claim then that abstract modes of categorizing persons are not required under non-technologically developed experiential conditions may be challenged as overlooking the many nonfunctional purposes underlying social categorization.

Cultural Interpretation

An alternative interpretation of age and cultural diversity in dispositional attributions focuses on contrasting culturally derived conceptions of the person, which influence attributors’ interpretations of experience. Cultural differences in dispositional attributions are seen as resulting, in part, from the more individualistic cultural conceptions of the person acquired by individuals over development in Western cultures, as contrasted with the more holistic cultural conceptions of the person adopted by individuals over development in non-Western cultures. Conceptions of the person emphasized in many Western cultures underscore the separation and independence of the agent from the context (Marriott, 1976). The autonomous individual tends to be treated as the primary unit of right and moral responsibility (Luke, 1973; Sampson, 1977; Weber, 1930). Portraying the agent as inherently asocial if not antisocial, such cultural conceptions tend to view deviance as arising from dispositional factors within the agent (Greenstone, 1982; MacPherson, 1962). In contrast, cultural views stressed in many non-Western cultures emphasize the openness and interdependence characterizing the agent’s relations with the surround (Dumont, 1965, 1970; Geertz, 1974). Forging a social view of the agent (O’Flaherty & Derrett, 1978), such cultural conceptions tend to approach deviance in interactional terms, as resulting from some disequilibrium in the agent’s relations with the environment (Marsella & White, 1982). These contrasting cultural views may be seen expressed, for example, in the “individually centered” cultural practices found in many Western cultures for dealing with mental illness, practices generally absent or given much less emphasis in non-Western cultures (Waxler, 1974, 1977).

Attributors’ acquisition of such divergent cultural conceptions, it is asserted, may contribute to the attributional differences observed in use of general dispositions (Shweder & Bourne, 1982; Shweder, Bourne, & Miyamoto, 1978). Adoption of the Western cultural perspective is seen as priming attributors to stress dispositional properties of the agent in making inferences about the determinants of behavior. The Western cultural emphasis on the agent’s autonomy from contextual influences and on individual responsibility for action, for example, is viewed as encouraging attributors to search for internal factors predicting behavior across contexts and distinguishing one agent’s behavior from that of another. In contrast, it is posited that individuals’ acquisition of more relational conceptions of the person in non-Western cultures may lead them to give less weight than Western attributors to general dispositions of the agent when making social inferences. Emphasizing the situational vari-
ability of behavior and treating the social role rather than the individual as the primary normative unit, such cultural conceptions are seen as heightening non-Western attributors' sensitivity to the contextual determinants of action (Ramanujan, 1980; Selby, 1975). In maintaining that cultural meaning systems are not merely accommodations to functional constraints, it is argued that the observed cross-cultural variation in dispositional attributions cannot be fully explained by reference to differences in attributors' objective adaptive requirements.

This cultural perspective may be applied to the interpretation of age differences observed in social attribution. The developmental patterning of attributional differences would be viewed as reflecting the time lag required for acquisition of the dominant views of the person held in a culture. In particular, the age increase in references to general dispositions documented to occur in Western cultures would be seen as arising from children's relatively gradual adoption, through processes of enculturation, of the individualistic views of the person stressed in such societies. In contrast, it would be anticipated that in non-Western cultures, modes of attribution are modified over development in the direction of the dominant holistic cultural views of the person, views stressing the contextual influences on behavior, not the agent's general dispositions.

Hypotheses Underlying Present Investigation

The present cross-cultural investigation was undertaken to provide a developmental test of this cultural interpretation of attributional diversity. An attempt was made to demonstrate that the development of social inference entails, in part, the acquisition of culturally variable meaning systems and cannot be understood merely by reference to subjective and/or objective determinants. This demonstration proceeded by showing that references to general dispositions by American and Hindu adults and children (a) conformed to patterns hypothesized on the basis of contrasting cultural conceptions of the person emphasized in the two cultures and (b) could not be fully explained by reference to various alternative cognitive and/or experiential factors.

Consideration of the differences in cultural notions discussed led to the hypothesis that Americans at older ages would make greater reference to general dispositions of the agent in explanation than would Hindus. This cross-cultural difference was anticipated to be greater in the explanation of deviant behaviors than in the explanation of prosocial behaviors, given the American, but not Hindu, cultural emphasis on the agent-oriented determinants of deviance. Examination of alternative non-cultural interpretations of the anticipated cultural and age diversity in references to general dispositions proceeded by assessing attributors' abilities to classify on the basis of conceptual similarity and by examining the relationship between attributors' references to general dispositions and their exposure to modernizing influences. It was predicted that (a) individuals at all ages tested in both cultures would display the cognitive skills in classification required to generate dispositional attributions and that (b) references to general dispositions would not vary as a function of attributors' exposure to objective conditions identified by theorists as making taxonomic categorization of behavior adaptive.

Study 1

Method

Subjects

Data were obtained from Indians in Mysore, a city in Southern India, and from Americans in Chicago. The main sample, interviewed in English, included 40 middle-class Hindu adults and 30 middle-class Hindu children in each age group of 8, 11, and 15 years as well as 30 middle-class American adults and 30 middle-class American children in each age group of 8, 11, and 15 years. Each age/cultural subgroup comprised an equal number of males and females. For control purposes, interviews were conducted in the local language (Kannada) among 20 middle-class Hindu adults and 12 middle-class Hindu children in each age group of 8, 11, and 15 years. American and Hindu children sampled had the same number of years of education. No significant differences in education (M = 17.5 years), age (M = 40.5 years), or in occupation (academic or other professional) occurred between adults in the Hindu and American middle-class samples.

To permit assessment of the impact of socioeconomic status as compared with subcultural orientation on attribution, data were obtained in their native language from 30 lower middle-class Anglo-Indian adults and from 10 lower class Hindu adults. The lower middle-class Anglo-Indian adults and lower class Hindu adults were less educated (Ms = 10.5 years and 4.3 years, respectively) and slightly younger (Ms = 31.3 years and 34.7 years, respec-
tively), and they held lower status occupations (primarily blue-collar and menial-labor jobs) than the middle-class Hindu and American adults.

Procedure

Explanation procedure. Subjects were asked to narrate two prosocial behaviors and two deviant behaviors and to explain, immediately after narrating each behavior, why the behavior was undertaken. In the case of deviant behaviors, subjects were instructed to "describe something a person you know well did recently that you considered a wrong thing to have done." In the case of prosocial behaviors, subjects were requested to "describe something a person you know well did recently that you considered good for someone else." The behaviors narrated and explained by subjects had to meet the criteria of being intentional, nonroutine, and performed in each case by a different agent whom the subject had interacted with on at least three separate occasions.

This strategy of specifying in formal terms the types of behaviors for subjects to explain, while allowing subjects to supply the content of such behaviors from their own experiences, was undertaken to maximize the functional equivalence of the behaviors explained across subgroups. Meaning, research suggests, is created through the conceptual assumptions brought to bear in comprehension, not referentially fixed (Bransford & McCarrell, 1974). In the present case, it was anticipated that the contrasting conceptual assumptions held by subjects at different ages would lead them to understand the same stimulus differently. An identical experimental stimulus then, it was judged, would not be equivalent in meaning for all subjects. In contrast, in requesting that subjects make distinctions that are common early in development and cross-culturally, the present alternative methodological approach was judged to produce greater functional comparability in the types of behaviors explained across subgroups. Explanations, for example, are most often offered spontaneously in relation to events experienced as somewhat unusual rather than routine (Hart & Honoré, 1959; Mackie, 1974). Distinctions between intentional versus unintentional behavior, and between socially desirable versus deviant action, research also suggests, are evident at early ages and in diverse cultures (Bretherton & Bates, 1979; DiVesta, 1966; Keasey, 1978; Osgood, May, & Miron, 1975; White, 1980).

Half the subjects in each age/cultural subgroup explained the two deviant behaviors followed by the two prosocial behaviors, and the other half explained the behaviors in the reverse order. Interviews were tape-recorded and later transcribed.

A coding scheme, outlined in Table 1, was constructed to enable exhaustive coding of subjects' responses and assessment of the research hypotheses.1 Based, in part, on a system for analyzing human motivation developed by Burke (1969) and on earlier content analyses (Lewis, 1978; Shweder, Bourne, & Miyamoto, 1978), the scheme offers several advantages. General in nature, it identifies global distinctions that, it may reasonably be assumed, are universal. As a formal system, the scheme is able to accommodate diverse content found among attributors from different age and cultural backgrounds.

Major distinctions are made in the scheme between references to (a) aspects of the agent undertaking the behavior, including the agent's general dispositions (e.g., "Agent A is proud") and situationally specific aspects (e.g., "Agent A was tired that day"); to (b) the context, including the social/spatial/temporal location (e.g., "His friends were with him"), aspects of persons other than the agent (e.g., "Agent A's friend was feeling sick"); and to (c) acts or occurrences (e.g., "She hit him" or "He fell down"). Attributes made simultaneously to the agent and to the context are encompassed under a combination category (e.g., "They [the agent and his friend] were annoyed").

Table 1
Outline of Scheme for Coding Explanations

| I. Agent |  
| A. General dispositions |  
| 1. Personality |  
| 2. Value, attitude |  
| 3. Preference, interest |  
| 4. General capability |  
| 5. Physical characteristic |  
| B. Situationally specific aspects |  
| 1. Purpose |  
| 2. Feeling |  
| 3. End in itself |  
| 4. Specific ability |  
| 5. Physical state |  
| II. Context |  
| A. Social/spatial/temporal location |  
| 1. Social norm, regulation |  
| 2. Descriptive references |  
| B. Aspects of persons other than agent |  
| 1. General aspects |  
| 2. Situationally specific aspects |  
| C. Impersonal aspects of context |  
| III. Acts/occurrences |  
| IV. Agent/context combination |  
| V. Other |  
| A. Reasons mitigating against behavior |  
| B. Extraneous comments |  
| C. Questionable comments (unscoreable) |  

1 Instructions for the coding scheme may be obtained by writing to the author.
nation given by a Hindu adult: (a) "It was dark" (context: social/spatial/temporal location); (b) "and there was no one else to help" (context: social/spatial/temporal location); (c) "Agent A was the only one there" (context: social/spatial/temporal location, redundant); (d) "Also A is a very kind man" (agent: general dispositions). The response is scored as including three distinct reasons (a, b, and d), with contextual factors accounting for 67% of the distinct reasons mentioned and general dispositions accounting for the remainder.

Reliability in applying the coding scheme was assessed between the author, another American, and an Indian from the Mysore region on a set of American and Hindu protocols. For overall agreement on the proportion of distinct mentions of different types of reasons per protocol, \( r = 0.84 \). No difference in agreement occurred as a function of the cultural origin of the coders or of the cultural source of the responses. These results, indicating high levels of agreement between American and Hindu coders, may be seen to provide some evidence that the scheme possessed cross-cultural validity.

**Classification procedure.** A classification test, based on a procedure developed by Flavell and Stedman (1961), was constructed to assess subjects' abilities to classify on the basis of conceptual similarity, a cognitive prerequisite for descriptive use of general dispositions.\(^2\) The task required subjects to distinguish between word pairs related on the basis of conceptual similarity and word pairs related on spatiotemporal and/or functional bases, the types of concrete bases observed to dominate young children's and non-Western adults' social attributions.

In constructing the task, four sets of different word pairs were selected to illustrate each of the following modes of conceptual interrelationship: (a) similarity (e.g., "talk, shout"); (b) contingency (e.g., "happy, smile"); (c) spatial contiguity (e.g., "market, sell"); and (d) linkage in an action sequence (e.g., "wash, hands"). The words selected represented ones relevant to the description of everyday social behavior and familiar to subjects in both cultures. Each word pair was coupled once with each of the other three word pairs in its set to generate a 24-item questionnaire. For each item, subjects were instructed to select the word pair "most similar in meaning." Subsequent scoring of the procedure focused only on word pairs contrasting items related on an abstract basis with items related on one of the three concrete bases. For example, for the item "(market, sell)(talk, shout)," a subject's response of "talk, shout" would be scored as correctly identifying the word pair most similar in meaning. Couplings between concrete word pairs—for example, "(happy, smile)(market, sell)"—were not analyzed.

**Results and Discussion**

The data were analyzed with repeated measures analysis of variance (ANOVA), with an arc sin transformation applied to all scores involving proportions (Winer, 1962). Assessment of subjects' explanations focused on their use of distinct reasons. Analysis revealed no significant effects of sex or of order of explaining prosocial as contrasted with deviant behaviors on any of the dependent measures. Responses were therefore analyzed with both sexes and orders of responding combined. Due to the low frequency of responses coded under the agent-context combination category, (less than 3% in any age/cultural subgroup), such responses are reported under their respective agent and context categories. Comparisons between the main and the control middle-class Hindu samples revealed no significant effects of language on subjects' overall responses to the procedure or on their use of general dispositions or contextual factors in explanation.

**Examination of Cross-Cultural and Age Differences in Explanation**

Overall responses to explanation procedure. An average of 85% of the responses in each age/cultural subgroup were scored as reasons explaining the behavior, with an average of 2% scored as reasons mitigating against performance of the behavior (e.g., "It wasn't because she was angry") and an average of 12% scored as extraneous comments (e.g., "I think what happened was funny"). Only a very small percentage of responses were unscorable (a maximum of 2% in any age/cultural subgroup). A \( 2 \times 4 \times 2 \) (culture \times \text{age} \times \text{valence of behavior}) ANOVA on the proportion of reason codings revealed no significant effects. No differences occurred across age/cultural subgroups in the proportion of responses coded in terms of some type of reason category (Categories I through \( V-A \) in the coding scheme) as compared with responses coded as extraneous comments or as questionable.

A \( 2 \times 4 \times 2 \) (culture \times \text{age} \times \text{valence of behavior}) ANOVA on the number of distinct reasons given in explanation revealed only a significant main effect of age, \( F(3, 242) = 30.45, p < .01 \). Adults produced approximately 3.3 distinct reasons per behavior being explained, whereas 8-year-olds averaged slightly under 2 distinct reasons.

These results demonstrate a general comparability across the cultures in subject's responses to the procedure. The bulk of subjects' verbalizations were task focused, with no cultural differences occurring in fluency.

\(^2\) A copy of the classification procedure may be obtained by writing to the author.
Weighting of general dispositions. A $2 \times 4 \times 2$ (culture $\times$ age $\times$ valence of behavior) ANOVA on the proportion of references to general dispositions (Category I-A in the coding scheme) revealed significant main effects of culture, $F(1, 242) = 20.98, p < .01$, and of age, $F(3, 242) = 22.14, p < .01$, as well as significant interactions of Culture $\times$ Age, $F(3, 242) = 4.99, p < .01$, and Valence $\times$ Culture, $F(1, 242) = 15.18, p < .01$. As predicted, at older ages Americans gave greater weight to general dispositions in explanation than did Hindus. Also as hypothesized, this cross-cultural difference was more marked in the case of deviant than in the case of prosocial behaviors. Analysis revealed that most of the cross-cultural differences observed in the use of general dispositions resulted from references to personality characteristics (e.g., "Agent A is insecure" or "Agent A is kind").

The upper half of Table 2 contrasts the mean percentage of references to general dispositions in explanation across the age and cultural subgroups. An average of 40% of all reasons mentioned by American adults made reference to general dispositions, in contrast to under 20% of all reasons cited by Hindu adults. This cross-cultural variation was particularly great in explanations of deviant behaviors, with American adults ($M = 45\%$) placing three times as much weight on general dispositions as Hindu adults did ($M = 15\%$).

In contrast to the striking cross-cultural differences observed among adults, little difference distinguished the responses of the youngest subjects. Responses of 8-year-old and 11-year-old American subjects, for example, differed from those of 8-year-old and 11-year-old Hindu subjects by only 2%, on average.

To evaluate within-culture developmental trends, post hoc trend analyses, evaluated by the Scheffé test (Keppel, 1973), were undertaken on the proportion of references to general dispositions. A significant linear age increase in references to general dispositions was observed to occur among Americans, $F(1, 116) = 67.22, p < .01$. In contrast, a similar analysis performed on Hindu responses showed no significant linear age effect.

The American emphasis on dispositional characteristics may be illustrated by consideration of explanations offered by American adults of deviant behavior. An American adult subject, for example, cited the following deviant behavior involving an agent cheating on her income tax return:

A neighbor of mine—she and her husband, they talk to us about a great number of things. She recently told me with a certain amount of even pride how she itemized her taxes to get back even more from the government—really outright cheating. On giving to charity she declared the maximum. And she knows and we know—cause she tells us—that they didn't give anything to charity at all.

The subject explained the neighbor's behavior by reference to her personality characteristics: "That's just the type of person she is. She's very competitive."

In a second case, a different American subject narrated a deviant act involving an agent's usurping credit for someone else's idea:

This involved one of the teachers I work with at school. It was a process of scheduling—something to do with scheduling. I came up with an innovative idea of organizing the scheduling, of what we should do. I talked to some of the other faculty members about it, and this first teacher picked it up and quickly went to the principal and presented it as if it were his own idea.

As in the previous example, this behavior was also seen as deriving from the agent's general dispositions: "He was just a very self-absorbed person. He was interested only in himself."

The present results provide support for the predictions based on American and Hindu cultural conceptions of the person. As hypothesized, at older ages Americans gave

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<th>Prosocial behaviors</th>
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greater weight to general dispositions in explanation than did Hindus. This cross-cultural difference, also as predicted, was more marked in explanations of deviant than of prosocial behaviors. Consonant with a cultural view of developmental change, within-cultural developmental variation in attribution was observed to parallel cross-cultural adult variation in attribution. Whereas references to general dispositions increased markedly across the age range sampled among Americans, they showed little developmental change among Hindus.

**Weighting of contextual factors.** Further examination of the data focused on contextual attributions, modes of attribution that, it was anticipated, might be employed more by Hindus than by Americans, given the holistic cultural views of the person emphasized in India. A 2 × 4 × 2 (culture × age × valence of behavior) ANOVA undertaken on the proportion of references to the context (Category II in the coding scheme) revealed significant main effects of culture, $F(1, 242) = 8.63, p < .01$; age, $F(3, 242) = 4.89, p < .01$, and valence, $F(1, 242) = 112.31, p < .01$, as well as a significant Culture × Age interaction, $F(3, 242) = 6.18, p < .01$. All subjects made greatest reference to the context in explanation of prosocial behaviors, an effect resulting from the greater number of normative reasons invoked to explain prosocial as compared with deviant behaviors. At older ages Hindus made significantly greater reference to the context than did Americans. Most of this cross-cultural difference resulted from attributions to the social/spatial/temporal location, a category encompassing references to social roles and to patterns of interpersonal relationship (e.g., "She is his aunt" or "He has many enemies") as well as references to the placement of persons, objects, or events in time or space (e.g., "It was early in the morning" or "He lives far away from school"). Such modes of attribution may be seen to be reflective of Indian cultural conceptions in their emphasis on locating a person, object, or event in relation to someone or something else.

The mean percentage of references to the context are compared in the lower half of Table 2. Hindu adults ($M = 40\%$) were observed to give over twice as much weight to contextual factors in explanation as did American adults ($M = 18\%$). Little cross-cultural difference in contextual explanations occurred among children. Unlike the case of general dispositions, however, contextual references were employed frequently at younger ages, accounting for over one third of children’s explanations of prosocial behaviors.

Post hoc trend analyses, evaluated by the Scheffé test, indicated a significant linear age increase among Hindus in proportionate references to the context, $F(1, 126) = 22.37, p < .01$. In contrast, no significant linear age increase occurred among Americans in contextual explanations.

The Hindu stress on contextual determinants of behavior may be seen in explanations by Hindu adults of deviant behavior. One Hindu adult subject, for example, discussed the following deviant behavior involving an agent’s cheating a customer out of money paid for work the agent was to perform:

I had to construct a house, and for that I had given advance money for Agent A to do that construction work. Agent A had promised—he had given in writing—that he would do that particular work. I gave him an advance of 1,500 rupees. He utilized it for his personal purposes, and then he never did that work or returned the money. That man, he deceived me up to the extent of 1,500 rupees. That’s a great injustice. But I can go to the court of law. I have the documents, everything.

The Hindu subject explained the behavior by reference to the agent’s socioeconomic position: “The man is unemployed. He is not in a position to give that money.” Another Hindu subject cited the following deviant behavior involving an advisor’s assuming first authorship on a paper written by someone else:

This involved a scholar in some other department, and she has got her PhD now. She wanted to publish four or five papers from her thesis. She produced some papers, but the thing is, her advisor, he put his name as first author and this young scholar as the second author. She was very hurt because that means usually the credit goes to the first author.

The Hindu subject attributed the advisor’s behavior to social role relations: “She was his student. She would not have the power to do it (publish it) by herself.” The deviant behaviors under consideration in these two cases may be seen to involve similar issues as in the earlier American examples (i.e., financial cheating and failure to acknowledge the contributions of a second person). Unlike the American cases, however, the deviant behaviors were at-
tributed to factors in the social surround and not to general dispositions of the agent.

Results observed in references to the context are in the direction suggested by the present cultural theory. Contextual references, modes of attribution more reflective of holistic than of individualistic cultural orientations, were used more at older ages by attributors from the culture maintaining holistic views of the person than by attributors from the culture maintaining more individualistic emphases. Similarly, a significant developmental increase in contextual references occurred only among Hindus and not among Americans.

Evaluation of Cognitive and Experiential Interpretations

Although the cultural and age differences observed in the use of general dispositions conform to the patterns hypothesized on the basis of American and Hindu cultural conceptions of the person, they are consonant as well with alternative noncultural effects. In particular, such attributional diversity might be interpreted as resulting from differences in attributors' cognitive capacities to generate dispositional attributions and/or from differences in attributors' exposure to objective conditions that make taxonomic modes of categorization adaptive. Analyses were therefore undertaken to evaluate the adequacy of such alternative explanations of the observed attributional trends.

Cognitive interpretation. To evaluate a cognitive interpretation of the observed cross-cultural and age differences in reference to general dispositions, assessment was undertaken of subjects' abilities to classify on the basis of conceptual similarity in the classification procedure. A $2 \times 4$ (culture $\times$ age) ANOVA was conducted on the number of times that subjects selected word pairs related on the basis of conceptual similarity as more similar in meaning than word pairs related on a concrete basis when the two types of word pairs were coupled. No significant effects of culture or age were observed in this analysis.

Table 3 contrasts the mean percentage of times that subjects selected word pairs related on the basis of conceptual similarity as more similar in meaning than word pairs related on a concrete basis. It may be seen that all subjects displayed relatively high levels of ability to distinguish abstract from concrete modes of conceptual interrelationship, correctly identifying abstract modes of conceptual interrelationship in all age/cultural subgroups on an average of better than 82% of the time. The analysis indicated that subjects were able to overlook the contextual interrelationships existing between word pairs (e.g., "school, learn") to isolate interrelationships based primarily on conceptual similarity (e.g., "boy, man").

The high levels of performance displayed by all subjects in the present procedure, it may be noted, do not imply the absence of any differences in subjects' classificatory abilities across the age/cultural subgroups. It is possible, for example, that significant age and/or cultural differences might be present on abstract classificatory skills not tapped by the present procedure, such as flexibility in shifting bases of classification, exhaustiveness in classification, and so forth. Given the context specificity of most cognitive abilities, it is also likely that somewhat greater subgroup differences in performance might be observed under contrasting task conditions, for example, utilizing a more difficult set of word items or a response mode making greater demands on subjects' verbal abilities and/or memory capacities.

Although they do not indicate identity in subjects' classificatory capacities, the present results do, however, demonstrate that subjects at all ages tested in both cultures possessed at least some capacity to classify on the basis of conceptual similarity. It was shown that all subjects were able to distinguish relationships of similarity from competing concrete spatio-temporal and/or functional relationships. The trends are consonant with past findings indicating the availability of some capacity in abstract classification early in development (Nelson, 1977). These trends suggest that it is un-
likely that the cross-cultural and age variability observed in dispositional attributions reflects a total incapacity of certain subjects to assume an abstract cognitive orientation.

*Experiential interpretation.* To evaluate an experiential interpretation of the observed cross-cultural and age differences in reference to general dispositions, comparison was undertaken of references to general dispositions by Indian adult subgroups, contrasting in their exposure to modernizing conditions and/or in their subcultural orientation. The following adult subgroups were compared: (a) the main Hindu middle-class sample, (b) the control Hindu middle-class sample, (c) the lower class Hindu sample, and (d) the lower middle-class Anglo-Indian sample. As college graduates with professional occupational backgrounds and extensive mobility, the middle-class Hindus had the greatest exposure to modernizing conditions, whereas the lower class Hindus had the least exposure to modernizing conditions, experiencing 3 years or less of education and having menial-labor occupational backgrounds and virtually no mobility. The lower middle-class Anglo-Indians represented an intermediate subgroup, in their levels of exposure to modernizing conditions, having high school educations, blue-collar occupational backgrounds, and limited mobility. As a Christian community of mixed Euro-Indian descent (Anthony, 1969; Maher, 1962), however, the Anglo-Indians held more Westernized cultural meaning systems than either the middle-class or lower class Hindus.

Contrasting multiple subgroups within the same culture, the present analysis is valuable in providing a controlled test of the research hypotheses. If references to general dispositions reflected merely attributors' exposure to more complex experiential conditions, associated with modernization, middle-class Hindu adults would be anticipated to make the greatest reference to general dispositions; Anglo-Indian adults, slightly less reference; and lower class Hindu adults, the least reference. In contrast, if references to general dispositions reflected attributors' maintenance of Westernized cultural meaning systems, independently of their socioeconomic status, it would be anticipated that the greatest reference to general dispositions would occur among Anglo-Indian adults, with little difference in the use of general dispositions occurring among the Hindu adult subgroups.

A $4 \times 2$ (Indian adult subgroup $\times$ valence of behavior) ANOVA on the proportion of references to general dispositions made by all Indian adults revealed a significant Subgroup $\times$ Valence interaction, $F(3, 96) = 3.34, p < .05$. Lower middle-class Anglo-Indians were observed to make significantly greater reference to general dispositions in explaining deviant behaviors than did either the middle-class or lower class Hindu subgroups.

Table 4 contrasts the mean percentage of references to general dispositions by the various Indian adult subgroups. It may be seen that explanations of deviant behavior by Hindu middle-class adults differed by less than 2% from those of Hindu lower class adults, despite the marked socioeconomic differences between the two groups. In contrast, even though the Anglo-Indians were slightly lower in socioeconomic status than the middle-class Hindus, they gave approximately twice as much weight to general dispositions in explanation of deviance as did the middle-class Hindus. As in the cross-cultural comparison between Americans and Hindus, subcultural differences between Anglo-Indians and Hindus were much greater in explanations of deviant behaviors than in explanations of prosocial behaviors.

In documenting that references to general dispositions did not vary with attributors' socioeconomic status, a variable closely linked in past research with objective conditions conducive to abstraction, the present results call into question an experiential interpretation of the observed cultural and age variation in references to general dispositions. The use of general dispositions, the results imply, does not represent merely a functional adaptation to the more complex experiential demands associated with modernization.

The results provide direct support for the present alternative cultural interpretation of attributional diversity in documenting that dispositional attributions varied with subcultural orientation within India in the same direction that they varied with cultural orientation across the United States and India. Consonant with their semi-westernized cultural orientations, Anglo-Indians ($M = 29\%$) were observed to display a pattern of weighting general dispositions in explanations of deviant behaviors.
Table 4  
Proportion of References to General Dispositions  
Among Indian Adult Subgroups  

<table>
<thead>
<tr>
<th>Adult subgroup</th>
<th>Deviant behaviors</th>
<th>Prosocial behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo-Indian</td>
<td>.29</td>
<td>.16</td>
</tr>
<tr>
<td>Hindu middle class</td>
<td>.15</td>
<td>.22</td>
</tr>
<tr>
<td>(main)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindu middle class</td>
<td>.13</td>
<td>.23</td>
</tr>
<tr>
<td>(control)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindu lower class</td>
<td>.13</td>
<td>.15</td>
</tr>
</tbody>
</table>

ance intermediate between that of Americans ($M = 45\%$) and that of Hindus ($M = 14\%$). Such results then lend support to the view that attributors' adoption of more individualistic as contrasted with more holistic culturally derived conceptual assumptions underlies the observed attributional diversity in the use of general dispositions.

Study 2

The analyses strongly support the present cultural interpretation of attributional diversity in explanation, but it might alternatively be argued that the observed cross-cultural attributional variation resulted from differences in the behaviors explained by subjects in each age and cultural subgroup. The research required subjects to explain deviant and prosocial behaviors, meeting certain formal criteria. Such a methodological strategy, it was judged, resulted in greater functional equivalence in the behaviors explained across subgroups than would have been achieved by having all subjects explain identical behaviors. The results observed, given use of the present methodology, however, might be interpreted in informational terms. It might be maintained that certain objective events, regardless of culture, are conceptually understood in a certain way and call for a similar type of explanation. Such an assertion, for example, has been made by various developmental theorists in positing that universally certain substantive content (e.g., injury to persons) will be seen as a moral violation (Turiel, 1978, 1979). Applied to the present case, it might be argued that the observed cross-cultural and age variation in references to general dispositions resulted exclusively from objective differences in the information being explained across subgroups and did not depend on subjects' culturally derived conceptual understandings of such information.

In order to evaluate this informational interpretation, a second sample of American adults was asked to explain a set of deviant behaviors generated originally by Hindu adults and explained in ways representative of the dominant Hindu adult pattern of explanation. The explanations of these incidents offered by the original Hindu subjects were not presented to the American subjects. If informational effects represented a major determinant of the observed attributional diversity, it would be anticipated that explanations by this new American sample would more closely resemble the dominant Hindu adult pattern of explanation than the dominant American adult pattern. In contrast, the reverse finding would suggest that attributors' culturally derived conceptual assumptions must be taken into account to explain the observed attributional diversity in explanation.

Method

Subjects

Subjects included 10 male and 10 female middle-class American adults, drawn from a university population. They had a mean age of 24.5 years and a mean education of 17.8 years.

Procedure

Deviant behaviors were chosen for presentation to subjects because they were the type of behaviors on which greatest cross-cultural differences in attribution had been observed in the original investigation. Selection of these behaviors entailed isolating all deviant behaviors that Hindu adults had explained by (a) some reference to the social/spatial/temporal location and by (b) no reference to the agent's general dispositions. Four behaviors were then randomly and blindly sampled from the set of behaviors meeting these criteria. In no case were two behaviors sampled from the same Hindu adult.

Two minor changes were made in the behaviors narrated by Hindu adults before presenting them to the American subjects to avoid overt identification of the responses as Indian: (a) The word dollar was substituted for rupee, and (b) nouns were substituted for proper names. Otherwise the exact wording of the original Hindu adult subjects was preserved.

The procedure was introduced to subjects as a task in which they would be asked to explain four nonhypothetical incidents that had been cited originally by other adults as examples of wrong behaviors. The same probe questions used in the cross-cultural investigation were used in this
second study. Subjects were asked to explain why they thought each behavior had been undertaken immediately after having the behavior read to them by the interviewer. Subjects' responses were tape-recorded and later transcribed and coded with the coding scheme used in the cross-cultural investigation. In debriefing after the interview, subjects indicated no awareness or suspicion that the deviant behaviors had been generated originally by non-Americans.

Results and Discussion

Results indicated that the explanations by this new sample of American adults more closely resembled the dominant American adult pattern of explanation than the dominant Hindu adult pattern of explanation observed in the cross-cultural investigation. For example, the new sample of American adults made, on the average, 36% of their attributions to general dispositions of the agent, a pattern of weighting general dispositions that is more similar to that displayed by the original American adult sample (M = 45%) than that displayed by the original Hindu adult sample (M = 15%). Similarly, the weight given to contextual reasons by the new American sample (M = 17%) practically matched that given by the original American adult subjects (M = 14%) but was markedly divergent from that observed among the original Hindu adult subjects (M = 32%).

Explanations presented below of the same deviant behavior by the original Hindu subject and by an American in the second study illustrate the type of divergence observed in Hindu as contrasted with American explanations:

Deviant behavior cited by Hindu adult subject:
This concerns a motorcycle accident. The back wheel burst on the motorcycle. The passenger sitting in the rear jumped. The moment the passenger fell, he struck his head on the pavement. The driver of the motorcycle—who is an attorney—as he was on his way to court for some work, just took the passenger to a local hospital and went on and attended to his court work. I personally feel the motorcycle driver did a wrong thing. The driver left the passenger without consulting the doctor concerning the seriousness of the injury—the gravity of the situation—whether the passenger should be shifted immediately—and he went on to the court. So ultimately the passenger died.

Interview question:
Why did the driver leave the passenger at the hospital without staying to consult about the seriousness of the passenger's injury?

Explanation by Hindu adult subject:
It was the driver's duty to be in court for the client whom he's representing (context: social/spatial/temporal location); secondly, the driver might have gotten nervous or confused (agent: specific aspects); and thirdly, the passenger might not have looked as serious as he was (context: aspects of persons).

Explanation by American adult subject:
The driver is obviously irresponsible (agent: general dispositions); the driver was in a state of shock (agent: specific aspects); the driver is aggressive in pursuing career success (agent: general dispositions).

Although both the Hindu and the American subject considered the driver's emotional state as one determinant of his behavior, the Hindu adult cited additional contextual reasons for the driver's behavior, whereas the American adult made references to dispositional causes. It should be noted that the contextual reasons cited by the Hindu subject (the driver's role obligations as a lawyer and the passenger's physical condition) were explicitly mentioned in the description of the deviant behavior presented to the American subject. The American adult, however, overlooked such available information to concentrate on dispositional properties of the agent, factors that could only be inferred. It may be argued that the American utilized certain culturally derived conceptual premises—that enduring dispositions regulate behavior across contexts and that the autonomous individual is the primary normative unit—to construct his explanation of the event. In contrast, the Hindu's focus on contextual factors appeared to reflect, in part, his culturally derived views of persons as highly vulnerable to situational influences and of the social role as primary locus of moral responsibility.

The results observed in the present study then provide some evidence to suggest that the cross-cultural and age differences in explanation observed in the cross-cultural investigation did not arise merely from variation in the objective behaviors being explained in each age/cultural subgroup. It has been demonstrated that when explaining a set of deviant behaviors generated by Hindu adults, American adults de-emphasized contextual reasons emphasized by Hindus and, in turn, emphasized general dispositional factors, reflective of American cultural conceptions of the person, that were neglected by Hindus. Such results may be seen to imply that the cultural and age variability in attribution observed in the larger cross-cultural investigation cannot be
fully explained without taking into account
the culturally derived conceptual assumptions
informing attributors' interpretations of the
particular behaviors under consideration.

General Discussion

The investigation may be seen to contribute
to a theoretical understanding of semantic in-
fluences on attribution, the patterning of cul-
tural and age diversity in attribution and the
role of social transmission in the acquisition
of everyday social knowledge.

Importance of Integrating Semantic With
Structural Considerations

Theories of attribution developed within
psychology have tended to neglect the impact
of cultural meaning systems on attribution. This neglect arises, in part, from tendencies
to treat the categories underlying veridical at-
tribution as self-evident (see, e.g., Rosch, 1975;
It tends to be assumed that particular objective
information, when processed accurately, gives
rise to one true conceptual representation of
its causal structure rather than to multiple ve-
ridical conceptual representations.

Adoption of such an approach to catego-
rization has led many theorists to focus pri-
marily on structural considerations in attempts
to explain the patterning of attribution and to
appraise the adequacy of alternative modes of
attribution. Objective variables, the informa-
tion available to the attributor, and/or sub-
jective variables, the cognitive processing of
information by the attributor, have been re-
garded as sufficient to explain the patterning
of attribution. Culture, as an intersubjective
system of meanings, has generally not been
considered an additional necessary and in-
dependent influence on the attribution process.
Depending on the particular approach, cul-
tural meaning systems have tended to be
viewed as (a) subordinate to the operational constrictions of the attributor and thus not a
source of patterning of individual modes of
conceptual representation (e.g., Piaget, 1954,
1966, 1970a, 1970b); as (b) nonessential
sources of information concerning the objec-
tive covariation structure of experience, pro-
viding information to supplement or substitute
for that acquired through individual obser-
vation (e.g., Kelley, 1972a, 1972b, 1973); or
as (c) adapted to objective constraints and thus
not an independent determinant of individual
modes of conceptual representation (e.g., Bru-
ner et al., 1966).

Focus similarly has tended to center on
structural considerations'in appraising the ade-
quacy of alternative modes of attribution. At-
tribution has been viewed primarily as serving
the requirements of adaptation, enabling ob-
servers with limited cognitive resources to
predict and control the causal structure of ex-
perience. Consonant with this perspective, the
scientific criteria of predictive power and par-
simony have tended to be applied as primary
standards for appraising the adequacy of al-
ternative modes of attribution. Such orien-
tations may be seen reflected, for example, in
dominant metaphors used to characterize the
attributor, such as an "intuitive scientist"
(Ross, 1977) or a "cognitive miser" (Taylor,

The present investigation extends current
approaches in providing evidence concerning
the independent impact of cultural meaning
systems on attribution. It was shown that cross-
cultural and developmental variation in ref-
ences to general dispositions could be pre-
dicted based on differences between the more
individualistic cultural views of the person
stressed in the United States as compared with
the more holistic cultural views of the person
emphasized in India. Evidence suggested that
this attributional diversity could not be fully
explained by reference to the structural factors
traditionally emphasized within psychological
approaches, that is, by reference to differences
in attributors' classificatory abilities and/or
their objective adaptive requirements.

Such results underscore the importance of
recognizing that the conceptual assumptions
informing social attribution are discretionary
and culturally variable, not self-evident. It
cannot be assumed that a given pattern of co-
occurrences gives rise to only one veridical
conceptual representation. Rather, it must be
recognized that the same objective information
may give rise to contrasting yet equally ade-
quate conceptual representations, depending
on the particular culturally derived conceptual
premises brought to bear in interpreting that
information by the attributor.
To descriptively represent reality, the properties available in experience, it may be seen, must be given differential weight, not merely inductively processed (Goodman, 1968, 1972; Shweder, Bourne, & Miyamoto, 1978). An infinite number of properties might be considered in any conceptual representation of reality. Taking all properties into account simultaneously would not then result in a determinate classification. As Goodman illustrates in arguing against a "copy" theory of conceptual representation, “To make a faithful picture [representation], come as close as possible to copying the object as it is.” This simple minded injunction baffles me; for the object before me is a man, a swarm of atoms, a complex of cells, a fiddle, a friend, a fool and much more. If none of these constitute the object just as it is, then none is the way the object is. I cannot copy all these at once; and the more nearly I succeeded, the less would the result be a realistic picture. (1968, p. 6)

Which properties of experience are considered in a descriptive representation reflect, in large part, their cultural relevance. In the present investigation, for example, it appeared that the more individualistic cultural views of the person held by older Americans led them to focus on dispositional properties of the agent in explanation, whereas Hindus’ more holistic cultural orientations led them to stress contextual influences.

It must also be recognized that the conceptual assumptions informing social attribution may serve prescriptive and not merely descriptive purposes and thus may not be based on patterns of correlated attributes (Geertz, 1973; Schneider, 1968). A purpose underlying social categorization is to forward rules for conduct, not merely or necessarily to represent patterns of cooccurrences, as in the exclusively inductive categories of science. Social categories, then it may be seen, have no necessary empirical correlates. A category such as woman, in referring to “agents who should be paid equal salaries to men” or to “agents who should treat their husbands as Gods,” for example, may or may not relate to ways that women actually are treated or behave. This independence of prescriptive categories from objective evidence was reflected in the present study in contrasting normative interpretations placed on the same information by American and Hindu subjects.

The present considerations highlight the need for greater efforts to integrate semantic with structural considerations in current theories of attribution. Attributors’ information and mode of information processing must be taken into account to distinguish more rational from less rational weighting of evidence. Such structural considerations alone, however, cannot explain the processes by which a veridical understanding of experience is approached in attribution. It must be recognized that conceptual interpretation, in terms of culturally derived premises, and inductive or deductive processing of evidence constitute independent and essential elements entailed in attaining veridical knowledge of experience.

Equally the investigation demonstrates the need for attention to semantic criteria in appraising the adequacy of alternative modes of attribution. It has been seen that, in encompassing prescriptive considerations, cultural conceptions of the person influencing attribution may not necessarily map correlated attributes. Functional criteria, such as parsimony and predictive power, then represent neither sufficient nor in all cases necessary standards by which to appraise the adequacy of alternative modes of attribution.

Need for Nonteleological Interpretations of Cultural and Age Diversity in Conceptualization

The patterning of attribution across age and culture has been viewed by many psychological theorists as resulting from a closed causal process and as following a progressive developmental course. It tends to be maintained that age and cultural diversity in conceptualization may be predicted by reference to universal laws of psychological and/or societal development. Cognitive-developmental theorists, for example, have linked the emergence of more abstract modes of conceptual representation to the transition to more advanced stages of cognitive development over ontogeny (e.g., Inhelder & Piaget, 1964). Other developmental and cross-cultural theorists have stressed the impact of experiential conditions associated with socioeconomic development, such as schooling, literacy, and urbanization, in promoting the acquisition of more abstract modes
of conceptual representation (e.g., Bruner et al., 1966; Greenfield, 1972; Horton, 1967; Luria, 1976; Scribner & Cole, 1973). It is assumed in such approaches that conceptual diversity observed across age and culture may be comparatively ranked as reflecting more or less advanced levels of cognitive development and/or more or less complex objective conditions, associated with modernization, to which attributors have been exposed.

The present investigation provides evidence suggesting that many of the conceptual changes occurring in attribution cannot be explained in such evolutionary terms. The finding that the patterning of attribution followed contrasting developmental courses between Americans and Hindus challenges the assertion that there is a determinate directionality to conceptual changes occurring over ontogeny. Equally, the demonstration that references to general dispositions among Indian adults varied with subcultural orientation (Anglo-Indian vs. Hindu) independently of socioeconomic status (middle class vs. lower class) calls into question the claim that technological development or modernization is causally related to changes in individuals' conceptual orientations. The observed trends rather suggest that attributors' conceptual orientations are not necessarily isomorphic with their exposure to modernizing conditions.

The present investigation then highlights the need for the adoption of nonteleological frameworks for interpreting age and cultural diversity in conceptualization (Cole & Griffin, 1980; Super, 1980). Changes occurring in conceptualization across cultures with technological development and over ontogeny, the results imply, must be regarded in historical and not causal terms. Such changes need to be considered as, at least potentially, cohort specific and liable to variation with a shift in cultural values.

The results also underscore the need to evaluate conceptual diversity in local terms rather than by reference to a universal normative standard. It was observed that the conceptual schemes informing attribution across different age and cultural groups cannot in all cases be comparatively scaled as providing more or less valid representations of the causal structure of experience or as reflecting more or less rational information processing. It must be recognized then that changes in conceptualization with ontogenetic and/or societal development are not necessarily progressive (Kuhn, 1962; Shweder, in press). Conceptual schemes found in different age and cultural groups may represent alternative yet equally rational systems for interpreting experience rather than more or less advanced levels in a single conceptual framework.

Role of Cultural Communication in Knowledge Acquisition

Psychological theories of attribution, particularly, in the Piagetian tradition, have tended to place primary emphasis on processes of self-construction in the acquisition of knowledge (see, e.g., Piaget, 1970a, 1970b). Social transmission tends not to be regarded as an essential component in the acquisition process. Although such approaches portray the attributor as active, it may be argued that they generally do not view the attributor as creative. The attributor's role tends to be seen as entailing solely the rational processing of covariation information and not as equally involving discretionary interpretation of this information in terms of culturally variable criteria.

The present investigation provides evidence showing the need to give greater weight to the social aspects of knowledge acquisition (D'Andrade, 1981; Higgins, Ruble, & Hartup, 1983; Schwartz, 1981). What constitutes objective knowledge of the world, it is demonstrated, is framed in terms of culturally variable concepts acquired gradually over development. Such knowledge then cannot be acquired through processes of autonomous individual discovery but requires the communication of culturally derived conceptual premises for interpreting experience.

In demonstrating that the knowledge acquired in attribution is of a culturally constituted and not just culturally interpreted reality, the present investigation also stresses the creative aspects of the acquisition process. The attributor is seen as not merely discovering preexisting patterns of covariation but as becoming initiated into a world created by cultural rules, rules that bear no necessary re-
relationship to objective or subjective determinants (D'Andrade, in press). Such cultural understandings are not static. Enculturation entails processes of change along with processes of continuity. Attributionists may be viewed, in part, as creating new cultural understandings through modifications introduced into existing understandings. It must then be recognized that social transmission and active construction of knowledge represent complementary, not necessarily opposed, aspects of knowledge acquisition.

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Sherman Appointed Editor of the Attitudes and Social Cognition Section of JPSP, 1985–1990

The Publications and Communications Board of the American Psychological Association announces the appointment of Steven J. Sherman, Indiana University, as Editor of the Attitudes and Social Cognition section of the Journal of Personality and Social Psychology for a 6-year term beginning in 1985. Effective immediately, manuscripts should be directed to

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