THE BEHAVIOR–COGNITION DICHOTOMY

There has not been, nor is there likely to be, a fusion of behavioral with cognitive solutions to the same psychological problems. Neither will a behavioral nor a cognitive solution be eliminated in favor of the other regarding social phenomena. To date, our theories have been conceptually solidified within the environment–organism polarity so that our epistemology tends to favor one or the other. It is no wonder that the mind–body dichotomy has followed us for over two thousand years. Even though we accept the idea that physical evolution is a function of the conditions of survival presented by the environment, the finite and definite way that the human body operates requires that we, at least momentarily, separate it from the changing environment in which it resides. In addition, the social scientist as observer participates in the very phenomena which she seeks to explain and that participation confounds method and epistemology. The assault by the deconstructionists on extant models of social inquiry broadens the issue of how to obtain useful information beyond that concerned with methodological problems. As we have seen in earlier chapters, many theorists have insisted that social context is at the core of understanding social action. With this emphasis, the history of a functioning group provides the primary material which allows for comprehension of both the individual and the group's collective behavior. The methodologies needed to comprehend this historical context are fundamentally hermeneutic in nature. Rhetoric and interpretive group history become more crucial to understanding than experimental method. The risk in favoring these methods over the experiment is that one loses the deductive certainty contained in experimental

method. Such a loss disallows the possibility of utilizing any form of the hypothetico–deductive system to build successful theory. If, as I believe I have shown, the centrality of group history usually, but not always, prevents the building of hypothetico–deductive systems to explain social activity, then the loss is inevitable. However, an historically oriented interpretation of group activity is, at best, only one among many possible rhetorically sound explanations. There is no exclusivity in the interpretation of any phenomenon. However, the historically oriented interpretation of group behavior may be the most effective way of explaining social activity.

As we have seen, deconstructionists have concluded that all explanation is interpretative, that is, textual, including the pronouncements of experimental sciences. I have argued, however, that the conclusions of science are fundamentally different from all other modes of inquiry because they are more successful in structuring people's beliefs than are any others. We have seen that the application of a strict scientific approach to explaining social activity is not possible. Consequently, we are left with rational, interpretive means of making sense of why people act the way they do toward other people. This does not mean that all interpretations of social activity are equally valid. Logic and occasional reference to scientifically confirmed fact eliminate some such interpretations. If I were to declare that people with pleasant dispositions were sent to the earth directly from the sun, few would heed me. They would most likely argue that (1) human beings could not live in the sun's climate and (2) that in any case they could not be transported from the sun to the earth. Other less fanciful explanations of certain social activity could be eliminated in a similar manner. Conversely, if I were to present a well-researched history and were to make direct observations over a lengthy period of time concerning the customs of a group, I would most likely be listened to with some attention. In short, it should be obvious that all interpretations of the same social phenomena are not equally valid even though it may be difficult to demonstrate this inequality in accordance with sound scientific and logical principles.

Harré and Gillett (1994) have argued for what they call a "discursive psychology" in interpreting social phenomena. Systems depending upon behavioral formulations are rejected as irrelevant to the hermeneutic process that emphasizes a discursive psychology which incorporates contemporary approaches such as ethomethodology, social constructionism and ethogenics ("study of the genesis of meaningful conduct or accountable behavior," p. 7). Their rejection of pre-Skinnerian forms of behaviorism follows the often repeated and quite valid criticisms discussed above. Skinner, and therefore behavior analysis, is not considered at all except to mention that Skinner argued that some types of mental activity were classifiable as behavior. Harré and Gillett consider cognitive psychology which depends upon computer

modeling as the first incomplete attempt at explaining social discourse. Harré and Gillett believe that there is a considerable discrepancy between formal computational processes and actual human thought and decision making. They argue for a hermeneutic or second cognitive interpretation of human behavior with an emphasis on its content rather than on the process of its acquisition. Harré and Gillett also discuss the limitations of the experiment in its inability to reflect the interpretation of social contexts and the behavior of its subjects. They propose to examine social discourse to discover the motives and rules that people follow when interacting with one another in specific situations. The "self positioning" of the subject is critical. Mind and attitude arise from discourse with others and therefore reflect in part the social order and agreements people make with one another. In short, Harré and Gillett's discursive psychology shifts the research emphasis away from the traditional focus on brain states and behavior to the individuals' interpretation of their perception of the nature of their own existence in its fullest sense. Although not discussed by the authors, this discursive position does not, logically or otherwise, require the elimination of the experimental method and hypothetico–deductive theory building as ancillary activities.

Harré and Gillett compare the ontology of discursive psychology to the ontology of Newtonian physics and the epistemologies of those psychological approaches derived from it. The setting for the Newtonian system is space and time, and the subject matter is things and events considered in causal relationships to one another. Arrays of people are the settings, speech acts are the subject matters, and rules and story lines are the relationships for discursive psychology. Intentionality and verbal representation are central to this approach. In discussing intentionality, the authors caution against the creation of fictitious and, therefore misleading, mental entities. For example, instead of saying NN has mastered the use of numerals we can say NN has acquired the concept of number. Though the terminology of concepts is useful, this terminology is dangerous in that it tends to suggest that there is some mysterious entity, "the concept of number," which NN now possesses. This is one of the points repeatedly made by behavior analysts in their analysis of psychological theorizing, that useful explanatory terms need to refer to an observable behavior such that there is no excess meaning implied in the way such terms are used. In reference to intention, as we have seen in Chapter 3, either current or past behavior needs to be specified such that behavior is the meaning of the intention. If I say that I intend to go to the movies tomorrow, even though it is not necessary that I actually do so in order for such a statement to be legitimately called an intention, it is only meaningful when it refers to the behavior of actually moving in such a way as to bring me into a movie theater. In short, the intentional statement refers to, and only to, potential behavior, realized or not, and is an instance of

another form of behavior that we call "verbal." There is no difference between the discursive and behavior analytic positions on this point although this is apparently unrecognized by Harré and Gillett (1994).

Emphasis on rule-following as a central component in discursive analysis reintroduces an issue discussed in Chapter 2 on the behavior analytic approach to verbal behavior where rule-following in language usage was thought to be reinforced by consequences in the language community. The discursive position holds that words are used in a certain way because that usage is "socially enforced." We are not free to use words in any way that we choose. We recognize this with the reaction of listeners when one calls a cat a dog, for example. The informality and context-dependence of language, rather than its formal structure, is emphasized. Since the meaning and consequent use of words are dependent upon social group context, there is a danger that particular words and phrases used to interpret the physical and psychological worlds may become reified. We have seen how explanatory words such as "mind," "concept," "attitude," etc. can be used to refer to processes or objects for which there may be no referent. Verbal communities often make mistakes about how the world operates because customary explanations are mostly developed from casual observation and even more casual reasoning. The whole point of science is to create a system of observation and reasoning that minimizes the probability of making such mistakes. The very universality of science is, as has been suggested earlier, non-cultural and therefore not dependent upon particular group processes of interpretation and evaluation. This having been said, the discursive position is essentially correct in its contention that to understand social process one must enter into the discourse and therefore the social content of a particular group because universal generality is not possible regarding the understanding of *social* issues. Even if a social group's interpretation of the nature of the physical world around it seems incorrect from the point of view of a scientifically oriented Western observer, these seemingly incorrect interpretations must be fully understood if one is to make successful predictions regarding the behavior of group members. Explanation of the physical world is universal. Explanation of the social world is particularistic because people are reinforced to believe what they do and to use explanatory language in the way that they do by the consequence of this behavior on other members of their community.

Conclusions

I. Over the last thirty years the theoretical attempts to explain human social behavior have fitted into either the behavioral or the cognitive frame of reference. A virtually separate intellectual society has grown with the

development of behavior analysis. The members of that society frequently attempt to translate the terms and concepts of the various cognitive positions into a behaviorally compatible language. Conversely, those identified with a general cognitive emphasis form a much looser coalition of social, personality and language psychologists. The cognitivists have almost nothing at all to do with Skinnerian analytical techniques and concepts. The result of this one-sided attention is that non-behavior analysts frequently misinterpret various aspects of the behavior analytic position. Even though the behavior analysts have shown a lively interest in various cognitive conceptions, Skinner's (1977) general rejection of cognitivism led behavior analysts to construct arguments against cognitive interpretations of various phenomena. Their attention, however, has been largely unrequited on the part of cognitivists. As we have seen, postmodernism, in addition, has produced an alternative to the behavioral and cognitive positions.

II. The hypothetico–deductive method, leading to formal or semi-formal theory involving postulates, theorems and laws, can not be used to explain most social activity. That activity is largely a function of group context and history rather than that which can be captured by abstract principle directed toward either the single individual or the group considered as an active entity. Following from this proposition is the idea that formal experimentation regarding social activity is severely limited in what it can tell us about this social process since experimentation is the principal procedure of the hypothetico–deductive method.

III. Gathering information about social situations is best accomplished by observations of people reacting to one another *in situ* followed by interpretations of these observations that do not violate the rules of logic and scientific observation. Because communication via language is what characterizes a great deal of social interaction, its usage and mode of acquisition are of critical importance in understanding social discourse.

IV. Attitude along with its many derivatives such as, for example, attribution and cognitive dissonance, has been the major concept used to explain social activity. It is a concept based upon the virtually biological determiners of response generalizations to various perceptual experiences characteristic of all animals. It was concluded that this generalization phenomenon has survival value. Because of its centrality as a concept in explaining social activity, attitude serves as a specific example of an area addressed by social theory construction.

V. With the advent of deconstruction and postmodernism came the rejection of the scientific method as the sole or most important approach to understanding human social activity. Description of social activity from the point of view of the participant is emphasized as crucial for returning relevance to social explanation. This position functions as a reasonable correc-

tive to the various failures of the hypothetico–deductive approach, as well as to the failure of more general scientific analytical approaches, to understanding social activity. However, there is a problem shared by both the deconstruction and more general postmodern positions. Lumping natural science together with all or most other interpretive schemes is fallacious because science's effect on people's beliefs is different from that of any other interpretive system. In short, the scientific system is the opposite of any other interpretive system because it seeks, sometimes with great success, to eliminate interpretation.

VI. However, in view of point I above, the general experimental approach to social phenomena is doomed to failure because people create their social worlds regardless of how inconsistent with good scientific principles those worlds may be. The social scientist is required to absorb and interpret a social world in order to begin to understand the patterns of behavior expressive of it. A prime example is trying to understand those behaviors associated with a belief in a personal god even though all scientific sub-disciplines such as physics, chemistry and biology do not consider the issue.

Verbal and other forms of social activity have critical, non-experimentally examinable histories (Lana, 1995). These histories need to be described. By so doing, our observations will shift from the process of acquisition to the content of the specific historical activity in the verbal–social community. For example, we can describe whatever African–American resentment toward the larger society that we may find by referring to current societal reinforcement patterns. African–Americans cite instances of whites crossing the street to avoid them, or of police stopping their vehicles for no apparent reason. These instances undoubtedly reinforce the behavior that we label "resentment" as it appears in all its forms. Can we fully describe African–American resentment toward established society solely by reference to these current reinforcement patterns? Obviously we cannot. A cultural history is relevant as well. By attending to the description of historical social patterns, we bracket discussion of how the process of acquisition of this resentment occurs in the present. Instead we focus on what behavior has been reinforced over an extended period in the terms directly descriptive of the social situation.

The description of a social event made by a disinterested observer and that made by a citizen–participant of the event will usually not be the same. Societies create myths that are often, but not always, behavioral prescriptions for their members, but almost never for the disinterested (scientific) observer. Consider for example, the frontier, self-sufficiency myth of America, the elan vital of Henri Bergson and the French during World War I, and the idea of the *Übermensch* of Nazi Germany. All such myths can be taken, in part, as prescriptions for behavior that characterized a community

during a particular historical period and that still may have manifestations in today's society. Objective observers always attempt to debunk myth and look for the actual reasons why people act as they do. However, believed myths are often real in their consequences as we know only too well from historical circumstances.

As with most long-lived theories, behavior analysis and the various cognitively oriented theories will not disappear. There is nothing to replace them. There is nothing to replace them because either (1) they have some truth-value and/or are useful, or intrigue us, or, perhaps, (2) we have reached the end of our abilities to understand ourselves. Postmodernism in its deconstructive form has acted as a corrective to the weaknesses of both the behavioral and cognitive theories. It has done so not by rejecting them, but by placing science as a whole in the collective of various interpretations of human existence. It has not given science its usually preeminent place in the pantheon of epistemologies. Postmodernists may be correct in their replacement of experimental science by various hermeneutic contexts for explaining and understanding social activity, but they are not correct about the text of the natural sciences which, I have argued, remains epistemologically separate from all other explanatory forms.