A Response to Hardin and Bharati

Robert J. Wolfson

Hardin has two general and several specific concerns: His general concerns are these: (1) The introduction of a social science lexicon through which extant theories can be restated and new theories constructed will probably not foster significant theoretical advances. (2) For social science, formalization may be one step short of ossification.

I would not argue that formalization is a magic key. I do not expect that by "putting on the glittering mask of natural science" I can "capture its explanatory power." Indeed, I agree that if the social sciences were to undergo forced formalization, they would become set in concrete. But what I propose is nothing of the sort. Rather, I suggest that social scientists be exposed to examples of what might be gained by the use of a specific formal language—that is, increased clarity of expression and the power to engage in logical analysis. Those who find a formal language a useful notion—either the general idea or the particular instance—might then start using it, or something like it. Those who don’t find a formal language useful would ignore it. If a formal language became sufficiently attractive to a sufficient number, it might become a standard medium of scientific discourse; if not, it would disappear. But the idea seems to some of us worth investigating.

Plato’s cautionary remark (a good theory must carve nature at the joints), which Hardin mentioned, seems appropriate for a field in which the practitioners can agree as to what and where nature’s joints are. But social scientists are less able to agree than those in some other fields. No doubt a particular formalization carries with it certain freight—implications as to where nature’s joints are assumed to be, and what they are. For those who agree on this matter, a particular formalization consistent with that agreement may be very useful. For others, a different formalization might be more helpful. But it is one thing to be faced with what Hardin calls “usefully elastic terminology,” quite another to be faced with mush. My collaborators and I have felt for a long time that mush is much more descriptive of the lexical state of affairs in the social sciences than is useful elastic terminology.

Turning now to Hardin’s particular questions: My collaborators and I
deal with belief in terms of the investigator's acceptance of some manifestation as sufficient grounds for his (the investigator's) concluding as to some state of belief by the observed. What is involved is not an assertion by us as to fact but a description of the grounds on which the observer or investigator will believe that a state of belief exists. Thus $F\text{-bel-}p$ may be read as *So far as the investigators can tell, individuals which have $F$ believe $p$.*

The $p$ in $F\text{-bel-}p$ is an object of the investigation. It is stated in the same language as are all other objects of the investigation. That is, $p$ is the object of, not a part of, formal scientific discourse. So $p$ is in this formal scientific lexicon only if the lexicon includes true descriptions of the objects of the investigation.

In speaking of revolution, the word *lawful* was used to refer to the explicit or implicit procedural constraints within which the organization is governed. It should be possible to describe (1) the process wherein agreement on these matters was arrived at, and (2) the content, in behavioral terms, of the agreement. So *lawful* is not a normative term but a descriptive one.

Bharati's remarks express, at great length and repeatedly, a far more fundamental concern—dismay, or anxiety, if I read him correctly. He seems uncertain as to whether what he does is science or art. Bharati appears to concur with the popular but erroneous notion that *science* is the most desirable label for a scholarly pursuit. Consequently his tactic is to modify this term so that instead of the phrase *social science*, he speaks of *idiographic social science*. This is a different view of science than the customary one. Who speaks of *idiographic natural science*? For Hume, and almost all other philosophers of science, the term *science* refers to studies whose objectives are the development of generalizations about natural phenomena and of something like causal laws. Clearly these are not objectives of Bharati's idiographic sciences.

Bharati's invocation of Gödel's theorem involves a misunderstanding of its implications. One can apply Gödel's theorem with equal appropriateness to arguments that (1) the natural sciences are an impossible project, and (2), as Bharati argues, the social sciences are an impossible project.

The dismissal of abstract treatments of empirical phenomena with the complaint that "they have little to do with actual people and actual languages" is simply a dismissal, and not a refutation, of claims about the utility of such concepts. By the same logic, quarks could be said to have little to do with actual matter and energy, and genes to have little to do with actual people.

In the final analysis the difference between Bharati and me seems to be that he believes either that there are no regularities in the social universe, or that the social universe is not analyzable in terms of abstract notions subject to rigorous logical manipulations; while I disagree with him on both these claims. Human social and individual behavior are part of the natural universe and should, in a very general sense, be capable of analysis in the same way as the rest of the natural universe is: not necessarily, to be sure, with electrodes, test tubes, or voltmeters but with abstractions which lend themselves to formal manipulation—with logical analysis and formal models.