Cognitive Suicide

Could it turn out that no one has ever believed anything? Underlying this question is the idea that a completed scientific psychology may impugn the commonsense conception of the mental, the framework in which concepts such as *belief*, *desire* and *intention* are embedded. If the commonsense framework is exposed as a "false and radically misleading conception of the causes of human behavior and the nature of cognitive activity,"[1] then a concept like *belief* may be as empty as the concept of phlogiston.

Although belief is an exemplary case, the issue is whether the commonsense conception of the mental, in a wholesale way, may be mistaken; if it is, then the entire framework in terms of which we describe ourselves and others as desiring, hoping, fearing, intending, supposing, speculating, imagining, hypothesizing, inferring, etc., may collapse. Thus, anyone who urges that the commonsense conception is eliminable incurs a considerable debt; he must show either that the functions served by the commonsense framework may be served in some other way or that those functions are themselves dispensable.

The far-reaching consequences of eliminating the commonsense conception extend to semantic issues as well. If no one has ever had a belief or intention, it is unclear how to interpret any inscription to be a claim that such-and-such, and, in particular, how to construe a claim advancing the view that no one has ever had a belief as even meaningful. In the absence of some indication of how meaning would be possible without beliefs or

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intentions, one who denies the commonsense conception of the mental is akin to a logician who takes the moral of the semantic and logical paradoxes to be that all logic is wrong, and just leaves it at that.[2] Or, to use another of David Austin's suggestive analogies, it is as if someone were to write on a blackboard: "The following sentences have no meaning or interpretation," and then, three or four sentences down, he were to repeat that same sentence. We would be entitled to be puzzled. We can hardly assess a claim that takes away everything we have to understand it.

This burden of proof is implicitly acknowledged by the philosophers who deny the commonsense conception of the mental when they mount extended discussions of the plausibility of their position. Here, I want to consider whether or not that burden has been successfully discharged, especially in the writings of Stephen P. Stich and Paul M. Churchland. There are many different issues that might fruitfully be joined—e.g., the accounts of belief ascription, arguments against functionalism, proposals concerning *de re* and *de dicto*—but these I shall leave aside to focus on a simple argument, which, I believe, may appeal to many.

The possibility that the commonsense conception of the mental "will have to go" (Stich's phrase) is entertained by Stich when he says that either the commonsense conception of the mental, which he construes as a kind of folk theory, will be "vindicated by scientific theory," or "[s]tates and processes spoken of in folk psychology are . . . mythical posits of a bad theory."[3] And Stich argues at length that it is a "serious possibility" that "ordinary folk psychological belief ascriptions will turn out, quite generally, not to be true."[4]

Similarly, Paul Churchland writes that the categories of the commonsense conception of the mental[5]

> appear (so far) to be incommensurable with or orthogonal to the categories of the background physical science whose long-term claim to explain human behavior seems undeniable. Any theory that meets this description must be allowed a serious candidate for outright elimination.

Implicit in these passages is a very general argument. I shall use the term 'scientific psychology' as a stand-in for the name of an explanatorily adequate theory of the mind, not yet developed, regardless of whether that theory uses the vocabulary characteristic of functionalism, neurophysiology, or something else. The general argument is this:

Argument A

  1. Either scientific psychology will vindicate (in a sense to be specified) the commonsense conception of the mental or the commonsense conception of the mental is radically mistaken.

2. Scientific psychology will fail to vindicate (in the relevant sense) the commonsense conception of the mental.

Therefore,

3. The commonsense conception of the mental is radically mistaken.

My plan is, first, to try to reduce the obscurity of argument A by discussing the commonsense conception of the mental and the ways in which a scientific psychology may be thought to vindicate or not to vindicate it. I shall argue that scientific psychology may well fail to vindicate the commonsense conception in senses suggested by Stich and Churchland. Nonetheless, I shall urge, the commonsense conception should not be abandoned. To support this position, I shall argue that those who entertain eliminating the commonsense conception have not succeeded in showing it to be an empirical theory, which may intelligibly be repudiated; then, upping the ante, I shall suggest ways in which denial of the commonsense conception may be incoherent.

Thus, I have two related aims. One is to show that those who entertain denial of the commonsense conception of the mental have not made that thesis intelligible. The other is to suggest that the defect in the arguments leading to a conclusion of such dubious intelligibility may lie, not in the prediction that science will fail to vindicate the commonsense conception of the mental, but rather in the assumption that science will either vindicate or eliminate the commonsense conception.

I. *The Commonsense Conception of the Mental*

What I am calling 'the commonsense conception of the mental' comprises those complex patterns of beliefs, desires, intentions and so on, which are the basis of our everyday understanding of human behavior and experience. The key feature of the commonsense conception is attribution of attitudes identified by content—believing that such-and-such is the case, intending to do one thing rather than another, fearing that a particular state of affairs may come about, and so on.

Content is typically attributed in English by 'that'-clauses, and this feature permits an ontologically and theoretically neutral way to distinguish one belief from another (or one desire from another, etc.). On the commonsense conception, one belief differs from another as the meanings of the 'that'-clauses of their attributions differ. Although just how the meanings of the 'that'-clauses are to be determined is a vexing theoretical question, for purposes here, I can bypass it and simply say that a weak sufficient condition for a belief that p to be distinct from a belief that q is that 'p' and 'q' have different truth-conditions. What makes this condition so bland in the

current context is that I shall be concerned only with narrow beliefs, beliefs that p, in which all the expressions in 'p' occur obliquely—that is, in which neither existential generalization nor substitution of co-extensive terms is freely permissible. The important point is that mental states that are not coherently identifiable by 'that'-clauses at all have no claim to being states of believing, desiring, or intending.

The commonsense conception of the mental has come to be thought of as a kind of folk theory, dubbed 'folk psychology.' Since I shall question the construal of the commonsense conception as an empirical theory, I shall avoid use of that term. Nevertheless, the core of what I am calling the commonsense conception coincides with the core of what others call 'folk psychology': definitive of each is the network of attributions of attitudes identified by content. Now, in what way could scientific psychology be thought to vindicate or to fail to vindicate the commonsense conception of mentality?

2. Reduction as Vindication

Although Churchland envisages a science that types psychological states in terms of neurophysiological properties, and Stich envisages a science that types psychological states in terms of "syntactic" properties, the two share a basic assumption: the psychological states that explain behavior are typed without regard to content.[6] Thus, vindication of the commonsense conception by a scientific psychology, so conceived, will depend upon how "comfortable" (Stich's term) a scientific psychology is with attributions identified by content.

Both Stich and Churchland consider two outcomes for the commonsense conception: either reduction (of a sort) or elimination. In neither case would scientific psychology recognize a property of believing that p or invoke beliefs or other attitudes. Roughly, the difference between reduction and elimination is that scientific psychology would reduce the commonsense conception if a sufficient number of statements licensed by the scientific psychology meshed with or matched up with or correlated with statements licensed by the commonsense conception; otherwise, the commonsense conception would be eliminated. So, although such a weak sense of reduction could be viewed as a kind of elimination, I want to distinguish between reduction and elimination, because on the views of Stich and Churchland, the propriety of attributions of attitudes hangs in the balance. Reduction would give a kind of warrant to attributions of attitudes; elimination would imply that all such attributions are false.

In this section and the next, I want to raise doubts about reduction as described by either Stich or Churchland. In the following sections, I shall

question the intelligibility of eliminating the commonsense conception. Together, these arguments suggest that reduction and elimination of the commonsense conception do not exhaust the alternatives.

On a syntactic theory of the kind advocated by Stich, psychological states are relations to uninterpreted sentence tokens. Stich stipulates that a scientific psychology must conform to what he calls "the autonomy principle," according to which "the states and processes that ought to be of concern to the psychologist are those that supervene on the current, internal, physical state of the organism."[7] According to the autonomy principle, the states of interest to scientific psychology have a "narrow causal role," in that molecule-for-molecule duplicates are in the same psychological states.[8] We now know little more about the character of Stich's syntactic states than that they conform to the autonomy principle; they are narrow causal states.

On the other hand, Stich argues that belief ascriptions are sensitive to the "pragmatic surround."[9] Thus, it is no surprise that Stich holds that a token of a given syntactic type may be a belief that p and that another token of the same syntactic type may fail to be a belief that p.[10] Indeed, Stich argues convincingly against the view that content is correlated with syntactic type: A "full narrow causal profile will not enable us to characterize the content of the subject's belief states nor to determine the semantic properties of sentences in his mental code." Or again: "It is simply not the case that the content or truth conditions of those mental state tokens to which content or truth conditions can be ascribed correlate with the syntactic type or narrow causal profile of the tokens."[11]

Nevertheless, Stich says, it "seems perfectly plausible to say that certain of these syntactic state tokens are, as it happens, beliefs that p." In that case, although predicates formed from 'believes that p' would not express the property of believing that p, they may be used, on occasion, to express truths. Such would not quite be a token identity theory for belief since Stich denies that the expression "'token of the belief that p' specifies some well-defined class or category." It is rather the view that "anything which, in a given context, may be appropriately described as a belief that p is identical with some belief-like syntactic state token."[12] So, Stich's best hope, his "modified Panglossian prospect," is for a syntactic theory that "postulates states many of whose tokens turn out to be describable as the belief that p, the desire that q and so on."[13]

But, in this case, it is difficult to see why syntactic tokens should be describable as beliefs *at all*. One may as well "vindicate" attributions of spell-casting to an accused witch by noting that quite often when the woman utters certain syntactic tokens, her hearers break out in a sweat and misfortune soon befalls them. The partial correlation between scientific descriptions of syntactic tokens, and descriptions in terms of spell-casting would

hardly justify a theory of sorcery. It is simply no vindication of the claim that certain women cast spells to say that scientific psychology "postulates states many of whose tokens turn out to be describable as" the casting of a spell. And no more is it vindication of the commonsense conception to say that scientific psychology "postulates states many of whose tokens turn out to be describable as beliefs that p."[14]

Without specifying conditions under which a given *syntactic token* may be *appropriately* described as a belief that p, Stich's modified Panglossian prospect offers no justification for ever describing any syntactic token as a belief at all. Thus, as far as Stich has elaborated his modified Panglossian prospect, it does not offer a clear alternative to Stich's darker suspicion that "ordinary folk psychological belief ascriptions will turn out, quite generally, not to be true."[15]

Churchland formulates a slightly heartier sort of reduction, one which requires at least a systematic correlation between generalizations concerning attitudes and generalizations concerning psychological states in the vocabulary of the scientific psychology. As Churchland construes theoretical reduction, a new theory reduces an old theory if the new theory, together with appropriate limiting assumptions and boundary conditions, logically entails a set of theorems which is "relevantly isomorphic" with claims of the old theory. The reducing theory is a "roughly equipotent *image*" of the reduced theory, which is "just the target of a relevantly adequate *mimicry*." If the reduction is "sufficiently smooth"—if, for example, many of the principles of the old theory find analogues in the new theory—the reduction may "sustain statements of cross-theoretic identity."[16]

Whether the commonsense conception is reduced by a scientific psychology or eliminated altogether is taken by Churchland to depend upon whether or not the mature science of the mind will "include, or prove able to define, a taxonomy of kinds with a set of embedding laws that faithfully mimics the taxonomy and causal generalizations of *folk* psychology."[17] It would seem to be a condition of the relevant mimicry that generalizations of the commonsense conception be at least materially equivalent to generalizations couched in the vocabulary of neuroscience.

Since such reduction is seen by Churchland to be the only alternative to outright elimination of the commonsense conception, consider the following variation on argument A:

Argument B

> 4. Either generalizations of attributions of attitudes identified by content will be materially equivalent to statements deducible from mature scientific psychology, or no one has ever had a belief or other attitude identified by content.

5. Generalizations of attributions of attitudes identified by content will fail to be materially equivalent to statements deducible from mature scientific psychology.

Therefore,

6. No one has ever had a belief or other attitude identified by content.

One may reasonably complain that mere material equivalence is still too weak to be called 'vindication' of the commonsense conception. (After all, even uniform regularity between ascriptions of spell-casting and scientific descriptions of neurophysiological states would not bring back witchcraft.) Nevertheless, I think it doubtful that even this weak sense of reduction will be forthcoming. Thus, I share Churchland's (and Stich's) suspicion that (5) may be true.

A thought experiment will tell against any systematic material equivalence between particular attributions of attitudes and statements describing neurophysiological or other narrow states. This is so because two individuals, in the same nonintentional states (whether "syntactic" or neurophysiological) and in the same physical environment, may still differ in their beliefs, construed as narrowly as possible.[18]

3. A Thought Experiment

Suppose that two combatants are brought to a Red Cross hospital. The two not only have fought on different sides, but are from different cultures. One speaks English, the other speaks only his native language—a mythical dialect, which, by chance, has an odd overlap with English. The non-English dialect is just like English with a single exception: The non-English dialect has a word that is phonetically indistinguishable from the English word, 'locusts,' but which any competent translator would render into English as crickets, because, among other things, it occurs in contexts which are unproblematically translated into English as 'The male x produces chirping noises by rubbing together parts of his forewings,' and 'No plagues of x's are reported in the Bible.' Just as the Spanish word 'burro' means 'donkey' and the Italian word 'burro' means 'butter,' so the English word 'locusts,' means 'locusts' and the mythical dialect word 'locusts' means 'crickets.' In all other respects, translation is homophonic.

The combatants have similar injuries in which each has lost his voice box; luckily, the hospital has artificial external voice boxes to which patients can be hooked up. Since the hospital does not have enough such devices, however, both combatants are attached to the same one. Each can activate the external voice box simply as if he were speaking naturally.

One day, while the combatants are recuperating in an atmosphere of excruciating boredom, the conversation in the hospital turns to the subject of insects. At exactly the same time, each of the combatants activates the artificial voice box, out of which comes a single token that sounds like "Locusts are a menace." However, only for the English speaker does the token express his belief that locusts are a menace; for the non-English speaker, the token expresses his belief that crickets are a menace. There is nothing about either token *per se* that makes it (the expression of) the one belief rather than the other.

With only a slight enlargement of the story, we may suppose that the machine is more than an artificial voice box, that it performs a portion of the patients' neural processing as well. That is, suppose now that the machine is activated, not by the muscles that would activate a natural, organic voice, but by certain configurations of neural firings in the brain. Now, if the patients activate this more sophisticated machine at the same time, their shared speech token is caused by a shared neurophysiological token.

We may imagine the combatants to be as alike as we please. For example, we may suppose that the combatants also have eye injuries, and that they can see only by being attached to a single machine that presents each with the same visual stimulation.[19] We may even imagine that the two combatants came to have their beliefs about locusts and crickets, respectively, under the same sort of (nonintentionally described) circumstances. Suppose that neither had seen or heard of locusts or crickets until he joined his guerrilla group. During training, each was exposed to illustrations of insects that might be encountered. Making demonstrative reference to exactly similar pictures, the instructor of each group, entirely independently of one another, said what sounded like "locusts," and then went on to give some information about the pictured insects, information which by chance pertains to both locusts and crickets. Both instructors may have pointed to their respective pictures and emitted the same sequence of sounds. Indeed, the training episodes by which each combatant acquired his beliefs may have satisfied all the same relevant nonintentional descriptions.

Nevertheless, there remain (intentional) differences between the two cases. One instructor intended to inform the recruits about locusts, the other about crickets. Locusts and crickets are sufficiently similar in appearance that visual stimulation provided by a single picture may equally well introduce a person to either type of insect; in any case, one may have beliefs about locusts in the absence of information about their appearance. Since both the combatants, as well as their instructors, are competent speakers of their respective languages, and since there is nothing unusual about acquir-

ing beliefs from what one is told and what one sees in pictures, it seems straightforward that one of the combatants acquired the belief that locusts are a menace and that the other acquired the belief that crickets are a menace.[20] The difference in their beliefs serves to illustrate the division of linguistic labor.

The example suggests that the hospitalized combatants may be in the same neurophysiological states (individuated either narrowly in terms of what is "in the head" or widely in terms of environmental causes). They are in the same physical environment; their relevant states are caused by the same environmental condition; they display the same linguistic behavior (nonintentionally described). Indeed, they may have been in the same sequence of mental states, described nonintentionally, all the way back to the acquisition of their beliefs and beyond. They may even be molecular replicas. Nevertheless, the English speaker, who has never heard of crickets, believes that locusts are a menace; whereas the non-English speaker, who has never heard of locusts, believes that crickets are a menace.[21]

The thought experiment shows that generalizations of attributions will not be materially equivalent to generalizations deducible from neurophysiology plus boundary conditions and limiting assumptions. For if they were, then predicates of the form 'x has a token T of neurophysiological type Y in context C' would be true of all and only those individuals of whom predicates of the form 'x believes that locusts are a menace' are true. However, the same predicates describing neurophysiological state and (physical) context are true of each combatant, but attribution of belief that locusts are a menace is true of one but not the other. Therefore, the candidate predicates are not even extensionally equivalent.

In the absence of the relevant materially equivalent statements, it seems doubtful that neurophysiology will "have the resources to conjure up a set of properties whose nomological powers/roles/features are systematic *analogues* of the powers/roles/features of the set of properties postulated by" the commonsense conception.[22] Lacking such "systematic nomological parallels," the commonsense conception will not reduce (in Churchland's sense) to neurophysiology.

If, as I have argued, Stich's modified Panglossian prospect offers no conditions under which a particular syntactic token is describable as a belief that p and when it is not, and Churchland's reduction fails, then (s) may well be true. (Such an eventuality would not disturb Churchland or Stich, who take the issue to be wholly empirical, contrary to the suggestion of my thought experiment.) In any case, if, as Stich fears, "the humanities, the social sciences, and the many social institutions which are so intimately interwoven with the conceptual framework of folk psychology"[23] are in any

danger from a scientific psychology at all, they will not be rescued by the kind of psychology envisaged by either Stich or Churchland.

But, (5) alone does not entail that there is anything amiss in the common-sense conception, or that no one has ever had a belief. (4) is also required for that bold conclusion. An interpretation of (1), (4) expresses the assumption that the commonsense conception will either be reduced or eliminated altogether. Thus, if (4) is true, and if my arguments against Stich's modified Panglossian prospect and Churchland's theoretical reduction are correct, then no token of the form 'S believes that p' expresses, or has ever expressed, a truth. If, however, the conclusion denying the commonsense conception itself turns out to be unembraceable, then we would have good reason to suppose that (4)—and with it, (1)—is false.

4. Is the Commonsense Conception an Empirical Theory?

Stich and Churchland have both argued that the commonsense concep-tion is an empirical theory, and as such, subject to replacement in toto by a scientific psychology.[24] To make such a suggestion plausible, they both offer historical analogies to show that the commonsense conception of the mental is no more secure than Ptolemaic astronomy. Just as no stone ever has sought its natural position in the earth, just as no celestial sphere ever has revolved around the earth at its center, just as no phlogiston ever has had negative weight, so, the argument goes, it may turn out that the com-monsense conception is radically wrong, and that no one ever has had a belief.

The natural way to describe these historical episodes is in terms of change of belief—from Aristotelian to Copernican cosmology, from alchemy to ele-mental chemistry, and so on. If the commonsense conception is false, how-ever, such natural descriptions are barred. If no one ever has had a belief or any other attitude identified by content, we can not truly say that people used to believe that the celestial sphere revolved around the earth at its center, but that they turned out to be wrong and now almost no one has that mistaken belief. But until the purported historical analogies are de-scribed in terms independent of belief, they contribute nothing to the plausibility of displacing belief. If one aims to undermine concepts like be-lief by means of analogies, one must provide relevant descriptions of the analogies which do not presuppose the very concepts to be undermined. No such descriptions are offered.

However, Stich and Churchland both have further arguments that the commonsense conception is a (would-be) empirical theory, subject to re-placement by a better theory. Stich supposes the commonsense conception to rest on empirical assumptions, disconfirmation of which he takes to be

fatal to the commonsense conception. He puts the most weight on a claim that "it is a fundamental tenet of folk psychology that *the very same* state which underlies the sincere assertion of 'p' also may lead to a variety of non-verbal behaviors," and he offers empirical evidence from self-attribution theory that this tenet is false. "[O]ur cognitive system keeps two sets of books" in a way allegedly inconsistent with the commonsense conception: "In those cases when our verbal subsystem leads us to say 'p' and our non-verbal subsystem leads us to behave as though we believed some incompatible proposition, there will simply be no saying which we believe."[25]

But this point hardly forces abandonment of the commonsense conception, any more than Kripke's puzzle about belief does. The discovery of puzzles generated by the commonsense conception presents a challenge to philosophers, just as discovery of logical and semantical paradoxes presents a challenge to logicians; to give up the commonsense conception in the face of them would be a drastic move with no more warrant than there is to give up logic.

Churchland likewise regards the commonsense conception as an empirical theory, which may be abandoned. His most potent argument is that the commonsense conception rests upon empirical generalizations. He argues that just as terms like 'acceleration' derive their meanings from their places in a network of lawlike statements, so too terms like 'believes' derive their meaning from their places in a network of lawlike statements. Churchland offers the following as an empirical law supporting action-explanations:[26]

(L)   (X) (φ) (A) (If [1] X wants φ, and

    [2] X believes that A-ing is a way for him to bring about φ under those circumstances, and

    [3] there is no action believed by X to be a way for him to bring about φ, under the circumstances, which X judges to be as preferable to him as, or more preferable to him than, A-ing, and

    [4] X has no other want (or set of them), which, under the circumstances, overrides his want φ, and

    [5] X knows how to A, and

    [6] X is able to A,

    then [7] X A-s.)

If (L) is an empirical generalization, it is false, even if the commonsense conception is generally correct. For it may have a true antecedent and a false consequent. Suppose that Jones, attending an APA convention, wants to get a job at State ([1]), and she believes that having a chat with the department head at State is a way to bring about her landing the job under the

circumstances ([2]), and she can't think of any better way to get the job ([3]), and she has no wants, under the circumstances, that override her want to get the job ([4]). At the smoker, a friend points out to Jones a man as the department head at State. Jones knows how to chat with the department head ([5]), is able to chat with him ([6]) and realizes that she is able to chat with him. (An extra clause, omitted by Churchland, is needed to insure that the agent realizes that she is able to do A.) Hence, the antecedent of (L) is satisfied. Yet, Jones fails to chat with the department head. Why? The friend has pointed to the wrong man, and Jones ignores the readily available head in order to chat with an aging graduate student at State, who quickly sees Jones's mistake but is having too much fun to let on.[27]

The simplicity and obviousness of this example suggest that our commonsense conception of psychology is not committed to any such generalization as (L) as an empirical regularity. If it were, then the commonsense conception would have been falsified long ago by people innocent of neuroscience. Moreover, the fact that disconfirmation of (L) is internal to the commonsense conception, with no appeal to scientific psychology, suggests that Stich and Churchland have underestimated the richness and complexity of the commonsense conception, which is worthy of more painstaking exploration than has been attempted by philosophers who are willing to reject it as a false empirical theory. In any case, neither Stich's nor Churchland's arguments show that the commonsense conception is an empirical theory, which may be eliminated in favor of a superior theory; the remaining considerations will strongly suggest that it is not.

5. Pragmatic Incoherence (1)

To deny the commonsense conception of the mental is to abandon all our familiar resources for making sense of any claim, including the denial of the commonsense conception. It may be thought that the image of Neurath's ship, being rebuilt at sea plank by plank, may be of service to those denying the commonsense conception. But on the contrary, the image works the other way. The commonsense conception can not be removed plank by plank; what is at issue is the entire framework of attitudes identified by content. If it is hazardous, as it surely is, to attempt to rebuild at sea a ship with a hull that may be seamless, it is all the more hazardous to undertake rebuilding with no replacement material available. Thus, at this point, simple advice to wait for the verdict of science is empty.

Now, with a measure of trepidation, I want to set out two ways in which denial of the commonsense conception may be pragmatically incoherent. Although the first kind of incoherence may be familiar[28] (though not, I think, sufficiently appreciated), the second may be novel.

The first way in which the view denying the commonsense conception may be pragmatically incoherent is this: If the thesis is true, it has not been shown to be assertible. If the view that no one has ever believed anything is true, its assertibility is problematic without some account of how there can be assertion without belief. Both Patricia Churchland and Paul Churchland have rebutted charges that if a certain thesis is true, it can not be asserted. Paul Churchland has aimed to rebut the claim that eliminative materialism—a corollary of the view that the commonsense conception is radically mistaken—is self-refuting. Here is how he sets out the argument that he intends to undermine:[29]

> [T]he statement of eliminative materialism is just a meaningless string of marks or noises, unless that string is the expression of a certain *belief*, and a certain *intention* to communicate, and a *knowledge* of the grammar of the language, and so forth. But if the statement of eliminative materialism is true, then there are no such states to express. The statement at issue would then be a meaningless string of marks or noises. It would therefore *not* be true. Therefore it is not true. Q.E.D.

Finding this argument question-begging, Churchland illustrates his point by presenting an argument against anti-vitalism, which, he claims, is both parallel to the above argument against eliminative materialism and obviously question-begging. The argument that he claims to be parallel is this:[30]

> The anti-vitalist says that there is no such thing as vital spirit. But this claim is self-refuting. The speaker can expect to be taken seriously only if his claim cannot. For if the claim is true, then the speaker does not have vital spirit and must be *dead*. But if he is dead, then his statement is a meaningless string of noises, devoid of reason and truth.

But the arguments fail to be parallel in two crucial respects. First, the argument against anti-vitalism has it that the thesis of anti-vitalism can not be asserted, on the assumption that the thesis is *false*; but the argument against eliminative materialism has it that the thesis of eliminative materialism can not be asserted, on the assumption that the thesis is *true*. The former is clearly question-begging; the latter is clearly not.[31]

Second, the pairs of imaginary disputants differ in the presuppositions that they share. The anti-vitalist would agree with the vitalist that being alive is a necessary condition for making a claim; he just differs in his account of what it is to be alive. The eliminative materialist, on the other hand, could not consistently agree with his opponent that having beliefs or other attitudes identified by content is a necessary condition for making

claims; the eliminative materialist is not offering a different account of what it is to have beliefs. He is denying that anyone has beliefs; the parallel to an eliminative materialist would be an anti-vitalist who held that dead men make claims. Therefore, the silliness of the argument against anti-vitalism has no bearing on the argument against eliminative materialism.

Churchland explains his rejection of the argument that eliminative materialism is self-refuting by claiming that it assumes "a certain theory of meaning, one that presupposes the integrity of [folk psychology]." But surely he is wrong. No particular *theory* of meaning is assumed; issues that divide theorists like Frege, Davidson, Kaplan, Montague, and Grice are wholly irrelevant to the argument that eliminative materialism is self-refuting. What the argument against eliminative materialism assumes is minimal: namely, that language can be meaningful only if it is possible that someone mean something. This is a platitude, not a theory. It is clearly incumbent upon anyone who wants to deny the platitude to show how there can be meaningful language even if no one has ever meant anything, even if no one has ever intended to say anything.

But no theorist has even begun to show how language can be meaningful under such conditions. The claim of the syntactic theory that mental activity consists in relations to uninterpreted sentences just begs for an account of what those advocating the syntactic approach are doing when they write; without such an account, it is simply a mystery how the sentences that they write can have any more claim on us than do crevices etched into the Rock of Gibraltar by the weather.

Although Churchland has offered several "scenarios" in which he imagines the actual displacement of the commonsense conception by neuroscience, they all by-pass the question being raised here. For example, Churchland asks:

> How will such [post-commonsense conception] people understand and conceive of other individuals? To this question I can only answer, 'In roughly the same fashion that your right hemisphere "understands" and "conceives of" your left hemisphere—intimately and efficiently, but not propositionally!'[32]

At this level of description, the analogy is unhelpful since, as Churchland signals by his use of scare-quotes around 'understands' and 'conceives of,' one's right hemisphere does not conceive of one's left hemisphere at all; however complex the transactions between the hemispheres, they have not been shown to illuminate understanding. Not only does the idea of nonpropositional "understanding" remain mysterious, but a strictly neurophysiological account of understanding would seem to leave us in the dark about how anything, including putative denials of the commonsense conception, could have meaning.

To sum up: the first kind of pragmatic incoherence stems from the consequences for language of denying the commonsense conception of the mental. The claim denying the commonsense conception, if true, undermines extant ideas of language and understanding; so without a new account of how language can be meaningful in the absence of belief and intention, we have no way to interpret the claim denying the commonsense conception.

6. *Pragmatic Incoherence (2)*

The second way[33] that the view denying the commonsense conception may be pragmatically incoherent is this: If the thesis is true, it has not been shown to be formulable. In order to formulate any thesis, one must adequately describe a state of affairs that obtains if the thesis is true. To say that the state of affairs must be *adequately* described is partly (albeit vaguely) to insist that formulation of the thesis requires a measure of informative detail; it is thus to rule out uninformative descriptions, such as 'the state of affairs that obtains if the thesis is true,' and to rule out incoherent descriptions, such as 'the state of affairs that obtains if and only if it fails to obtain.' I shall argue that if the thesis denying the commonsense conception is true, then what obtains can not be adequately described. (I do not mean 'description' here as an action.)

What state of affairs obtains if the thesis denying the commonsense conception is true? In the absence of the scientific psychology that is to replace the commonsense conception, it is difficult to say much more than this: the state of affairs is one in which all attributions of attitudes identified by content are false. If all attributions of attitudes identified by content are false, then everyone who attributes such attitudes (i.e., everyone) is mistaken; they are victims of gross cognitive error. So, if the thesis denying the commonsense conception is true, the state of affairs which obtains is one in which everyone is currently in gross cognitive error. How is such cognitive error to be characterized?

On the commonsense conception, one makes a cognitive error if such-and-such appears to be the case when it is not the case—e.g., although the geocentric view of the universe turned out to be false, it did appear that the sun revolved around the earth. But, of course, the notion of its appearing that such-and-such is the case is as laden with content as the notion of believing that such-and-such is the case. So, if the commonsense conception, with its attributions of content, is false, the normal contrasts between appearance and reality can not be drawn.

Moreover, without attitudes identified by content, nothing has ever *seemed* to be one way rather than another. For its seeming to be the case that p is not understood or relevantly described without invoking attitudes identified by content; its seeming to one that she has beliefs is at least as

"contentful" a thought as simply having a belief. We could no more describe current error by saying that it wrongly seems to people that they have beliefs than by saying that people falsely believe that they have beliefs. So, if the commonsense conception is false, we are under no illusion that we believe one thing rather than another; indeed, without content, we are under no illusions at all.

If either Stich or Churchland is correct, then it would seem that the error that we all currently make—indeed, any cognitive error—will have to be describable wholly in terms of causal properties (syntactic or neurophysiological) and physical properties of the environmental context. I know of no specification of exactly what features determine a context, and I strongly doubt that there is a determinate set of context-fixing physical properties which can be specified once and for all. Although the absence of specification of exactly what features determine a context increases the difficulty of construing error in terms of inner states plus environment, let me briefly sketch the only two approaches to cognitive error that I see available to one who denies that there are attitudes identified by content.

First, lacking attitudes identified by content, one may make a cognitive error when one's mental states as identified by the scientific psychology (syntactic or neurophysiological) fail to "correspond" in the right way to states of affairs.[34] But how are mental states to be mapped on to states of affairs? Which correspondence is the right one?

Given only the syntactic or neurophysiological properties of mental state tokens and physical properties of contexts, any token may be mapped on to any state of affairs. A natural way to select an appropriate mapping—one that plausibly has a claim to securing truth—would be to identify mental states by content. But if mental states could be identified by content, then the commonsense conception would be (at least minimally) vindicated. Thus, I do not see how cognitive error can be explained, without invoking content, in terms of failure of correspondence between mental state tokens and states of affairs.

The second characterization of cognitive error, without presupposing attitudes identified by content, would be in terms of the causes of one's mental states. Cognitive error could then be understood in terms of nonstandard causal chains. To take an oversimplified example, snow's being white may cause, in some standard way to be specified, a certain mental state m, which in turn contributes to an utterance, "Snow is white."

But this proposal, too, has difficulties. It is unlikely that the notion of a standard causal chain can be filled out satisfactorily. Standard chains must be specified without presupposing attitudes identified by content; in this case, snow's being white—that very state of affairs, not the perception that snow is white—would have to cause m in standard conditions. But since

the mental state so caused can not be identified by content, it is entirely unclear how one could ever pick out just the right route to count as standard. Moreover, as the cricket/locust example indicated, two routes may be indistinguishable, as long as they are described nonintentionally, yet one may lead to a belief that p and the other to a belief that q, where 'p' and 'q' are nonequivalent. Finally, in many cases, a belief that p is not connected with the state of affairs that p in any obvious way.

What must be shown, and what has not been shown by anyone denying the commonsense conception, is how, in the absence of attitudes identified by content, scientific psychology can characterize cognitive error as error at all. So, on the one hand, if the thesis denying the commonsense conception is true, then we all are mistaken. But, on the other hand, from the point of view that denies the commonsense conception, there seems to be no mistake to be made.

To sum up: to formulate the thesis denying the commonsense conception, one must describe adequately the state of affairs that obtains if the thesis is true. At this point, the substance of the thesis is that no attributions of attitudes identified by content are true and that those who attribute such attitudes are in gross cognitive error. So, to describe adequately the state of affairs that obtains if the thesis denying the commonsense conception is true, one must describe cognitive error as error. But nothing seems describable as cognitive error in the absence of attitudes identified by content. Therefore, formulation of the thesis seems to presuppose the existence of the attitudes that the thesis denies. In that case, if the thesis denying the commonsense conception is true, it can not be formulated.

Thus, in light of the considerations just presented, it seems that we can neither understand nor assert nor even formulate the thesis denying the commonsense conception of the mental. This seems ample reason to deny the conclusions of arguments A and B.

7. The Upshot

Suppose that we do deny the conclusions of arguments A and B; since both arguments are valid, the premises of each argument can not both be true.[35] Since each second premise may well be true—since, that is, it is a real possibility that science will fail minimally to vindicate the commonsense conception—the culprit is likely each of the first premises. In that case, we should reject the assumption that mature scientific psychology will either vindicate or eliminate the commonsense conception of the mental. Less an empirical theory than a condition of intelligibility, the commonsense conception of the mental simply may not be an option for us.[36]

One need not be any kind of Cartesian dualist—certainly, Davidson and

Wittgenstein are not dualists—to hold that science is in no position either to vindicate or to eliminate the commonsense conception of the mental. Since cognition without content is empty, denial of the commonsense conception of the mental may be a kind of cognitive suicide that we are constitutionally unable to commit. Or so, as I should put it, it seems to me.

Comments

Charles Chastain

Baker asks: "Could it turn out that no one has ever believed anything?" I think that the right answer to that question is: "Yes, it could turn out that way, but it isn't going to, and we ought to be able to see now that it isn't going to, no matter what happens in the future development of cognitive science."

I do not think that an affirmative answer to the question involves any sort of pragmatic incoherence—here I disagree with Baker—but I do think that folk psychology could not simply *fail* empirically and be abandoned, like such now-defunct theories as witchcraft theory, phlogiston theory, and the caloric theory of heat. Part of the plausibility of eliminative materialism depends on an analogy between these empirically refuted theories and folk psychology, and I think that this analogy is a bad one which cannot survive a close look. I think that folk psychology is a "theory" only in a very loose sense, and that assimilating it either to bad, refuted scientific theories or to good, well-confirmed scientific theories is to misunderstand what it is, how we use it, what we use it for, and why it is so very useful. I believe that Baker and I are in essential agreement on this point.

I think that it is an open question what role the notions of folk psychology will play in a mature cognitive science, and I think that one live possibility is that they will play no role whatsoever. (I would bet against this outcome, but only on the basis of hunches that I will not attempt to articulate here.) I think that it is a *live* possibility because I take very seriously the arguments presented by Stephen Stich in his book, *From Folk Psychology to Cognitive Science: The Case Against Belief.*[1] Stich has done much more than reiterate the analogy between folk psychology and bad theories like phlogiston theory: he has made a strong case against the approach to cognitive science which employs the folk notion of a propositional attitude; he has described an alternative approach which does not depend on identifying mental states in terms of their propositional content (this is his Syntactic Theory of the Mind); and he has offered an *explanation* of why proposi-

tional attitudes may turn out not to be of any use in a mature cognitive science. Later on I will say why I think that even if Stich is right about this, it still does not follow that "ordinary folk psychological belief ascriptions will turn out, quite generally, not to be true."[2]

First, however, I will explain why I don't buy Baker's arguments about pragmatic incoherence. I am going to use the following terminology: the phrase 'mature cognitive science' will cover whatever unified, complete, and correct scientific theory is the ultimate successor of the present-day sciences of psychology, linguistics, neurophysiology and the other neurosciences, behavioral biology, and so on. This list is deliberately open-ended: there is no way of telling which present-day sciences will turn out to be tributaries of the hoped-for mature cognitive science, or what new sciences may join in along the way. And of course there may never be any mature cognitive science—for purposes of this discussion, I will assume that some day it will arrive. I will continue to talk about 'folk psychology' because the phrase seems to have become standard; but I intend it to designate everything that is covered by Baker's term 'the commonsense conception of the mental'. Eliminative materialism will be understood as the doctrine that a mature cognitive science will show that folk psychology is a false theory; that no such things as propositional attitudes will be assumed or recognized by a mature cognitive science; *and that it follows from this* that propositional attitudes (and any other mental states identified in terms of their content) do not exist.

I believe that eliminative materialism is false, and that it should be taken seriously only to the extent that radical skepticism about the existence of the external world, or of other minds, should be taken seriously, and for similar reasons: seeing what's wrong with it may deepen our understanding of commonsense ways of thinking, and that in turn will help us see where and how they can be improved. I want to make it clear that I do not believe that the commonsense conception of the mental is "perfectly in order as it stands," or that every part of it will be, or ought to be, untouched by a mature cognitive science. What I am pretty sure is not in the cards is a wholesale falsification of it in the event that it is not *reducible to* cognitive science.

Baker says that she has two main aims: (1) "to show that those who entertain denial of the commonsense conception of the mental have not made that thesis intelligible"; and (2) "to suggest that the defect in the arguments leading to a conclusion of such dubious intelligibility may lie . . . in the assumption that science will either vindicate or eliminate the commonsense conception." I will argue that her first aim cannot be achieved because the thesis can be made intelligible. I agree in part with the second aim: I think

that elimination is not going to result from *any* future developments in cognitive science, and that some degree of vindication probably will occur, though we are in no position to say how much.

I will now discuss Baker's arguments against the intelligibility of eliminative materialism. "To deny the commonsense conception of the mental," she says, "is to abandon all our familiar resources for making sense of any claim, including the denial of the commonsense conception."

She presents descriptions of two ways in which the denial of the commonsense conception may be "pragmatically incoherent."

The first way is this: "If the thesis is true, it has not been shown to be assertible. If the view that no one has ever believed anything is true, its assertibility is problematic without some account of how there can be assertion without belief." I will reply on behalf of the eliminative materialist, who can say: "The shortest and quickest way to show that my thesis is assertible is simply to assert it. I now do so: no sentence of the form 'S believes that P' is true; furthermore, the phrase 'believes that' does not designate any relation between a human being (or other organism) and a proposition; and no noun-phrase of the form 'S's belief that P' ever names any state or property of anything. I need not give any account of how there can be assertion without something called 'belief' because there is no such thing. I am prepared to repeat the preceding remarks substituting any of the other so-called 'propositional attitude' verbs or nouns for 'believe' and 'belief'."

In order to assert his thesis, the eliminative materialist does not have to first present an alternative account of assertion which does not involve ascriptions of belief. He doesn't have to present any *account* of assertion—all that is required is that he do some asserting. He has done some asserting. If what he has asserted is true, 'belief' is an empty word, a term that designates nothing, or, speaking loosely, no one has ever believed anything, because there are no beliefs and there is no such thing as believing. If the eliminative materialist's thesis is true, then there will exist some alternative account of assertion which does not involve ascriptions of belief, but he doesn't have to give that account before he can assert anything. He doesn't even have to know what the alternative account is: nobody can be required to have, or to be able to present, a theory of speech acts before he can perform a speech act.

It is true that *our* theory of speech acts involves the essential use of the concepts of belief, intention, and other propositional attitudes, but if the eliminative materialist is right we need a new theory of speech acts, one which does not employ those scientifically unfounded concepts. He can hold that this is true without producing or being able to produce such a theory.

The same goes for Baker's claim that "what the argument against elimina-

tive materialism assumes is minimal: namely, that language can be meaning-ful only if it is possible that someone mean something. This is a platitude, not a theory. It is clearly incumbent upon anyone who wants to deny the platitude to show how there can be meaningful language even if no one has ever meant anything, even if no one has ever intended to say anything. But no theorist has even begun to show how language can be meaningful under such conditions."

I think that there is a theorist who has at least *begun* to show how lan-guage can be meaningful under those conditions—his name is Willard Van Orman Quine. But whether or not Quine is on the right track, or whether some other approach altogether will be the one which ultimately leads to an account of meaning which is consistent with our hypothetical mature cognitive science, the eliminative materialist of the present day does not have to produce that account. If eliminative materialism is correct, such an account is possible, and the fact that we don't have it yet doesn't show that we never will. As to the "platitude" that language can be meaningful only if it is possible that someone mean something, the eliminative materialist will simply deny it; platitude or no platitude, his view entails that it is false. (Intellectual history is full of platitudes that turned out to be false: that when a hot object heats up a cold object caloric flows from one to the other; that gloomy people suffer from an excess of black bile; that in mathematics 'true' just means 'provable'; that knowledge is justified true belief; etc.)

Baker claims that the second way in which eliminative materialism can be pragmatically incoherent is this: "If the thesis is true, it has not been shown to be formulable." Her argument goes like this: "In order to formu-late any thesis, one must *adequately* describe a state of affairs that obtains if the thesis is true. . . . I shall argue that if the thesis denying the common-sense conception is true, then what obtains cannot be adequately described. . . . What state of affairs obtains if the thesis denying the commonsense con-ception is true? In the absence of the scientific psychology that is to replace the commonsense conception, it is difficult to say much more than this: the state of affairs is one in which all attributions of attitudes identified by con-tent are false." If all such attributions are false, then "everyone who attri-butes such attitudes (i.e., everyone) is mistaken; they are victims of gross cognitive error." Therefore the present state of affairs "is one in which everyone is currently in gross cognitive error."

At this point the eliminative materialist interrupts: "That's true! *Every-body*—except for the elect few who have achieved cognitive salvation by be-coming eliminative materialists—remains in gross cognitive error."

Baker continues: "On the commonsense conception, one makes a cogni-tive error if such-and-such appears to be the case when it is not the case . . . But, of course, the notion of its appearing that such-and-such is the case is

as laden with content as the notion of believing that such-and-such is the case. So, if the commonsense conception, with its attributions of content, is false, the normal contrasts between appearance and reality cannot be drawn."

The eliminative materialist now replies: "Since folk psychology is false, and its so-called 'propositional attitudes' or 'attributions of content' do not exist, the gross cognitive error that Baker describes does not involve things 'appearing' to be the case when they are not the case, for there is no such thing as 'appearing.' The gross cognitive error involves uttering, and being disposed to utter, lots of false sentences containing the empty terms of folk psychology. I do not have to distinguish between 'appearance' and reality because 'appearance' is just another empty folk term. There is no such distinction. All I need in order to describe the gross cognitive error which everybody (except for us eliminative materialists) is now in, is the distinction between falsehood and truth, which, of course, applies to *utterances* and not to any supposed 'propositional attitudes.' This is why the formulation of my thesis does not, as Baker claims, 'presuppose the existence of the attitudes that the thesis denies.' (I can throw away *that* ladder without ever having climbed up on it.)"

So ends the dialogue.

I think that my eliminative materialist has succeeded in formulating and asserting his thesis. I think we should reject that thesis, and anyone who is worrying about whether it might be true should *stop worrying*!

Let us take a closer look at the analogy between folk psychology and refuted bad sciences like phlogiston theory and the caloric theory of heat. These theories were created by scientists who wanted to explain phenomena they could observe in their laboratories in terms of substances they posited using theoretical terms introduced in the context of laws which were thought to describe the behavior of those substances. The concepts of phlogiston and caloric were created in the laboratory, not picked up from a commonsense tradition of "folk physics." What the laboratory gave, the laboratory eventually took away. I do not know to what extent terms like 'phlogiston' and 'caloric' found their way into common speech in earlier times; common speech can, of course, absorb bits of jargon from bad sciences—for example, 'humor,' 'I.Q.,' and 'Oedipus complex'—but the concepts of phlogiston and caloric did not survive as part of the tradition of folk physics. There was, of course, such a tradition: it contained folk terms like 'fire,' 'burn,' 'hot,' 'cold,' 'hard,' 'soft,' 'slimy,' 'slippery' and many others. It contained generalizations ("laws of folk physics"), like 'Fire burns things,' 'Hot things make cold things warmer,' 'Slimy surfaces are slippery' and so on. These terms and generalizations are still with us, and the inspir-

ing success story of modern physics does not include a chapter describing the abandonment of this folk vocabulary because the terms in it do not appear as fundamental concepts in our mature physical science, or because there are no "smooth reductions" of either the predicates or the generalizations of folk physics to scientific physics. What is 'soft' going to be reduced to? How do we reduce 'soft pillow,' 'soft butter,' 'soft wood,' 'soft coal'? What law of physics is materially equivalent to 'Slimy surfaces are slippery'? There is, literally, no telling. Nevertheless, the pillow I sleep on is soft, and I have slipped on slimy surfaces. Nothing that has happened or would happen in physics could demonstrate that there are no soft objects, or that nothing is slimy. (This is not to say that *nothing whatever* could demonstrate that there are no soft objects, or that nothing is slimy. We all know how to describe conceivable situations in which these propositions are false and in which we find out that they are false. But skeptical fantasies are no threat to folk physics.)

There was, though, a time—say, about a quarter of a millennium ago—when progressive thinkers might have imagined a different kind of fate for folk physics. I will call these people 'eliminative idealists' and their doctrine 'eliminative idealism.' I will let them speak for themselves. Here is the Manifesto of the Eliminative Idealists:

"The commonsense conception of the tangible is really a kind of theory, comparable to a genuine scientific theory in its form even though it originated among the common folk, not in the libraries of learned men. Only in recent years has careful analysis laid bare its structure and made clear its assumptions. The commonsense conception of the tangible—or 'folk physics,' as some call it—contains terms like 'physical thing,' 'matter,' 'material stuff,' 'hard,' 'soft,' 'heavy,' 'slippery,' and many others, and it presents generalizations framed in these terms. The common folk make remarks like 'Butter is soft in the summer, but hard in the winter,' believing statements like that helps them cope with what they touch and feel in their daily lives and indeed forms an important part of their conception of tangible phenomena. But there is at present really no reason to think that such statements are true, or that folk-physical terms like 'hard' and 'soft' actually name properties of so-called 'matter,' or that there *is* any such substance as 'matter' (which the common folk actually think of as capable of existing outside the mind!). We know, of course, that there are minds and their experiences, including their experiences of tangible phenomena, of the sensations of touching and feeling and handling, and of other forms of manipulation, but it has not been established whether the substances and properties imagined in folk physics are real. There is genuine need for a science which deals with manipulation and its objects, and with manipulative processes.

We will find out whether or not folk physics is true only when we have developed a unified, complete, and correct science of the tangible—we propose to call it Manipulative Science—and it is only in terms of a mature Manipulative Science that we will be able to judge whether or not the commonsense conception of the tangible is true or false. If its terms can be understood as naming mental properties and substances, and if its generalizations turn out to be equivalent to genuine laws of mental activity, then folk physics will be vindicated. If not, then folk physics will have been shown to be false through and through and will have to be abandoned. In that case we will see that there is no such thing as 'matter,' that there are not and never have been any 'physical things,' and that nothing has ever been heavy, or slippery, or hard, or soft, for the mind and its contents do not have any such properties. Our learned Continental colleague Dr. Stephen Pangloss thinks it barely possible that some parts of folk physics will to a modest degree survive the advent of a mature Manipulative Science, but we eliminative idealists disagree. If eliminative idealism is correct, folk physics will be shown to be completely false, despite what the common folk believe, and we will see that nothing has ever *really* been hard or soft—not even butter." (So ends the Manifesto.)

The great tradition of eliminative idealism has died out, but even if the history of science had taken the course hoped for by my eliminative idealists, folk physics would have survived. (Even Berkeley knew that.) And I believe that folk psychology will survive whatever happens during the development of cognitive science. That is not to say that its "laws" will be shown to be materially equivalent to laws of cognitive science; the loose and tentative generalizations of folk psychology are "laws" only by courtesy. It is, of course, *true* that people try to get what they want to have, that they become resentful when they are insulted, and that they stay away from places they regard as dangerous—but these statements are not to be likened to laws of any science.

Folk psychology will survive because people will continue to employ its concepts in making ascriptions—true ones—of beliefs, desires, intentions, and the other propositional attitudes in particular cases, and because they will continue to utilize its vague and loose generalizations in framing *ad hoc* explanations of what people do and think and feel on particular occasions, and these explanations will often be correct. They will be able to do these things because of the very same characteristics of beliefs and other propositional attitudes which Stephen Stich appeals to in explaining why he thinks those folk-psychological concepts will not be a good starting point for cognitive science. He makes his case in terms of belief, letting this propositional attitude stand in for all the rest, and I will follow his usage.

According to Stich, folk psychology takes beliefs to be complex internal

states which we express by uttering sentences. When we say what someone else believes, we describe his belief by relating it to one we ourselves might have. We indicate this potential belief of our own by uttering the sentence which we ourselves would use to express it; that is how we specify which belief it is and indicate its content. Folk psychology assumes that there is a common causal pattern underlying most cases in which we sincerely and straightforwardly express a belief. Since most of our assertions are in fact sincere and straightforward expressions of belief, we assume that the common causal pattern underlying sincere assertions is the *typical* causal pattern underlying assertions in general. When we ascribe a belief to someone else by uttering a "content sentence" that identifies which belief it is, we have to imagine ourselves uttering that sentence and imagine the typical causal history which would lead to our uttering it. The belief we are ascribing is the one which would play the central role in that causal history in our own (imagined) case.

Stich holds—and he is surely correct—that "there are no necessary and sufficient conditions for the application of this intuitive concept" of belief.[3] Identity of content between the belief someone else has and the one I would have if I were to say what the other person said is a matter of degree. "Content-identity" is a *similarity* relation which "admits of a gradation of degrees."[4] As is typical of similarity judgments, what we are interested in and concerned about—what matters most in determining whether the similarity is sufficient for identity of content—will depend on the context in which we make the similarity judgment, and will be highly variable from one context to another. The salient—and inescapable—feature of the folk-psychological concepts is their sensitivity to context. As Stich says: "There is . . . a sort of *observer relativity* built into our own folk notions, and a cognitive theory written in the folk language of belief would inherit this observer relativity." But, he says, "the scientist's attributions of psychological states to subjects are, or ought to be, largely independent of context."[5] Therefore, ascriptions of belief with their inescapable context-sensitivity have no place in cognitive science.

What I have given is just the barest sketch of a very powerful case that Stich makes for his claim that belief and the other propositional attitudes have no place in cognitive science. I think that he has, at least, shifted the burden of proof to those who think otherwise. Nevertheless, Stich's arguments give no more support to eliminative materialism than analogous arguments—showing that predicates like 'soft' and 'hard' and 'slimy' have no place in scientific physics—would give to the view that folk physics should be eliminated. Terms like these are highly context-sensitive and observer-relative, just like the terms of folk psychology. Just like the terms of folk psychology, they can be used—by particular observers in particular

contexts—to make true statements. And Stich does not deny that the terms of folk psychology can be used to make true statements. (It goes without saying that nobody in his right mind would deny that the terms of folk physics can be used to make true statements.) Although Stich concludes (a bit tentatively) that *"there is no such thing as the property of believing that P,"* he asserts that this does not entail that *"predicates* of the form 'is a belief that P' are meaningless or never apply to anything." What he denies is that there are belief-state tokens or belief-state types, because believing is not a property. He concludes: "In denying that believing that P is a property, we need not deny that statements of the form 'X is a belief that P' are often unproblematically true."[6]

Eliminative materialism, which denies this, is no more believable than its mirror image, eliminative idealism. Cognitive scientists, and philosophers who want to understand the concepts and assumptions of folk psychology, folk physics, and all the other branches of folk wisdom, are engaged in a common enterprise, for even if folk wisdom has nothing to contribute to the conceptual framework of cognitive science, it is, at least, part of its subject matter.

Reply

Lynne Rudder Baker

Many philosophers agree with Chastain and me that "folk psychology," or the commonsense conception of the mental, will not disappear, regardless of the development of cognitive science. Such philosophers still may disagree on how we ought to regard the commonsense conception in case it finds no place in what Chastain calls "mature cognitive science": would commonsense ascriptions be true? In "Cognitive Suicide" my arguments were aimed at those who, like Paul Churchland, and Stephen Stich in one of his voices, consider answering the question in the negative. Chastain agrees with me that the question should be answered in the affirmative, but finds fault with at least part of my argument and advances an argument of his own. Chastain's reply to my paper is roughly in two parts. I shall comment on both.

I.

In the first part of his reflections, Chastain criticizes my arguments concerning pragmatic incoherence of eliminative materialism. I argued that eliminative materialism is pragmatically incoherent in two respects: if true,

it has not been shown to be assertible, and if true, it has not been shown to be formulable. I shall take these up in order.

A. Chastain argues that although assertion, as we now understand it, requires belief, if eliminative materialism is true, then "there will exist some alternative account of assertion which does not involve ascriptions of belief"; nevertheless, the eliminative materialist need not know what that account will be in order to make assertions.

As Chastain puts it, "if the eliminative materialist is right we need a new theory of speech acts, one which does not employ those scientifically unfounded concepts [such as belief]. He can hold that this is true without producing or being able to produce such a theory." Notice that in his description of the eliminative materialist, Chastain ascribes to him an attitude identified by content: "He can hold that this is true. . . ." We seem unable even to describe an eliminative materialist without implying that eliminative materialism is false.

Although one can not predict future conceptual resources, it is difficult to see how the notion of assertion any more than the notion of chair—and in contrast to, say, the notion of electron—could turn out to be radically different from the way we think of it. In any case, to say that there will be an alternative account of assertion that does not invoke belief strains credulity in the absence of any idea of how such an account might go. (To my knowledge, Quine did not give any such account; he availed himself of notions like those of query and assent as if they offered no problems from his point of view. As David F. Austin has pointed out, in *Ontological Relativity*, Quine said, "we end the regress of background languages, in discussions of reference, by acquiescing in our mother tongue and taking its worth at face value."[1] If eliminative materialism were true, our words would be "faceless.")

I did not intend to suggest that, in general, one must be able to give an account of assertion in order to make an assertion. There is no pressing difficulty about assertion when the normal presuppositions are in play. But remove the presuppositions—as the eliminative materialist does—and you remove the warrant for the distinction between assertion and mere audible emission. Furthermore, assertion seems to be as much a part of the commonsense conception as belief, as Stich seems to agree: "it is hard to see how ['sincere assertion of *p*'] could be unpacked without invoking the idea of an utterance caused by the belief that *p*."[2]

Thus, as far as we know and as far as we have any reason to think, eliminative materialism is assertible only if it is false.

B. My second charge of pragmatic incoherence is that the thesis of eliminative materialism may not even be formulable, because the elimina-

tive materialist may lack the resources to contrast truth and falsity. I do not think that Chastain has met the difficulty that I was trying to raise. (I did not say that the eliminative materialist illicitly distinguishes between appearance and reality, but only that on the commonsense conception, a distinction between appearance and reality is available to make sense of cognitive error.)

Eliminative materialism implies that we are in gross cognitive error; how, from the point of view of eliminative materialism, can such error be described? Chastain's answer on behalf of the eliminative materialist is that the gross cognitive error "involves uttering, and being disposed to utter, lots of false sentences containing the empty terms of folk psychology." Chastain says that all an eliminative materialist needs is "the distinction between falsehood and truth, which, of course, applies to *utterances* and not to any supposed 'propositional attitudes.'" But what, in terms available to the eliminative materialist, is this distinction? What, in the absence of attitudes identified by content, makes an utterance true? Theories of formal semantics answer the wrong questions. *Given* some mapping of symbols onto the world, for example, they can say which sentences are true relative to that mapping. But obviously, not just any arbitrary mapping secures the needed distinction. The challenge to the eliminative materialist remains: in virtue of what are true sentences (or utterances) true?

II.

The second part of Chastain's reflections offers his own line of thought against eliminative materialism. It relies on a sustained analogy between terms of folk psychology and terms of folk physics like 'hard,' 'soft,' and 'slimy.' Chastain argues that "whatever happens during the development of cognitive science," people would not only continue to employ terms like 'belief,' but also ascriptions of beliefs would be true and explanations in terms of them correct.

As I understand it, here is Chastain's argument: Stich's analysis of belief ascription leads to the conclusion that "ascriptions of belief with their inescapable context-sensitivity have no place in cognitive science." Terms like 'soft' and 'slimy,' which are also context-sensitive and observer-relative, likewise have no place in scientific physics; but "nobody in his right mind" would deny that they can be used to make true statements; so, even though cognitive science has no use for folk psychological terms, we should not (or need not?) deny that such terms can be used to make true statements.

I can think of two ways that an eliminative materialist may respond: He may bite the bullet and simply deny (a la Ungar) that terms like 'soft' and 'slimy' can be used to make true statements; or, more plausibly, he may argue that statements like 'The butter on the windowsill is soft,' are true in

virtue of their relation to true sentences of physics, but that folk psychological statements, lacking the requisite relation to cognitive science, are not likewise true. The latter line is clearly available to both Stich and Churchland, whether either would take it or not.

What makes folk psychological concepts "not . . . a good starting point for cognitive science" is not the context-sensitivity or observer-relativity of their ascriptions *per se*. Attributions of simultaneity are observer-relative, and attributions of fault lines in the earth are context-sensitive, yet simultaneity has a role to play in physics and fault lines a role to play in geology. Rather, as I argue in "Content by Courtesy,"[3] the reason that attitudes identified by content are unsuitable for cognitive science (understood physicalistically) is that the relevant contexts can not be identified nonintentionally. To the extent to which the relevant context of 'The butter on the windowsill is soft' can be identified nonintentionally, there is a powerful disanalogy between folk physics and folk psychology. Such a disanalogy, in the hands of an eliminative materialist, may ground his holding true some statements employing terms from folk physics—but not statements employing terms from folk psychology.

Thus, I do not think that Chastain's argument from analogy, with its appeal to Stich's analysis of belief ascriptions, does the work that Chastain wants. (By the way, in my original paper, I did not take issue either with Stich's analysis of belief ascription, or with his argument that attitudes identified by content will play no role in a mature cognitive science.)

Let me conclude by voicing a suspicion that Stich is, at best, an uncertain ally for Chastain. Chastain puts exclusive emphasis on but one aspect of Stich's writings. The Stichian position emphasized by Chastain is the one that Stich calls his "modified Panglossian prospect," which would allow that "statements of the form 'X is a belief that P' are often unproblematically true"[4] even though there is no property of believing that *P*. But, unlike Chastain, Stich does not *endorse* this optimistic position; he only points it out as one of two possibilities. The other possibility is eliminative materialism. Stich takes it to be "indeed a serious possibility" that "ordinary folk psychological belief ascriptions will turn out, quite generally, not to be true."[5]

Whether eliminative materialism is true or not, on Stich's view, depends upon the truth of various empirical assumptions. For example, if mature cognitive science failed to "cleave reasonably closely to the pattern presupposed by folk psychology"[6]—and whether it will remains an open question—Stich would abandon the optimistic view that Chastain applauds.

It is difficult to see how Chastain can simply borrow Stich's modified Panglossian prospect, which at its most optimistic is a "proposed reconciliation between cognitive science and folk psychology"[7] contingent upon

certain empirical facts; what Chastain envisages seems to be a simple coexistence of folk psychology and cognitive science come what may. As Chastain remarks, "folk psychology will survive whatever happens during the development of cognitive science." By contrast, Stich's view is that "[i]f our science is inconsistent with the folk precepts that define who and what we are, then we are in for rough times. One or the other will have to go."[8] Calling Dennett's attempt to save folk psychological notions from being undermined by science "patently disreputable,"[9] Stich makes no secret of which would "have to go." Thus, there is considerable tension between Stich's position and one that construes folk psychology as impervious to developments in cognitive science.