Eliminativism in the philosophy of mind is a position that almost everyone loves to hate, yet it has a tantalizing allure not unlike atheism and amoralism. To its proponents it seems the only scientifically respectable position to take; to others it seems daring to take science so seriously. I think it is to the credit of eliminativists to have raised the issue of the status and possible fate of psychological concepts. But I also think that the issue must be considered in a much wider context than that of the progress of neuroscience. Only from this wider perspective can we come to a fair appreciation of the conditions that legitimate or undermine our psychological concepts. I see this paper as one part of a larger investigation that I call "conceptual axiology": a study of the proper grounds for the evaluation of concepts.

The core of the eliminativists' critique is this: Our psychological concepts, such as "belief," "desire," and "intention," are part of a network of concepts that are used to articulate a theory about why people act as they do. This "folk psychology" is used to describe, explain, understand, and predict human behavior. Since it is a theory with scientific pretensions, it should be evaluated by the standards of the best science we know. And in that -the light of neuroscience—it has already to some extent turned out, and probably will to a large extent turn out, to be faulty and incomplete. The demise of folk psychology has only been so late in coming, compared to the demise of other folk sciences such as folk physics and folk medicine, because neuroscience has only fairly recently become as sophisticated as physics and medicine. Philosophers have taken issue with eliminativism on various grounds. I wish to discuss a range of concerns that I think are especially interesting and insufficiently appreciated. But I also want to acknowledge ways in which there may be some truth to eliminativism as well.

My basic concern is this: The concepts of folk psychology are not used only for their theoretical role in explaining and predicting human action (though they are used in that role, as the Churchlands have insisted), they are also used in deliberating and planning action. Thus, the purposes of science do not exhaust the purposes of folk psychological concepts. Hence, the standards of science may not be the only ones relevant for evaluating folk psychological concepts.

A position like this has been clearly stated by Jaegwon Kim:

The intentional psychological scheme - that is, the framework of belief, desire, and will - is one within which we deliberate about ends and means, and assess the rationality of actions and decisions. It is the framework that makes our normative and evaluative activities possible. No purely descriptive framework such as those of neurophysiology and physics, no matter how theoretically comprehensive and predictively powerful, can replace it. As long as we think of ourselves as reflective agents capable of deliberation and evaluationthat is, as long as we regard ourselves as agents capable of acting in accordance with a norm--we shall not be able to dispense with the intentional framework of beliefs, wants, and volitions. ("Psychophysical Laws," p. 386) (I do not know if Kim was articulating this view on behalf of Davidson, or for himself.) The view has its roots in Aristotle, Kant and Wittgenstein. I wish to elaborate this basic objection in some detail.

According to eliminativism, the proper psychological concepts are those necessary for an advanced neuroscience to explain and predict how and why people act the way they do. Insofar as people deliberate and weigh options, neuroscience will have to explain and predict that, too. But the concepts necessary to do that may not themselves suffice to perform the deliberations that are so neatly explained. For example, to deliberate it may be necessary to have a concept of the unity of the deliberating self, and a concept of freedom in choosing between options, concepts which in fact may not be necessary or useful to have from the outside to explain what is going on, or to predict what will go on, on the inside. It may, for example, turn out that a comprehensively adequate third-person perspective is unusable from the first-person perspective.

The eliminativist seems to be committed to the following standard: A process (such as folk psychology) involving a set of concepts (such as belief, desire, and intention) is legitimate only if the set of concepts necessary to engage in the process is a subset (though not necessarily a proper subset) of the set of concepts necessary to explain the process. It would be most effective if I could think of an analogy for which this standard clearly failed. Unfortunately, since "engagement" is a rare phenomenon in nature, enjoyed only by rational beings, the process in question threatens to be sui generis. Nevertheless, the standard seems implausible. It is unclear why engagement should be subordinated to explanation. This standard seems to betray an understanding of science that is in this case inappropriate: The scientist stands wholly outside the system to be studied—an isolated observer. Whereas, in fact, the scientist is herself a rational being. Scientists must deliberate in setting up experiments and choosing between alternative hypotheses. The practice of science itself cannot be ignored in applying so-called scientific standards to practices generally.

There is a further oddity about the eliminativists' view that concepts are to be evaluated solely in terms of their usefulness in constructing successful explanations: For most sorts of scientific theorizing we expect that the phenomena to be theorized about exists and carries on basically independently of the theorizing about it. The thing to be explained is a given. But this is precisely not true of human behavior if the eliminativists' standard for evaluating concepts is employed. The process of coming to understand human behavior, through neuroscience, is supposed to give rise to new forms of self-understanding, which would themselves, presumably, influence human behavior. Hence the process of theorizing about a phenomenon will, if the eliminatists are right, lead to changes in that phenomenon. This hardly qualifies as a standard case of scientific progress. It is not unlike the very problematic case of quantum mechanics in which the very act of extracting information about a system necessarily leads to a change in the system, because the information-gathering methods are so clumsy relative to the delicacy of the system being investigated.

I think we are now in a position to see why when we wish to evaluate certain concepts, such as our folk-psychological selfconceptions, we may not wish to limit ourselves to a concern with the accurate prediction and explanation of the phenomena covered by those concepts, i.e., human behavior.

If we are interested in evaluating our self-conceptions, there are a number of questions we might ask in addition to the eliminativists' question: what kinds of self-conceptions are most conducive to the accurate prediction and explanation of behavior? For example, we might also ask what kinds of self-conceptions are most conducive to: creativity? hopefulness and energetic engagement? making us transparent to one another? productive cooperation? unity of purpose? By asking these kinds of questions we come to see that our self-conceptions may be tied to, influenced by, and influential upon, a number of things in addition to their vertical relationship to our brains. There are a number of horizontal relationships to social practices generally.

The importance of these horizontal relationships can be brought out by considering some history and some anthropology. The eliminativists are so concerned to emphasize the stagnant nature of our folk psychology that they ignore respects in which folk psychology has clearly changed. There may be more and better examples of this, but I will focus on the one that I am most familiar with-the folk psychology of the Homeric poems. Arthur Adkins has done the most interesting and impressive work in comparing Homeric psychology with our own. By way of summary of his research he writes:

the Homeric poems...use language which suggests that Homeric man has a highly fragmented psychological, and also physiological, experience. Such words as thumos [spirit], kradie and etor [heart] are much more in evidence than the personality as a whole, and enjoy a considerable degree of autonomy. Similarly, there is little mention of the body as a whole, much of its parts; and these may be spoken of as initiating action in the same manner as thumos and similar psychological phenomena. (Indeed, the distinction between psychological and physiological phenomena is not relevant to the Homeric poems...) Again, the 'spectral balance' is frequently present as a psychological model of the passage from thought to action: the Homeric Greek says 'it seemed better to me...', not 'I decided...'. Furthermore, the gods are often portrayed as initiating human action by 'putting in man' a drive (or idea), which again suggests that Homeric man was highly aware of the spontaneous element in his psychological experience; and he is highly emotional, and distinguishes between his emotional responses in a manner unfamiliar to us. In fact, it might be said that Homeric man experiences himself as a plurality, rather than a unity, with an indistinct boundary. (From the Many to the One, p. 267)

In fact the portrait that Adkins paints of Homeric psychology has elements that seem likely to be reintroduced by a neuropsychological re-envisioning of our self-conceptions—a conflation of psychological and physiological, and a fragmentation of our imagined psychological unity. Is this sheer coincidence? It would be interesting to know why the Homeric people had the self-understanding they had, and why we have a different one. No doubt these are unanswerable questions. But here is one possibility: self-understanding arises originally out of rough neurophysiology, but the increasing importance and sophistication of society leads to gradual modifications. Adkins' own conjecture about why we differ from the Homerics has to do with the differing nature of society. The Homerics (and still to an extent the Classical Greeks) lived in a small scale society in which insecurity and personal involvement loomed large. The Homeric psychology was well-suited to that circumstance. With the decline of the *polis* and the ascendency of the nation-state in the Hellenistic period, the Homeric psychology became untenable and was gradually replaced, through the influence of Stoicism, with something like our own self-conception.

Whether or not this is correct, it suggests a way in which social factors can be relevant to the formation of selfunderstanding. Indeed, how could this be denied? Psychological concepts could be evaluated according to how well they suit people to live productive and satisfying lives in the social circumstances in which they find themselves. That would be the proper Marxist analysis: psychological self-conception is just an element of the ideological superstructure of an era. It is an epiphenomenon of the economic mode of production. This way of looking at it may seem excessively conservative with respect to existing social structures. Perhaps self-conceptions should have a socially progressive influence, and not be a mere dependent variable. But eliminativists seem to suppose, at the other extreme, that self-conceptions can be a completely independent variable in relationship to social structures. Marxists would hold that that it is a liberal illusion. I only wish to suggest that it cannot be completely independent.

Now for some anthropology. In making his famous "case against belief" Stephen Stich several times refers to the work of anthropologist Rodney Needham. Needham has argued (in *Belief*, *Language*, and *Experience*) that the concept of "belief" in English is not a natural category, and is not to be found in a number of other languages. Or perhaps it would be more accurate to say that a number of other languages carve up the psychological landscape in ways that do not precisely correspond to the English notion of belief. What does this show? Unless one is a chauvinist about English, this shows that there is nothing sacrosanct about our concept of "belief" and the folk psychology that is built up around it. But this surely does not show, or even remotely suggest, that folk psychology might be reformed under the influence of neuroscience.

Needham goes on to claim, what would be quite odd from Stich's point of view, that the concept of intention is a universal concept. Furthermore, Needham emphasizes the importance, for any concept like belief, of understanding the social-contextual background in making psychological ascriptions. This contextual sensitivity is completely foreign to the eliminativists' approach to generating a scheme of self-understanding. Finally, on the crucial point of how a scientific psychology would affect the deliberative functions of folk psychology, it is important to realize that even if other languages do not have anything exactly corresponding to the concept of belief, they do have a network of concepts that provide for deliberation in some way or other (unless the languages and cultures under examination are as far removed from us as the Homeric Greeks). Again we have to ask the question of why other cultures may have other folk psychologies? Though there may be many answers to this question, none of them definitive, they will all have to acknowledge the relevance of varying social and physical circumstances. Again we are reminded of the importance of relationships other than the vertical relationship to neuroscience.

The elimitivists may not wish to deny these other relationships, but simply claim that they should have no independent weight in conceptual evaluation: No doubt our self-conceptions are molded by all kinds of factors, but they *ought* to be molded only by the purposes of science. But why should the purposes of science have this kind of primacy in life? Why ought they to be the only influence on our self-conception? From a broad social context, I can see no defensible answer to this question. Alleged analogies with the evaluation of folk physics, folk medicine, and folk chemistry have no relevance precisely because no one has ever doubted that those enterprises were fundamentally scientific.

But perhaps the eliminativist can give a more narrowly philosophical reason for limiting the evaluation to success by the lights of science. Even if the concepts of folk psychology have deliberative purposes as well as explanatory ones, these two types of purposes are intimately connected. Deliberation is only interesting to us if it explains action, and it will do this only if it causes action. Thus, whatever account we offer of psychology must be such as to allow it to enter into the causal network which we understand by science. Thus science is the proper standard for the evaluation of psychological concepts. The topic of mental causation has been widely discussed. There are a number of responses to the eliminativist on this point. I wish to suggest one more. The concept of causation is not set in granite, any more than any other concepts, as the eliminativists are the first to remind us. Whether it will continue to be a fundamental concern to people, or whether it will be stretched in ways that allow it to accommodate the mental, are questions that we cannot now answer. Thus we cannot make the need to fit psychological concepts into the causal network, as we now understand it, the one and only criterion for evaluating such concepts.

Connected with the concern about causation may be a concern about realism. Perhaps a hard-headed scientific attitude is the only way to insure realism about the mental. Whether, after the eliminativists' reforms, the realism insured could properly be called mental realism is open to serious dispute. But in any case it is not clear why the preservation of realism must be an important motivation. Why is ascriptivism so hard to accept? Why must our self-conceptions be something generated by hard reality? Why can't we see them for the social constructs they so obviously are?

At best, the issues raised by realism and the problem of mental causation should be some among a number of factors relevant to the evaluation of psychological concepts.

I think a main assumption behind the eliminativists' treatment of self-conceptions is that science is a sort of value-free enterprise that can guide or judge concepts without being committed to any particular values. But we all know that is false. The value of scientific progress, and what it brings in its wake, is just one value among others--and the reform of human self-conceptions is not best viewed from this very narrow perspective. The last issue I wish to consider is not specific to eliminativism, but is relevant to many attempts to evaluate and reform our concepts and practices. I will call this the problem of proleptic theorizing. It is a problem that is common to eliminativism, Marxism, and some religions: What are we now to make of what is presumed will occur later? In particular, is the future supposed to have some sort of normative force on the present?

Many people would be willing to agree that neuroscientific concepts for self-understanding may replace the concepts of folk psychology sometime in the future. Let us even grant, for the sake of argument that, all things considered, that would be a good thing. But it does not follow that the concepts we have now are inappropriate for now, nor does it follow that it would be a good thing to try to change them now. Indeed, it is not even clear what it means to try to change certain concepts. Who is the "we" who would try, and what does it mean to "try"? Isn't conceptual change something that happens as a result of other things we do, rather than something that we do directly? Even within science, scientific revolutions do not occur by decision, rather they are a result of many individual and institutional conversions, which are propagated by a variety of social forces within the scientific community. Future conceptual change may make for good cocktail conversation and science fiction, but it is only a project for proselytizers, and no one enjoys their company.

A parallel dispute exists within Marxism over the role of the individual in history. Orthodox historical determinism holds that the communist revolution, and the resulting reform of human nature and self-conception, will occur when and only when the proper economic conditions occur. Direct revolutionary action is either futile or unnecessary. Revisionist Marxism holds that revolutionary activity will be useful when economic conditions are ripe, because revolutionary transformation is not an automatic consequence of those conditions.

If eliminativists are like orthodox Marxists, then they might as well just shut up about folk psychology and get on with brain research. If they are like revisionists, then they ought to give some consideration to what the factors are that tend to impede their revolution, as I have been insisting, and examine the price that would have to be paid to run over those factors. (Marxists infamously failed to do that.)

In fact, science enthusiasts have often overestimated the potential influence of science on ordinary ways of thinking. When the eliminativists point to the lessons of phlogiston and caloric fluid it is important to realize that those were never concepts of any kind of folk thinking. They were concepts of scientists, who eventually gave them up in favor of other concepts. No one doubts that psychologists might change the way they think about humans. The question is whether, or for what reasons, humans, qua humans, might come to change the way they think about things, in this case themselves. Lessons about this issue from the past offer less reason for enthusiasm. Our common sense notions of space, time and solidity have changed not at all, despite the fact that these notions, as understood by common sense, have no role to play in physics.

A more interesting and complex example of this sort of issue is the relationship between science and religion. Since the rise of science and its increasing ability to explain all phenomena, it would have been natural to assume that this would lead to the downfall of religion (at least within scientifically sophisticated societies). But this has not happened. Religion certainly does not have the predominance that it once had, but it continues to be a vital force within society nevertheless. Some see science and religion as in fundamental conflict with one another-atheistic scientists and religious fundamentalists tend to see it this way. But others do not see the two practices as inconsistent-including many religious scientists and scientifically knowledgeable believers. At the same time as religion lost its predominance, it also, no doubt, underwent fundamental changes. For example, some interpretations of it gave up their cosmological explanatory pretensions. Some might say that it thereby stopped being religion. But the fact that many people continued to call themselves religious while giving up those explanatory pretensions seems to tell against that interpretation.

Folk psychology may well evolve in the same way-giving up some of its explanatory pretensions, while possibly retaining others, and retaining other functions as well. But it is pointless to try to gaze into this crystal ball. Marx was generally quite restrained in his discussion of the future communist society, leaving its character largely undescribed. He was usually content to think of it as whatever social order would result from communal ownership of the means of production. We can only wish that eliminativists had such good sense.

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Works Cited:

A. W. H. Adkins, From the Many to the One: A Study of Personality and Views of Human Nature in the Context of Ancient Greek Society, Values, and Beliefs, Ithaca, NY: Cornell University Press, 1970. Patricia Smith Churchland, Neurophilosophy: Toward a Unified Science of the Mind/Brain, Cambridge, MA: MIT Press, 1986, pp. 395-400.

Paul M. Churchland, *Matter and Consciousness*, Cambridge, MA: MIT Press, Revised edition: 1988, pp. 43-49.

Jaegwon Kim, "Psycho-Physical Laws," in Actions and Events: Perspectives on the Philosophy of Donald Davidson, eds., E. LaPore and B. McLaughlin, Oxford: Blackwell, 1985.

Rodney Needhamn, *Belief, Language and Experience*, Chicago: University of Chicago Press, 1972.

Stephen Stich, From Folk Psychology to Cognitive Science: The Case Against Belief, Cambridge, MA: MIT Press, 1983.