As True as "You Think": Preserving the Core of Folk Psychology

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ABSTRACT

In this paper I argue in defense of an important fragment of folk psychology. Specifically, I argue that many propositions about the ontology of mental states and about mental causation are true largely because of certain observable features of human linguistic behavior. I conclude that these propositions are immune to common avenues of eliminativist criticism. I compare and contrast this argument with some previous arguments about the truth of folk psychology.

1. Introduction

Folk psychology is supposed to be an informal theory about the mind—a theory that people normally acquire early and accept unthinkingly. The propositions that people have feelings and thoughts, that people's thoughts and feelings can cause them to act, and so forth—all these commonplace propositions, which people normally use to think about

the mind, constitute what philosophers call "folk psychology." According to a common position in the philosophy of mind, folk psychology is an empirical theory that might be false. Some philosophers—the eliminativists—have taken the extreme position that folk psychology is quite false, and that mental terms like "belief" and "desire" do not refer to anything at all. Eliminativist arguments typically rest on neuroscience; in one way or another, they try to establish that neuroscientific discoveries about the mind show (or probably will show) that folk psychology is false.¹ Other philosophers have mounted serious challenges to eliminativism. According to some of these challenges, no future discovery in neuroscience or cognitive science could give us a strong reason to abandon folk psychology.²

In this paper, I will not take up the usual question of the truth of folk psychology. Instead, I will argue for a weaker conclusion: that an important *part* of folk psychology is true. I will do this by means of two arguments. Each argument shows that a crucial class of propositions of folk psychology is independent, not only of scientific discoveries, but of many philosophical considerations as well. Together, these arguments show that folk psychology has a "safe" core—a set of central propositions that no set of scientific discoveries can refute, and that do not depend on the fate of philosophical arguments defending the whole of folk psychology. Thus, a significant part of folk psychology is independent, not only of scientific discoveries, but of the usual philosophical debates as well.

The line of argument presented here is only partly new. It partially overlaps, or at least coheres well with, previous defenses of folk psychology by Graham, Greenwood, Horgan, Margolis, and McDonough. For now I will cite the relevant works in an endnote.³ In section 3 I will discuss in detail the similarities between these authors' ideas and mine.

2. Mental Language and the Classification of Situations

In the next several paragraphs I will present some general observations about the nature of folk psychology. These observations are neither new nor deep. I will present them with the help of the traditional language of folk psychology, with the caveat (for the sake of argument) that such language might ultimately be eliminable.

The commonsense psychological language that people use every day relies heavily upon the *classification of situations involving human organisms*. Greenwood's line of argument, with its emphasis on "classificatory descriptions of human action",⁴ points us firmly toward this fact.⁵ The following example, which has a precedent in that line of argument,⁶ makes this point. Consider what happens when a child learns the word "think." The child learns to utter that word when certain situations occur that involve his own organism. He learns to utter tokens of sentences like "I'm thinking." In learning to use the word, the child learns to apply the word in connection with certain situations that the child's cognitive apparatus can recognize. The child's brain is able to discriminate these situations from other situations. While learning a language, the child learns to make utterances like "I'm thinking" in response to those situations.

The situations for which the child learns to say "I'm thinking" are more or less those situations that experienced speakers of the same language would call "situations in which the child is thinking." It is an observable fact that a child with typical language capabilities can learn to recognize these situations. *How* this happens—the neural mechanism of the discrimination, its social context, etc.—is beside the point for my argument.⁷ I am not ruling out the possibility that the recognition ultimately is verbal in character—that learning the ways to use the word "thinking" is what gives the child the capacity to pick out situations of thinking.⁸ I am not even ruling out the possibility (discussed by Greenwood⁹) that recognitions of this sort are theory-laden.

Regardless of the details of the mechanism, the child learns to apply the word "thinking"

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to certain situations. If the child has typical neural capacities, he will be able to pick out certain situations from among other situations involving humans. He learns to label those situations as situations of "thinking." Of course, this learning involves the absorption of linguistic norms from the child's social surroundings. Learning to use the word "think" involves learning to discriminate situations that may properly be called situations of "thinking" from situations that may not be so called. In the preceding sentence, "may" indicates the "permission" obtained from the child's linguistic environment. If the child is bouncing a ball and says, "Look, Ma, I'm thinking", the child might be told, "No, that's not called thinking, that's called bouncing a ball." But suppose that the child says, "Look Ma, I've been thinking. Two plus three makes five", which is a fact that the child didn't know before but figured out on his fingers. Then an appropriate adult reaction is "Yes, you have been thinking." A certain physical situation occurred; the features of that physical situation are such that we are warranted in asserting that the child has been involved in a situation that we would call a situation of the child thinking. (Whether this situation is reducible to the child's behavior, or to functional states of the child, or to anything else, is a large and old question which, despite its importance, is completely irrelevant to my present argument.)

People come to regard certain situations involving human organisms (and perhaps other organisms or machines as well) as states of thinking. If some standard forms of materialism are true, then these situations are situations of brains being in states of certain kinds. Externalistic views of mind might equate these situations to situations involving both the organism and its surroundings. Regardless of the truth of these views, the process of learning how to use the words "think" and "thinking" is mainly a matter of learning which situations may correctly be labeled, in one's language, as situations of thinking. According to the rules of a given language (such as English or one of its dialects), certain situations involving a human organism are to be called situations of "thinking." Other situations involving a human organism, like situations of ballbouncing, are not to be called situations of thinking; they are to be called other things instead. So, to learn to use the word "think," one must learn to discriminate some situations involving the human machinery and/or its surroundings from the rest of the

situations involving those elements.

Needless to say, the remarks I have made about "think" and "thinking" can be extended, mutatis mutandis, to other mentalistic words and phrases, like "feel," "want," and "fear"; and also to more specific mentalistic phrases like "thinking of a pear" and "wanting some money."

What does all this have to do with eliminativism? According to one standard line of eliminativist argument, neuroscience has shown (or might eventually show) that there is nothing in neurobiological reality that is much like a mental state. If this happens, the argument goes, we should not believe in mental states. (I condense and simplify a number of different arguments here,¹⁰ but I believe I have captured their gist.) Suppose someone says "I am thinking of a pear." Someone else (an eliminativist) could say "That isn't true. There's nothing real corresponding to what you, in your ignorance, call 'thinking of a pear.' The phrase 'thinking of a pear'—and, for that matter, the word 'thinking' itself—can't find homes in neurophysiology, so you really should give them up."

My answer to the eliminativist runs as follows. Even if the classification of some states as thinking states has no basis in neurobiology, *it still has a basis in physical reality*. At very least, this classification is part of the linguistic practice of human organisms—and that practice is part of physical reality! Regardless of one's views of the ontology of language, the physical utterance of tokens of words and sentences is a process in the physical world.¹¹ It is as much a part of physical reality as is any other physical phenomenon. The fact that organisms of a particular species are able to respond to certain situations with certain sounds or markings is a genuine physical fact. This fact forms the basis for a real distinction among situations. One cannot sensibly claim that the word "thinking" corresponds to nothing in physical reality. That word picks out a class of states definable in terms of the physically real behaviors of certain physically real organisms. Standard eliminativist arguments cannot get around this fact. At worst, they might be able to show there is no *neurophysiological* basis for the application of the word

"think." But they cannot do away with the fact that there is a *physical* basis for this application—a basis rooted in the physical features of certain easily observable linguistic practices.

One cannot sensibly deny that physical reality picks out a class of situations of thinking. In like manner, physical reality picks out a class of situations of thinking about a pear. It also picks out a class of situations of feeling happy, a class of situations of wanting money, and so forth. Physical reality manages to pick out these classes of situations— and it does so *regardless* of the facts of neurophysiology or the alleged limitations of folk psychology.

Since all these kinds of situations are firmly rooted in physical reality, it follows that we are correct in speaking as though situations of these kinds really existed. (We can speak as if they really existed because they do really exist.) This implies that ascriptions of mental states to humans, made in the customary fashion, normally are correct. We can easily convert talk about mental situations into talk about mental states: for X a human organism, X is in a state of thinking if and only if there is a situation of X thinking. This is not to say that these mental states have all the powers that folk psychology attributes to them. I will take up that question later.

The fact that *people sometimes think* is true largely, though not solely, because of the way that the word "think" is ordinarily used. This is not the only condition for the truth of that fact, but it is an important one. Given certain empirical facts about the physical nature and behavior of humans, we can deduce, by considering the standard usage of "think," that it is correct to assert that people sometimes think. It would be wrong to conclude that people don't think just because it turned out that there is nothing in neuroscience corresponding to thinking. The set of mental situations of a given kind, such as situations of an organism's thinking of a pear, might not be a neat set of situations involving the activity of brains. Instead, it might be a very disjunctive set of such situations, having little in common except that they are picked out verbally in the way I have described.¹² Alternatively, mental situations could be situations that are *not*

confined to the brain. Externalism goes in this direction, as do the sociocultural accounts of folk psychology proposed by Margolis¹³ and McDonough¹⁴. All these ideas remind us that we should not uncritically picture the domain of mental states as a neat, clean, easily definable set of brain states. As long as we can pick out, by observable physical means, the states that constitute thinking states, then it is perfectly acceptable to use predicates like "is thinking" to describe people. It may well be that such predicates are of no value to brain science, but that's the worst we can say about them. "Thinking" may not be a useful term for physiology, but certainly it's a good term for some other purposes. The word "thinking" does correspond to something in physical reality, though this "something" has more to do with socially conditioned organismic behaviors than directly with neural states.¹⁵ In this sense, the word "thinking" is truthful. We should not feel any imperative to give up this word just because thinking, when analyzed neurobiologically, doesn't fall apart along the lines that neuroscientists might want it to. This, of course, goes not only for "thinking," but also for "feeling," and for "wanting a rose," and for other mental terms. These terms apply to situations involving the human apparatus. Mental terms are applicable to these situations by virtue of the *physical* facts about how the mental terms are used.

3. Some Philosophical Precedents

The above claim about the application of mental terms is close to a number of earlier arguments about folk psychology. It comes quite close to an important pair of antieliminativist arguments by Greenwood.¹⁶ Greenwood argues that facts about the causal roles of intentional states should not make us throw out our beliefs about the existence of such states.¹⁷ He points out that there is evidence for the existence of such states, quite apart from our beliefs about their causal roles. This evidence comes from self-knowledge and communication, and does not stand or fall with beliefs about intentional states ' causal powers.¹⁸ Greenwood also reminds us that a child can learn to recognize states of thinking, etc. without holding any theoretical beliefs about the causal roles of such states.¹⁹ Thus, according to Greenwood's view, we may safely suppose that intentional states exist, even if our beliefs about the causal powers of those states are wrong.

The main difference between my argument and Greenwood's is that I am trying to do less. My argument says little about intentional states in general, or about our knowledge that a state is intentional or representational. My argument shows only that we can be sure of the reality of *particular kinds* of *putatively* intentional states—states that philosophers normally classify as "intentional." There is a nonempty class of states normally called "states of thinking," another nonempty class of states normally called "states of the reality, regardless of what neuroscientists might discover. In Greenwood's arguments, representation plays an important role; he suggests that "our theoretical classificatory descriptions of human action" could have been wrong if we had lacked "empirical evidence for the intentional direction of human actions."²⁰ On my account, we could preserve those classifications with even less evidence than that. It is enough that human organisms are able to respond behaviorally to the states in the way that they presently do. This capacity is enough to ensure that the phenomena of thinking, feeling, etc. are grounded in physical reality.

One also can think of the account proposed here as a stripped-down, minimalist version of the view that folk psychology is culturally grounded and hence does not need the support of neuroscience or cognitive science. Margolis²¹ and McDonough²² have proposed accounts of this latter sort for folk psychology. These two accounts are of great interest, and (I believe) are compatible with my approach. However, my view appears to have an added strength: it does not depend on specific understandings of, or detailed arguments about, the relation of folk psychology to culture (as do the views of Margolis and McDonough). Instead, my view depends mainly on certain general observations about how individual humans use mental words. My approach also has an added *weakness* compared to these earlier approaches: my argument does not address the preservation of folk psychology as a whole, but only the preservation of a fragment of folk psychology. The fragment in question consists of attributions of mental states. (Later in this paper I will extend this fragment, but even then it will not encompass all of

folk psychology.) Since language is a cultural practice, my suggestion is a version of the view that folk psychology is culturally grounded. However, my view may be more robust than other ideas of this kind, since it depends less on facts or concepts about culture and more on physical facts.

My claim also comes close to Horgan and Graham's ideas about the "austere" character of folk psychological commitments²³. According to my view, folk psychology commits us to very little besides the existence of certain obviously real phenomena. My argument does not use the conceptual apparatus of Graham and Horgan, with its classification of theses as "austere" and "opulent." Nevertheless, my proposal overlaps the approach of Horgan and Graham in a key respect. Like them, I have assigned *linguistic competence* the key role in grounding the truth (or at least the warrant) for folk psychological propositions. In Graham and Horgan's account, linguistic facts form the fundamental piece of evidence for the truth of folk psychology. In my account, only the simpler physical aspects of linguistic practice are crucial; these give us confidence only in a part of folk psychology psychology rests on the ways in which human linguistic practices are embedded in a physical world.

It would be interesting to make a detailed comparison of my argument with the ideas of Horgan and Graham. One could regard my proposal as a claim about the extreme austerity of folk psychological concepts. On the other hand, one could regard my proposal simply as a suggestion that we can back off from most of the commitments of folk psychology without losing what is most central to folk psychological knowledge.

4. Mental Causation and the Meaning of "Cause"

Folk psychology does not consist of mental state attributions alone. Another important part consists of propositions about causation by mental states. Are these defeasible by neuroscience or cognitive science, as eliminativists often claim? I will argue that some of

these propositions seem less defeasible once one gives them a slightly more charitable reading.

Consider the proposition that my subjective impression of the color red *causes* me to feel excited, and that my desire for a rose *causes* me to seek a rose. Read naively, these propositions seem to say that mental contents (or states) are literally and simply causing other mental contents (or states). Thus, the statement I just made about red might plunge you into the middle of the debate about the causal role of qualia. My statement about desire for a rose might plunge you into the debate about the reality of propositional attitudes.

This paper is not the place to review the known accounts of mental causation. Instead, I will make a suggestion that (I believe) is somewhat orthogonal to the traditional debates about this topic. I suggest that statements about mental causation are more ambiguous than we usually realize. Specifically, I suggest that the meaning of the word "cause" when that word is applied to mental phenomena may not be quite the same as the meaning of the word "cause" when that word is applied to simple physical phenomena.

Sometimes a familiar word turns out, unexpectedly and surprisingly, to have had two incompatible usages all along. In these cases, the best way to understand the incompatibility is to assume that the word has two slightly different senses. To use an old example from physics, people often use the word "heavy" and its derivatives in two incompatible ways in different contexts. Compare the sentence "This ten-pound dumbbell is heavier than this five-pound dumbbell" with the sentence "Gold is heavier than water." The conflict between these two usages becomes evident when the user is faced with certain puzzles, such as whether a gram of gold is heavier than a gram of water. When we learn introductory physics, we learn that the word "heavy" is best understood as having two meanings in these two contexts—closely related meanings perhaps, but different ones. It turns out that "heavy" is equivocal between two meanings. "Heavy" means "having a large weight" when used in weight contexts; it means "having a high density" when used in density contexts.

some new knowledge, to figure this out. This is a case in which people use a word in different contexts, with slightly different senses or slightly different extensions, and don't really think about it. They just do it.

Perhaps this happens with the word "cause" too. People say "my desire for money caused me to do this"; they also say "the impact of the cue ball caused the eight ball to move." Maybe if they learned more, thought carefully, and reflected deeply on physical and mental cause and effect, they would end up saying something like this: "When I said my desire for money *caused* me to act, I didn't mean quite the same thing as when I said the impact of the cue ball *caused* the eight ball to move. I didn't realize it before, but maybe I am using 'cause' in two slightly different ways."

People sometimes use the same word in two different, though related, senses. If the two senses are sufficiently similar or entangled, people may do this without even knowing it. The sameness of words sometimes may deceive people into making false assumptions about the sameness of things. But the fact that the things aren't really the same doesn't give one grounds for throwing out the words. It only acts as a reminder that one must be careful with words. (As if philosophers didn't already know that!) When we use "cause" in the context of talk about mental states, perhaps we are not using it in precisely the same sense as when we use it in regard to physical things. If we are using "cause" in mental and in physical contexts, and we think it has the same sense in both cases, then perhaps we are a bit confused—just as we would be if we had learned a word for the first time and didn't quite know how to apply it in some cases. Equating mental causality to physical causality may be a mistake, but if it is, then it is an understandable mistake. The mistake arises from equating the meaning of the word "cause" in mental contexts with the meaning of the word "cause" in physical contexts.

Someone might try to rebut this by saying "But the two instances of 'cause' *do* mean the same thing! Nobody draws that distinction of meaning when they talk about mental states 'causing' things. They just mean what they normally mean by 'causing.' The second meaning of 'cause' is your invention alone. Therefore, causation by a mental

state is the same phenomenon as causation of one billiard ball movement by another." My reply to this rebuttal is as follows: If people really were using "cause" in slightly different senses in mental and in simple physical contexts, would they inevitably *know* that they were doing so? As I just pointed out, people sometimes use words in slightly different senses without even noticing it.

If "cause" is ambiguous, we cannot say for certain that the simple physical meaning is primary or paradigmatic. If the word really has two legitimate senses (as does "heavy" in the density example), then neither sense is a strained or quotation-marked sense. But even if one sense is privileged, then the simple physical sense is not necessarily the privileged sense. For all we know, the simple physical sense of "cause" might be demonstrably *non*-paradigmatic. Perhaps the concept of mental causation, which lies so close to our own experiences, somehow underlies or permeates all our ideas about causality. Perhaps learning about mental causation helps to set the stage for learning about other kinds of causation—including the billiard-ball kind, which is more alien to the observer. Note that I said "for all we know"; I am not claiming to know whether the last two sentences, with the "perhaps" removed, are true. But in any case, there is no conclusive reason to put one sense of "cause" above the other and to claim that one sense is more standard or correct than the other. (At least there is no reason for this outside the psychology clinic or the physics lab, where special jargons prevail and "cause" may well not have quite its usual richness of meaning.)

Is "cause" really ambiguous in the way I have suggested? As a matter of observable fact, people use the word "cause" to refer to relationships among mental states and also to relationships among obviously physical states of matter. The usages of "cause" in these two contexts are not obviously identical; if they were, there would be far fewer philosophical puzzles about the relationship between what philosophers call "mental causation" and what physical scientists call "causation." Thus, for prephilosophical language, there is little doubt about the double usage of "cause." One cannot get around this by claiming that "cause," as used in physical science, has only one sense. That sense of "cause" amounts to a term of art particular to the physical sciences. It may well not be

the same as the prephilosophical meaning of "cause," or as the sense of "cause" when that word is used in psychological contexts. Psychologists should be interested in whether mental states "cause" each other in the full, uncut, unsimplified sense of the word "cause." They should not be equally concerned about whether a term of art from physics happens to apply to their subjects' thoughts and feelings.

If "cause" is ambiguous in the way I have suggested, then we have no grounds for a blanket denial of claims that mental states (or situations) can play causal roles. Such a denial may even begin to appear a bit extravagant.

Perhaps mental causation is very different from the causation that happens when billiard balls bump. Maybe it can even have a different time ordering. Maybe, as some well-known experiments suggest, an action begins before we are conscious of the decision to act.²⁴ But this peculiarity of timing should not be too surprising, for time always is measured with clocks that make use of the *other* kind of causation—the simple physical kind. If mental state A causes mental state B, does A have to "cause" B in the physical sense? Perhaps not. Perhaps physical causation is not crucial to mental causation; perhaps a certain commonality of information between mental states, or some other relationship (functionalistic?) between states, is more important. Thus, for all we know, the time ordering of A and B might not be too important for mental causation. (Needless to say, this suggestion does *not* involve reverse causation in the physical sense.)

Once we recognize that "cause" is ambiguous, we can preserve most or all of the part of folk psychology that deals with mental causation. We can do this while leaving open the questions of the reducibility of mental causation in neuroscience, cognitive science, or physics. We can now accept a fragment of folk psychology, even if we do not have answers to many of the ontological questions.

The upshot is that many folk psychological beliefs about mental causation come out true if you give those beliefs a *somewhat charitable reading*, by recognizing that "cause" means something a little different in mental as versus simple physical contexts. All we

need to do is let "cause" have its standard meaning, instead of one of its jargon meanings. We should not assume uncritically that "cause," when used in mental contexts, is a word borrowed from freshman physics with no change in meaning. We can admit that mental causation is a relationship of the kind that one actually finds in psychology, instead of a relationship of the kind that one finds on the billiard table. Once we admit this, many folk psychological beliefs about mental causation simply come out true.

5. Concluding Remarks

In this paper I have suggested that some propositions of folk psychology are true mostly by virtue of the way mental terms are used in natural languages. Propositions about the existence of mental states, such as "I am thinking," often come out true because the human organism can learn to tag certain physical situations in certain systematic ways. Propositions about mental causation often come out true because of the way in which the usage of "cause" accommodates both mental and physical contexts.

We do not know whether these findings will let us preserve folk psychology as a whole. However, they do preserve a key fragment of folk psychology. This fragment, I suggest, is vitally important to our picture of ourselves as persons. It contains the crucial propositions that people have mental states, and that mental states sometimes are causes. This fragment is the vital core of folk psychology—and this core is true largely (though not entirely) because of the way mental language is used within a physical world. Hence future discoveries in cognitive science and in neuroscience will not refute this core, nor will standard lines of philosophical argument erode it. This finding, though not a defense of folk psychology as a whole, is enough to preserve what is most human in us from present and future critiques by eliminative materialists.

REFERENCES

Churchland (1991). Paul M. Churchland, "Folk psychology and the explanation of human behavior". In Greenwood (1991a).

Davidson (1995). Donald Davidson, "Laws and cause". Dialectica, 49 (1995).

Dennett (1991). Daniel C. Dennett, Consciousness Explained. Boston: Little, Brown and Co., 1991.

Graham and Horgan (1994). George Graham and Terry Horgan, "Southern fundamentalism and the end of philosophy". *Philosophical Issues* **5**, 1994.

Greenwood (1991). John D. Greenwood, "Reasons to believe". In Greenwood (1991a).

Greenwood (1991a). John D. Greenwood (ed.), *The Future of Folk Psychology: Intentionality and Cognitive Science*. Cambridge: Cambridge University Press.

Horgan and Graham (1991). Terence Horgan and George Graham, "In defense of southern fundamentalism". *Philosophical Studies* **62**, 1991.

Horgan and Woodward (1985). Terence Horgan and James Woodward, "Folk psychology is here to stay". In Greenwood (1991a). (Reprinted from *The Philosophical Review* **94**, 1985.)

Margolis (1991). Joseph Margolis, "The autonomy of folk psychology". In Greenwood (1991a).

McDonough (1991). Richard McDonough, "A culturalist account of folk psychology". In Greenwood (1991a).

Ramsey et al (1991). William Ramsey, Stephen Stich, and Joseph Garon, "Connectionism, eliminativism, and the future of folk psychology". In Greenwood (1991a).

NOTES

¹ See, for example, Churchland (1991).

² This is how I read Horgan and Graham (1991) and McDonough (1991).

³ In alphabetical order: Greenwood (1991); Graham and Horgan (1994); Horgan and Graham (1991); Margolis (1991); McDonough (1991).

⁴ Greenwood (1991), p. 70.

⁵ See Greenwood (1991), especially pp. 73-75.

⁶ The precedent is this: Greenwood (1991, pp. 80-83) points out that a child can learn to use words for mental states without understanding the supposed causal roles of intentional states.

⁷ Greenwood (1991) touches on some of these issues; see especially pp. 80-83.

⁸ But see Greenwood (1991, p. 83) for a likely counterexample involving shame.

⁹ Greenwood (1991), p. 82.

¹⁰ For example, Churchland (1991); Ramsey et al. (1991).

¹¹ This does not exclude the possibility, supported by Margolis (1991; see especially p. 245) and McDonough (1991), that human culture is not reducible to the physical sciences.

¹² This statement about disjunctive states brings to mind Davidson's anomalous monism (see especially Davidson (1995)) and the remarks about "gerrymandered" structures and events in Horgan and Woodward (1985), sections 3 and 4. Comparing these three sets of ideas might prove fruitful. What are the differences and similarities?

¹³ Margolis (1991).

¹⁴ McDonough (1991).

¹⁵ Once again I am in the vicinity of Margolis' and McDonough's claims about the cultural nature of folk psychology (Margolis (1991); McDonough (1991)). Those accounts certainly are compatible with, though not entailed by, what I am saying in this paper.

¹⁶ Greenwood (1991).

- ¹⁷ Greenwood (1991), especially pp. 75-81.
- ¹⁸ Greenwood (1991), especially pp. 81-87.
- ¹⁹ Greenwood (1991), pp. 80-83.
- ²⁰ Greenwood (1991), p. 74.
- ²¹ Margolis (1991).
- ²² McDonough (1991).
- ²³ Horgan and Graham (1991), Graham and Horgan (1994).

²⁴ I am thinking, of course, of the Libet experiments and other related findings (see Dennett (1991), chapter 6, for relevant information).

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