# SCIENCE AND THE ATTITUDES: A REPLY TO SANFORD

Lynne Rudder Baker University of Massachusetts, Amherst

Explaining Attitudes was not intended to be hostile to science. Its target is what I called the Standard View, a conception of the attitudes that is held almost universally. The heart of the Standard View is the thesis that beliefs (and other attitudes), if there really are any, are brain states in this sense: Corresponding to any genuine, nontacit belief that a person has, there is a particular brain state. The Standard View invites a certain kind of scientific investigation of attitudes: For any putative belief, find one or more brain states ("distributed" or not) that correspond to it. It is this use of science (along with scientism) that I find misguided, not science per se.

What divides the Standard View and my alternative, Practical Realism, with respect to science is not that the Standard View considers science to be relevant to the attitudes and Practical Realism considers science to be irrelevant. Rather, what divides the two approaches with respect to science is that the Standard View takes beliefs to be like physical kinds, such as diamonds or water: To understand water, find its molecular structure. I rejected the analogy between water and belief in favor of another one: Horses couldn't win races unless their legs had certain states, but winning a race is not identical to, nor does it consist in, a pattern of leg states; similarly, people couldn't have beliefs unless their brains had certain states, but having a belief is not identical to, nor does it consist in, a pattern of brain states. This no more implies that neurophysiology is irrelevant to understanding attitudes than it implies that horse physiology is irrelevant to understanding winning races. But it does imply that the use of science to find neural items to identify with beliefs is off the mark. And it does imply that neurophysiology is not determinative of the nature of belief—but there is a lot of room between "not determinative of" and "irrelevant to."

Of course I agree that particular commonsense explanations of behavior may be falsified by the discovery that the subject has a brain tumor, or Alzheimer's Disease. Of course I agree that psychopharmacology, even before Prozac, was making strides in controlling moods, attitudes, and behavior. Everybody knows that changes in the brain (after ingesting LSD, say) make for changes in attitudes and behavior. But even if neurophysiology could predict when someone will start having paranoid beliefs in general, I am doubtful that the difference between believing that one's

#### **AUTHOR'S NOTE:**

Please address all correspondence to: Lynne Rudder Baker, Department of Philosophy, Box 30525 Bartlett Hall, University of Massachusetts, Amherst, MA 01003-0525.

### **BAKER**

neighbor is a space alien and believing that one is being followed by a federal agent can be discerned in neurophysiological terms—and the difference between the beliefs is important if we are trying to understand someone's behavior. My point was not that neurophysiology is irrelevant to understanding human activity, but that it does not have the relevance assumed by the Standard View.

If, unlike Quine, we allow intentional sciences—for example, the social, political, and physiological sciences—then I am quite sanguine about the contribution of science to understanding human activity in terms of attitudes. But these are sciences whose taxonomies make reference to intentional phenomena that we have no idea how to understand in nonintentional terms. And unless and until we do, Sanford's (RMT)—entailing that everything that can be explained can be explained by physics—seems to me hardly more than a fond hope.

In response to my arguments against eliminative materialism, Sanford suggests that no one is an eliminative materialist any more. But the thesis of a recent article that I discussed in detail is this: "If connectionist hypotheses . . . turn out to be right, so too will eliminativism about propositional attitudes." To say, with Sanford, that "the current projects" of "philosophers who compare beliefs to ghosts" seem "neither to assume nor to presuppose the elimination of the mental" (p. 183) is to say that the eliminativists do not act on the views they profess, not that they have been converted.

Finally, Sanford discusses at some length my use of an argument about "screening off" that I put in an objector's mouth. Sanford says, "This is a dangerously confused argument. Baker's reply exploits rather than corrects the confusion" (p. 185). Sanford's criticism seems to ignore the dialectic of the situation. When I supposed that someone might hold that if Property A is screened off from an outcome by Property B, then Property A is not really explanatory of the outcome, I did not just invent a confused argument for my opponent. Consider what Wesley Salmon (1984, p. 44) calls the "Statistical Relevance" model of causation (S-R): "A factor that has been screened off is irrelevant, and according to the definition of the S-R basis (condition 7), it is not to be included in the explanation, A falling barometer does not explain the storm." My point, with which Sanford agrees, was that one could not deny causal relevance to (nonpsychological) intentional properties merely on the ground that they are screened off. If Sanford wants to use "[s]creening off [to] reveal causal structure," that is fine. But it is rather beside my point, which was to defend the casual relevance of certain properties against the (not unlikely) objection that they had been screened off.

In sum, I think that Sanford has mislocated the crucial difference between the Standard View and Practical Realism. In his last paragraph, Sanford seems to suggest that I would resist saying that attitudes and nonattitudes can have positions in the same causal structure; on the contrary, in fact, I quoted Hume's famous "connected chain of natural causes and voluntary action" (Baker, p. 234). Sanford continues: "Can attitudes and neurophysiological states have positions in the same causal structure? The Practical Realist thinks that learning about any such structures will contribute nothing to the understanding of our everyday cognitive practices" (p.

## REPLY TO SANFORD

186). The Practical Realist thinks no such thing. I've already suggested that brain tumors and attitudes can have positions in the same causal structures (or, as I prefer to say, causal pattern). Far from disagreeing with Sanford when he says that "one can abandon most of the Standard View without regarding science as irrelevant to understanding attitudes and how attitudes explain" (personal correspondence, July 26, 1995), I would go farther: One can abandon *all* of the Standard View without regarding science as irrelevant to understanding attitudes and how attitudes explain.

## REFERENCES

- Salmon, W. (1984). Scientific explanation and the causal structure of the world. Princeton, NJ: Princeton University Press.
- Baker, L. R. (1995). Explaining attitudes: A practical approach to the mind. Cambridge, England: Cambridge University Press.
- Sanford, D. H. (1996). Demolishing the standard view. Behavior and Philosophy, 24, pp. 181-186.