## Jackson's Empirical Assumptions-

STEPHEN STICH AND
JONATHAN M. WEINBERG
Rutgers University

Frank Jackson has given us an elegant and important book. It is, by a long shot, the most sophisticated defense of the use of conceptual analysis in philosophy that has ever been offered. But we also we find it a rather perplexing book, for we can't quite figure out what Jackson thinks a conceptual analysis is. And until we get clearer on that, we're not at all sure that conceptual analysis, as Jackson envisions it, is possible. The main reason for our perplexity is that Jackson seems to be making some empirical assumptions about people's intuitions and the psychological mechanisms that give rise to them, though it is far from clear exactly what these empirical assumptions are. Moreover, on what is perhaps the most natural reading, he is making at least one assumption about which many cognitive scientists who study concepts have serious doubts. In the first of our two sections, we will elaborate this theme. Our goal, in that section, is not so much to criticize as to seek clarification. It is a great virtue of this journal's multiple review format that critics can pose questions to authors, and the authors get to reply. So we hope that in his reply Jackson will help us understand his defense of conceptual analysis by explaining more clearly what his empirical assumptions are; and if he is indeed making an assumption that many cognitive scientists would challenge, we hope he will tell us why he thinks that challenge is misguided. In the second section, our stance will be more critical. There is one empirical assumption about which Jackson is admirably clear and explicit. However, we think there is now good reason to think that this assumption is false.

## 1. Jackson's Assumptions About the Cognitive Mechanisms Underlying Intuitions

The goal of conceptual analysis, Jackson tells us, is to elucidate some of the philosophically important concepts that ordinary folk use. But, as Jackson makes clear, his talk about concepts is just shorthand for talk about the way

<sup>\*</sup> We would like to thank Hilary Kornblith, Eric Margolis, Shaun Nichols and Stephen Laurence for their helpful suggestions.

we use our words. "Our subject is really the elucidation of the situations covered by the *words* we use to ask our questions—concerning free action, knowledge, ...or whatever." (33; italics in the original) The central method used in the sort of inquiry that Jackson advocates involves "consulting intuitions about possible cases." (33) These intuitions are useful because

my intuitions about which possible cases to describe as cases of K-hood, to describe using the term 'K', reveal my theory of K-hood.... (37)

And that theory, Jackson maintains, plays a central role in guiding how we use the term 'K'. So by uncovering the relevant theory we can elucidate philosophically important concepts, like the concept of free action.

[W]hat guides me in describing an action as free is revealed by my intuitions about whether various possible cases are or are not cases of free action. Thus my intuitions about possible cases reveal my theory of free action... Likewise, your intuitions reveal your theory.... To the extent that our intuitions coincide with those of the folk, they reveal the folk theory. (31–32)

Jackson is under no illusions about the difficulties that this analytic project can sometimes pose. But he is confident that the project is doable:

Of course it may not be easy to come up with the right analysis. But the crucial point here ... is that our classification of things into categories ... is not done at random and is not a miracle. There are patterns underlying our conceptual competence. They are often hard to find ... but they must be there to be found. (64)

Now, as we read him, Jackson is making two very different empirical assumptions. The first is the very weak assumption that intuitions (or "our classifications of things into categories") are neither random nor miraculous. With *this* assumption we certainly have no quarrel. But Jackson also appears to be making the much stronger assumption that—at least for terms or categories likely to be of interest to philosophers—these intuitions derive from something that can plausibly be described as a *theory*. This is the assumption on which we will focus for the remainder of this section. But before we go on, let us pose our first question for our author: Frank, do you indeed assume that if K-hood is a philosophically interesting category, then intuitions about which possible cases to describe as cases of K-hood are subserved (or "guided") by something that can plausibly be described as a *theory*?

If, as we suspect, the answer is *yes*, then it should set off alarm bells among those familiar with the recent literature in cognitive science. For, while *some* researchers who study commonsense concepts and the ways in which ordinary folk classify things into categories would agree that commonsense (or "folk") theories guide our classificatory intuitions involving *some* terms or concepts, many researchers hold that our classificatory intuitions about *many* concepts are guided by cognitive structures that are very different from folk theories. In the rich empirical literature on concepts there is a wide

range of hypotheses about non-theory-like structures that might guide our classificatory intuitions, but since space is limited, we'll sketch just a single example—the so-called "exemplar" theory.

On this account, our classificatory intuitions about actual and possible cases are subserved by a cluster of exemplars, which can be thought of as detailed descriptions of specific examples of things in the category. On simple versions of the exemplar theory, categorization proceeds by running through the exemplars and assessing the similarity between each exemplar and the item to be categorized. If the similarity between the item and any exemplar exceeds some threshold level, the item is classified as belonging to the category. (All of this processing, of course, is assumed to be unconscious.) On more complex (and on our view more plausible) versions of the exemplar theory, it is not the case that all exemplars for a category are accessed when making classification judgments. Rather, the person's recent cognitive and emotional history serves to "prime" or activate a subset of the relevant exemplars, and it is only this subset that is used in generating the intuition. The person's recent circumstances also determine the degree of similarity that must be achieved before a positive intuition is generated. On this version of the theory, it is entirely possible that a person might have different intuitions about an item on two different occasions, because her recent circumstances had primed two different subsets of the exemplar space. One of us (Stich, 1993) has speculated that many of our moral intuitions may be subserved by a mechanism of this sort, where the exemplars might be detailed descriptions of particular cases of, say, just or morally admirable behavior. If this is right, it would help to explain the importance of myths and parables in moral pedagogy, since these stories can serve as the basis for building up stored exemplars. It would also explain the fact that people's intuitive moral judgments seem to be influenced by the sorts of factors that might prime one or another exemplar. We think it is worth investigating whether intuitions about knowledge, free action, causation and other philosophically important concepts might be subserved by an exemplar-like mechanism.

Now, by our lights, exemplar structures are not at all theory-like. It does not make sense to talk about the deductive or inductive consequences of a set of exemplars; nor to talk of inferential and explanatory connections between different components of that set. But such consequences and internal connections are part and parcel of theories, as we understand them. Also, of course, theories can be true or false, though it makes no clear sense to attribute a truth value to a set of exemplars. Nonetheless, since Jackson does not tell us much about what he takes a "folk theory" to be, it is possible that as he uses the term, exemplar structures *are* theories. Perhaps the best way to get clearer

See, for example, Smith & Medin (1981) and Komatsu, L. (1992).

on all this is to ask our author a few more questions: Frank, if people's judgments about K-hood are subserved by a priming-sensitive exemplar based mechanism, would you say that they have a *theory* of K-hood? If so, then what (if anything) does *not* count as a folk theory? If not, then you must be assuming that intuitions about most philosophically interesting concepts are not subserved by a priming-sensitive exemplar based mechanism. But that is a substantive empirical assumption; what evidence do you have for it?

## 2. Jackson's Assumptions About How Typical His Own Intuitions Are

In the previous section our goal was to encourage Jackson to clarify some of his empirical assumptions. However, one empirical assumption that plays a central role in Jackson's book needs little clarification. This is the assumption that, when consulting intuitions about possible cases of philosophical interest, Jackson and other philosophers can often simply rely on their own intuitions, since "often we know that our own case is typical and so can generalize from it to others." (37) It is our contention that this is a singularly implausible assumption and that it leads Jackson to make a host of further claims that are even more implausible and that largely undermine the interest of his project.

Before making our case for the implausibility of Jackson's assumption, let's consider just what is at stake. A point that Jackson makes repeatedly is that the sort of conceptual analysis he advocates is of very little interest unless the concept being analyzed is one that is used by ordinary folks. Here is how he makes the point with respect to the analysis of moral concepts:

As Lewis Carroll said through the character of Humpty Dumpty, we are entitled to mean what we like by our words. But if we wish to address the concerns of our fellows when we discuss the matter—and if we don't we will not have much of an audience—we had better mean what they mean. We had better, that is, identify our subject matter via the folk theory of rightness, wrongness, goodness, badness, and so on. (118; first emphasis added)<sup>2</sup>

As we've seen, Jackson is convinced that, in many cases at least, "we" can be confident that "our own case is typical"—that we can generalize from our intuitions to those of the folk, because we share pretty much the same folk theory. "Folk morality" is one domain where Jackson apparently assumes that the central elements of *his* theory are widely shared. Consider, for example, the following passage:

I have spoken as if there will be, at the end of the day, some sort of convergence in moral opinion in the sense that mature folk morality will be a single network of input, output, and internal role clauses accepted by the community as a whole. In this case we can simply talk of

See also p. 129, where Jackson makes much the same point in very similar words, p. 88 where he makes a similar point about the analysis of color concepts, and p. 31 where he makes the point again, this time focusing on the analysis of free action.

mature folk morality without further qualification. Indeed, I take it that it is part of current folk morality that convergence will or would occur. We have some kind of commitment to the idea that moral disagreements can be resolved by sufficient critical reflection—which is why we bother to engage in moral debate. To that extent, some sort of objectivism is part of current folk morality. (137; emphasis added)

Now, we are prepared to believe that the italicized claims correctly characterize Jackson's current moral theory, and perhaps they also correctly characterize the current moral theory of some of his colleagues. But we find it simply astounding that Jackson attributes these "objectivist" views to the "folk". Indeed, we can't help wondering whether Jackson ever talks to undergraduates, since a significant number of our undergraduates claim to be moral relativists. Moreover, we suspect, many people who are not convinced moral relativists (including both of the authors of this paper) believe that, in many cases at least, the religious convictions and moral views which people absorb from their culture are so powerful that no amount of the sort of "critical reflection" that Jackson has in mind will dislodge them. Jackson must be assuming that moral relativists and people like us who are skeptical about the power of critical reflection to resolve moral disputes are outliers who do not share the views of the folk. We're not sure why Jackson feels entitled to make this assumption—he never bothers to tell us. But our best guess is that he is relying on the claim that we are challenging: that "often we know that our own case is typical and so can generalize from it to others."

Obviously, this is an empirical claim, and Jackson acknowledges that a more empirical methodology can be called for to defend it. For he tells us, in the passage leading up to that claim, that he is

sometimes asked—in a tone that suggests that the question is a major objection—why, if conceptual analysis is concerned to elucidate what governs our classificatory practice, don't I advocate doing serious opinion polls on people's responses to various cases? My answer is that I do—when it is necessary. (36–37)

Since we are just the sort of philosophers who are inclined to ask that question, perhaps even in just that tone, we were both pleased and surprised to read that answer. How exciting to discover that one of the leading advocates of "armchair metaphysics" has come to think that philosophy should be an empirically-informed discipline! Alas, disappointment lurked right around the corner, when Jackson reveals what he means by "serious opinion polls":

Everyone who presents the Gettier cases to a class of students is doing their own bit of fieldwork, and we all know the answer they get in the vast majority of cases. But it is also true that often we know that our own case is typical and so can generalize from it to others. (37)

Jackson seems to be suggesting that when he presents Gettier cases to students in the classroom, it constitutes "a serious opinion poll." But anyone who accepts the importance of the basic methodological standards that prevail

BOOK SYMPOSIUM 641

in the social sciences will find this hard to take seriously. For, first of all, the participants in Jackson's polls are students at elite universities, and thus hardly a representative sample of "the folk." Moreover, students who take philosophy courses (particularly advanced courses) are a self-selected group, and there is no reason to think they are a representative sample of university students. In addition to the problem of sample bias, informal classroom polls also run a serious risk of experimenter bias, since they are conducted by an authority figure with strong antecedent beliefs about how the "experiment" should turn out. Added to this is the fact that typical classroom polls involve a public show of hands or some other public expression of opinion—a procedure which, as social psychologists demonstrated long ago, has a strong tendency to suppress dissenting opinions. (See, for example, Ross and Nisbett (1991), Ch. 2.)

What would happen if people's epistemic intuitions were polled in a way that avoided most of these methodological problems? Well, as it happens, we have some data. Inspired by Richard Nisbett's recent work suggesting that people whose cultural background is East Asian have very different "mentalities" from people whose cultural background is European (Nisbett et al., in press), and by Jonathan Haidt's demonstration that people in different socio-economic groups have systematically different moral intuitions (Haidt et al., 1993), we have been conducting a series of experiments (in collaboration with Shaun Nichols) aimed at determining whether people in different ethnic and socio-economic groups have systematically different epistemic intuitions. (Weinberg et al., forthcoming) Our experiments strongly suggest that they do. The details make for an intriguing story, which we think should be rather unsettling to philosophers like Jackson who think that the intuitions of high socio-economic status males, like themselves, who have advanced degrees in philosophy and whose cultural background is Western European can serve as a basis for generalizations about the intuitions of "the folk".

Since we're already close to our word limit, let us close with a single example. Subjects in one of our experiments were presented with written questionnaires that contained a number of epistemic intuition probes, including Jackson's favorite example, the Gettier case. Here is one of the probes that was used:

Bob has a friend, Jill, who has driven a Buick for many years. Bob therefore thinks that Jill drives an American car. He is not aware, however, that her Buick has recently been stolen, and he is also not aware that Jill has replaced it with a Pontiac, which is a different kind of American car. Does Bob really know that Jill drives an American car, or does he only believe it?

A "mentality" is a mutually reinforcing cluster of psychological processes (e.g., perception, memory, attention) and the beliefs, theories and values to which they give rise.

Not surprisingly, a substantial majority—74%—of subjects whose cultural background was European answered that Bob "only believes". But members of other cultural groups had dramatically different intuitions. 57% of subjects whose cultural background was East Asian and 61% of subjects whose cultural background was Indian or Pakistani answered that Bob "really knows."

Jackson concedes (indeed insists) that the results of his conceptual analyses will not be of much interest unless most of the intuitions on which they are based are widely shared by "the folk". It is our contention that Jackson has no good reason to believe his intuitions are widely shared, and that there is a growing body of evidence indicating that they are not.

## References

- Haidt, J., Koller, S. and Dias, M. (1993). "Affect, Culture and Morality, or Is It Wrong to Eat Your Dog?" *Journal of Personality and Social Psychology*, 65, 4, 613–28.
- Komatsu, L. (1992). "Recent Views of Conceptual Structure." *Psychological Bulletin*, 112, 500–26.
- Nisbett, R., Peng, K., Choi, I. and Norenzayan, A. (in press). "Culture and Systems of Thought: Holistic vs. Analytic Cognition." To appear in *Psychological Review*.
- Ross, L. and Nisbett, R. (1991). *The Person and the Situation* (New York: McGraw-Hill).
- Smith, E. and Medin, D. (1981). *Categories and Concepts* (Cambridge, MA: Harvard University Press).
- Stich, S. (1993). "Moral Philosophy and Mental Representation," in *The Origin of Values*, ed. by M. Hechter, L. Nadel and R. E. Michod (New York: Aldine de Gruyter) 215–28.
- Weinberg, J., Nichols, S. and Stich, S. (forthcoming). "Normativity and Epistemic Intuitions." To appear in *Philosophical Topics*, 29.