

# Factors and fictions in person perception: A reply to Lamiell, Foss, and Cavenee<sup>1</sup>

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## ABSTRACT

The systematic distortion hypothesis states that under difficult memory conditions judges infer what "must" have happened from their general model of what the world is like and/or find it easier to retrieve conceptually affiliated memory items. The hypothesis further states that lay conceptual schemes "tend to be inaccurate with respect to how behaviors covary, confusing 'what is like what' with 'what goes with what'" (Shweder & D'Andrade, 1979), and that interbehavior correlations derived from memory-based ratings cannot be considered valid evidence for the objective existence of proposed personality traits, factors or syndromes. The systematic distortion hypothesis is clarified with reference to the Lamiell, Foss, and Cavenee "critique" (1980). That "critique," it is argued, is neither a test of the systematic distortion hypothesis nor a critique. What Lamiell, Foss, and Cavenee demonstrate is that the validity of the systematic distortion hypothesis does not depend upon the unrealistic assumption that observers are capable of reporting only what they expect to see.

Lamiell, Foss, and Cavenee (1980) make reference to six studies by Shweder (1975, 1977a, 1977b, 1977c, Note 1; Shweder & D'Andrade, 1979). A primary objective of those studies (also see D'Andrade, 1965, 1973, 1974; Shweder, 1979; Shweder & D'Andrade, Note 2) is to raise doubts about the objective existence of covarying, multibehavior personality traits (e.g., dependency: seeks help, seeks closeness, seeks attention; extroversion: organizes meetings, likes parties, welcomes the opportunity to speak before a group) as revealed by correlational analyses of memory-based ratings.

Most multibehavior personality traits in the personality literature have been retrieved from the analysis of interbehavior correlational patterns on interpersonal checklists, inventories, and questionnaires. D'Andrade and Shweder have discovered that parallel multibehavior personality traits are, on the one hand, easy to retrieve

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from similarity of meaning judgments and, on the other hand, difficult to retrieve from on-line scorings of reasonably objective behavioral records (e.g., videotapes). In seven different attempts to assess the degree of correspondence among interbehavior association matrices derived from memory-based behavior ratings, similarity of meaning judgments, and immediate behavior scorings, D'Andrade and Shweder have found that (a) the average correlation between memory-based behavior matrices and similarity of meaning matrices is .75; (b) the average correlation between memory-based behavior matrices and immediately scored behavior matrices is .25; (c) the average correlation between similarity of meaning matrices and immediately scored behavior matrices is .26. In other words, with reference to the issue of multibehavior clustering, what correlates with what in memory-based ratings corresponds to preexisting ideas of "what is like what," yet neither the memory-based rating structure nor the similarity structure correspond to what correlates with what in actual behavior.

To explain this pattern of results, D'Andrade and Shweder have advocated a thesis alternatively referred to as the "systematic distortion," "conceptual similarity" or "illusory correlation" hypothesis (also see Chapman, 1967; Chapman & Chapman, 1967, 1969). The "systematic distortion" hypothesis states that *under difficult memory conditions* judges either (a) infer what "must" have happened from their general model of what the world is like, (b) find it easier to retrieve conceptually affiliated memory items, or (c) both (Shweder & D'Andrade, 1979). Since, according to the systematic distortion hypothesis, "the schemata held by most people tend to be inaccurate with respect to how behaviors covary, confusing 'what is like what' with 'what goes with what,'" memory for behavioral events "contains a systematic bias in that things which are conceptually similar are recalled as if they covaried" (Shweder & D'Andrade, 1979).

A number of cognate formulations of the systematic distortion hypothesis are available in the literature. D'Andrade (1965, p. 215) points to a confusion of "propositions about the world" with "propositions about language." Shweder (1977c, p. 641) notes that "it is easy to confuse the conceptual connections among one's descriptive categories with observed connections among the objects and events described," and in one formulation (the formulation frequently quoted by Lamiell, Foss, and Cavenee) Shweder (1975, p. 476) argues that "items alike in concept are judged to be characteristic of the same person even when the conceptual relationships among items do not correspond to the relationships among items in actual behavior." With due respect to Lamiell, Foss, and Cave-

nee (pp. 60, 67, 68, 69), none of these formulations of the systematic distortion hypothesis imply that observers are insensitive to the intensity of a signal or incapable of processing instances where behavior departs from conceptual expectation.

The systematic distortion hypothesis is not an explanation for the existence of error variance in person perception, and does not imply that the ratings made by any individual rater on any individual ratee for any individual item are entirely under the control of preexisting conceptual schemes. The hypothesis merely asserts that *when* errors do occur they tend to be *systematic* errors, and that it is these systematic errors that organize interbehavior correlations into the deceptively coherent pattern suggested by preexisting ideas about what is like what.

These points do not go unmentioned in the studies by Shweder referred to by Lamiell, Foss, and Cavenee, although they seem to have been overlooked. Shweder (1975, p. 477) restricts the occurrence of systematic distortion to instances where raters "do not have access to relevant information [about a ratee] or the relevant information is unavailable, i.e., the respondent either knows too much or too little about the person judged." Shweder and D'Andrade (1979, pp. 3, 9–10) note that systematic distortion only occurs "under difficult memory conditions," and they point out that it is the *prior* existence of error variance that permits the effect of systematic distortion to occur. Perhaps the most explicit attempt to eschew hyperbolic interpretations of the systematic distortion hypothesis occurs in Shweder (Note 1, p. 39):

The point is *not* that raters are characteristically inaccurate. In Newcomb's data (1929), ratings of *particular* items correlated in the .40–.50 range with measures derived from daily records, and presumably, under special conditions favorable to our impressive relative frequency sensors, ratings could correspond even more highly to performance criteria. The real point is that (a) raters are far from perfect . . . and when raters do make errors their errors are *systematically biased* errors not random errors; (b) the typical personality rating situation requires the judge to abstract and summarize a mass of observations from perhaps days, weeks and months of observation on multiple categories that vary in their base rates and cue frequencies; numerous opportunities for error, and thus systematic bias, occur; (c) if one were to eliminate error and systematic bias from personality data one would not discover neat traits, factors or dimensions, but rather a complex of context-dependent truths, or alternatively said, that which *is* accurate in personality ratings would not support a global trait approach to individual differences in conduct.

In other words, the claim that "items alike in concept are judged

to be characteristic of the same person . . ." is *restricted* to instances where the rater does not have valid information about a particular item for a particular ratee; twenty to thirty percent error variance is probably enough to permit moderate size illusory interbehavior correlations to occur. It is not what observers know that gets them into trouble; what gets raters into trouble are the conceptually guided inferences they are prepared to make when random guessing would have been a better judgmental strategy.

In the light of this understanding of the systematic distortion hypothesis I find Lamiell, Foss, and Cavenee's research simultaneously puzzling, reassuring, and incomplete. Lamiell, Foss, and Cavenee (p. 64, Table 2) demonstrate that, for individual observers, interbehavior correlational structures derived from memory-based ratings can be derived from similarity of meaning judgments, and that individual ratees are perceived as more consistent (or less consistent) to the extent that similarity of meaning is (or is not) a predictor of within-protocol interbehavior rating equivalence (as measured by the difference in absolute scores on a seven-point rating scale) (p. 67, Table 3). They also demonstrate (p. 66, Table 3) that, *within* single memory-based rating protocols, similarity of meaning is, on the average, a weak to modest predictor of interbehavior rating equivalence (again, as measured by the difference in absolute scores on a seven-point rating scale). Lamiell, Foss, and Cavenee conclude that "people *are* capable of generating behavior reports which do not correspond highly to their conceptual schemes" (p. 67).

I find Lamiell, Foss, and Cavenee's research puzzling because it disconfirms a thesis to which no one subscribes. As noted earlier, the systematic distortion hypothesis does not assert that observers live in a fantasy world in their understandings of particular others, nor does it *blankly* imply that "conceptually (dis)similar items should be responded to (dis)similarly in descriptions of an individual" (Lamiell, Foss, & Cavenee, p. 59). What it does claim is that error variance in person perception is not negligible, and *that within the realm where errors do occur*, conceptually similar items will be responded to similarly in descriptions of an individual, thereby producing illusory correlations and artifactual support for the existence of multibehavior personality traits.

I am, however, reassured by certain aspects of Lamiell, Foss, and Cavenee's research. Lamiell, Foss, and Cavenee demonstrate (Table 2) that, even at the level of individual observers, interbehavior correlational structures derived from memory-based ratings substantially parallel similarity of meaning structures, and that this is true for observers who are able to report instances where behavior

does not fit their conceptual scheme (Table 3). From my point of view, Lamiell, Foss, and Cavenee have shown what D'Andrade and Shweder have argued, viz., the systematic distortion hypothesis does not require the unrealistic assumption that observers are blind.

Unfortunately, the research is incomplete. Lamiell, Foss, and Cavenee have no immediate scorings, objective records, or performance criteria against which to assess the memory-based ratings of their judges. Thus, despite their opinion to the contrary, Lamiell, Foss, and Cavenee are in no position to test the systematic distortion hypothesis.

The systematic distortion hypothesis makes claims about the way *error variance* becomes *systematically* distorted. To test the hypothesis using Lamiell, Foss, and Cavenee's methods, one would have to identify, within each protocol, all those item pairs which had either large absolute difference scores on an *actual* behavior scale (e.g., a measure of frequency derived from immediate scorings) and small absolute difference scores on the memory-based rating scale, or small absolute difference scores on the actual behavior scale and large absolute difference scores on the memory-based rating scale. It is about these items that the systematic distortion hypothesis predicts that "conceptually (dis)similar items should be responded to (dis)similarly in descriptions of an individual" (Lamiell, Foss, & Cavenee, p. 59). This prediction is never assessed by Lamiell, Foss, and Cavenee, who seem to have taken "a closer look" in the wrong direction.

What implications should be drawn from Lamiell, Foss, and Cavenee's research? Does the research jeopardize the D'Andrade (1965, 1973, 1974) and Shweder (1972, 1975, 1977a, 1977b, 1977c, 1979, Note 1; also Shweder and D'Andrade, 1979, Note 2) critique of multibehavior personality traits (Lamiell, Foss, & Cavenee, p. 59)? Does the research show that people have personality traits consisting of broad clusters of covarying behaviors, or that the widespread belief that people have such traits is a codification of accumulated behavioral experience (Lamiell, Foss, & Cavenee, p. 69)? I think not.

A major goal of personality classification is to discover a parsimonious set of dimensions (extroverted versus introverted, permissive versus nonpermissive, dependent versus self-reliant) for validly predicting individual differences in one context from knowledge of individual differences in another context. Adequate personality classifications are parsimonious; they are "founded on attributes which have a number of other attributes correlated with them . . ." (Gilmour, 1937). Adequate personality classifications

are also valid; they summarize the relationships of co-occurrence, opposition, and independence among items of behavior, and thus provide an inductive warrant for cross-contextual inferences (e.g., men who get angry when a woman cuts in front of them in line are more likely than other men to get angry when a woman contradicts them in an argument; "dependent" children are more likely than other children to seek help from peers in the playground, seek attention from adults at home, cling to their parents' "apron strings" in the kitchen, etc.). The analysis of absolute difference scores within single protocols plays no part in this taxonomic enterprise.

Most classifications of individual differences in the personality literature are indeed parsimonious; typically a large and unmanageable number of behaviors are reduced to a relatively short list of underlying factors, trait clusters or syndromes. Unfortunately, most of these parsimonious personality classifications are derived from memory-based assessment devices. It is unfortunate because the primary finding of the systematic distortion position is that the correlations taken from memory-based ratings cannot be considered valid evidence for the objective existence of proposed personality factors, trait clusters or syndromes. (Note again: To say that one does not trust the correlations *among behaviors* discovered on memory-based tests does not imply that people can only see what they expect to see or that the ratings made on any individual subject for any individual item are entirely invalid. Twenty or thirty percent error variance is enough to permit moderate size illusory correlation to occur.)

The systematic distortion position is a critique of the broad interbehavioral inferences that memory-based classifications invite us to draw; the critique suggests that the homogeneous multibehavior factors, trait clusters, and syndromes of most memory-based personality classifications will be difficult and often impossible to induce from behavior observational evidence. As one shifts from memory-based ratings to immediate scorings of behavior, the simple main effects and global factors of most personality classifications disappear into complex person-, context-, response-mode interaction effects (see e.g., Newcomb, 1929, 1931; Raush, Dittman, & Taylor, 1959; Raush, Farbman, & Llewellyn, 1960; Sears, 1963; Mischel, 1968; Moos, 1969; Yarrow & Waxler, 1976). The child who is more likely than others to seek help from his peers in the playground is not typically the child who is more likely than others to seek attention from adults at home. Individual differences in one context do not seem to generalize very widely.

Finally, Lamiell, Foss, and Cavenee (p. 69) advocate a "modification and development" theory of conceptual schemes, and deny

the relevance of Shweder's (1975, p. 479) concern for the "discrepancy between mental associations and behavioral connections." For example, Shweder asks: "How can our schemes for classifying people, our conceptual dimensions for describing one another, fail to be more or less accurate inductive generalizations about behavior and at the same time continue to be part of our linguistic and cultural inheritance?" Lamiell, Foss, and Cavenee seem to read this type of question as if it were a call for research on why people see only what they expect to see, which it is not. The question concerns the ontological status of cultural categories, and, at the moment, it seems to me that the most promising answer to the question is as follows (see Shweder, Note 1): Everyday trait terms (e.g., industrious, responsible, honest, cooperative) are not deficient scientific categories. They are not *scientific* categories at all. They were not designed to "map" what goes with what in conduct. This is why they do not undergo modification in the face of disconfirming evidence.

There is a widespread assumption in personality psychology, apparently shared by Lamiell, Foss, and Cavenee, that everyday trait terms were designed to serve the needs of man-as-scientist, and that trait terms exist primarily to summarize and encode nature's regularities. While it is true that social scientists and laymen have (mis)appropriated our cultural trait lexicon for scientific use (e.g., to help draw inferences about what goes with what), it does not follow that this is the use for which our trait lexicon was designed. For example, trait labels serve many rhetorical, persuasive, and regulatory (i.e., nonscientific) functions in our lives, such as inspiring and proscribing conduct ("be courageous"; "stop being so dependent") and mediating the way we are appraised by others.

In other words, the persistence of everyday personality "theories" (a revealing misnomer) may be unrelated to their truth or falsity, or to any scientific criterion. One should not expect our trait lexicon to adapt, evolve, or go away simply because the semantic connections and conceptual associations among trait categories fail to generate valid predictions about what correlates with what across individual differences in conduct. Nor should one doubt that our trait lexicon fails to yield valid interbehavioral predictions simply because it has not gone away.

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