Journal of Theoretical and Philosophical Psychology
2011, Vol. 31, No. 2, 102–105

1068-8471/11/$12.00 DOI: 10.1037/a0023482

COMMENTARY

On the Concept of Concept

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This commentary is in two parts: 1) a short review of problems with representational theories of mind, and 2) a critique and diagnosis of what I claim are fundamental problems with Wittgensteinian notions of grammatical analysis. These problems turn on an incomplete characterization of normativity in Wittgenstein's (and others') work.

Keywords: representation, concepts, computational theories of mind, Wittgenstein

The target paper is both a description of the history and domain of the study of concepts, and a *pre*scription in that one of those approaches is clearly favored. Slaney and Racine (2011) correctly note that I have criticized the standard representational theories of mind (e.g., Bickhard, 1993, 1996, 2009a, 2009b). Here I will outline some of the central problems with those theories, but I would like to focus primarily on their favored language-based approach—I also have some problems with that approach and would like to outline them.

What's Wrong With Representational Theories of Mind?

The central problem with what are known as representational theories of mind is not that they are representational per se, but that they have what is at root an incoherent model of the nature of representation. There are multiple perspectives on the fundamental errors of standard representationalist theories, but I will focus on just one—an error regarding the normativity of representation, which connects with my later discussion of language based models.

The kinds of representation that we are most familiar with are external representations, such as pictures, statues, blueprints, words, and so on. In various ways, they "stand-in" for what they represent. Those differing modes or bases of stand-in relationships include visual similarity, structural homomorphism, and conventional connections. It is understandable, then, that attempts to model internal, *mental*, representation should be based on such familiar examples.

The problem with this approach is that all such external representations involve the person knowing both ends of the stand-in relationship so that they can interpret the stand-in in terms of what it stands in for. The stand-in relationship is an encoding relationship, but we have to already know both ends of such relationships and know the relationship itself before any such encoding connection exists for any particular epistemic agent. We can have such a general perspective on *external* representations, but we cannot have such an external perspective on our own mental representations. Mental representations cannot require interpretation—representational "interpretation" is precisely what they are suppose to account for, so any such "account" is circular.

Attempts to account for mental representation in these terms has, in general, attempted to find some natural relationship that could somehow constitute a representational relationship—some natural relationship which, when it obtains between some object or property in the world in some state in the brain would constitute an encoding relationship between that mental state and that external object or property. Fodor (1990, 1991; Fodor & Pylyshyn, 1981), for example, proposes that the representational relationship is constituted by a lawful relationship, such as between light hitting the retina and retinal-brain activities.

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Such kinds of models, however, face a fundamental problem: how could they possibly account for the normativities of representation? How could they account for representation being potentially true or false? The crucial "natural" relationships are supposed to be factual, but Hume argued that no norms could be derived from facts, so how could models like that of Fodor's accomplish what those models attempt to do?

Most recently, this problem emerged explicitly in the 1980s in consideration of information semantics approaches to (mental) representation, of which Fodor's model is one example. If the representation constituting relationship—lawfulness or informational or causal, and so forth—exists, then the external end of that relationship exists, and, therefore, the "representation" is correct. If the representation constituting relationship does not exist, then the representation does not exist. There is no third possibility available to even attempt to account for the representation existing but being false.

There has been a minor industry for the last few decades attempting to overcome this problem, but they have the form of taking the perspective of some external observer of both the agent and the agent's environment, who can compare what the representation is supposed to represent with what is actually present in the environment and thus determine whether the representation is in error. The classic radical skeptical argument, however, points out that taking such an external perspective on one's own representations and environments is not possible, and, thus, we cannot determine for ourselves whether our own representations are in error.

But if representational error cannot, in principle, be determined by an organism itself, then error-guided behavior and learning are not possible. We know that error-guided behavior and learning occur, so there has to be something wrong with this argument. I suggest that the error is in the assumption that mental representation has the form of encodings; encodings are precisely what require an external perspective on both ends of the encoding and on the encoding relationship per se, and such a perspective is precisely what we cannot have on our own representations (Bickhard, 2009b).

This is not the occasion for elaborating an alternative model of representation that avoids these problems and can account for organism detectable representational error (see, e.g., Bickhard, 2009b). But I will point out that a pragmatist (inter-)action framework offers the possibility of functional *anticipations* of what interactions might be possible, and that such anticipations can be correct or incorrect, true or false. With such representational normativity available, it becomes possible to construct models of more general representations on an action basis, roughly in the manner of Piaget (1954). Simply put, a future-oriented "anticipatory" model of representation can account for the possibility of error, and such anticipations can, in principle, be detected as being in error if the anticipations do not work out. This is in contrast to the classical "spectator" models of representation that have dominated Western thought for millennia (Dewey, 1960/1929; Smith, 1987; Tiles, 1990), in which the epistemic agent is supposed to be peering back down the sensory input stream, attempt to "see" what is at the other end— the "past" end —of that stream.

Language-Based Theories

My concerns with language-based theories can be developed in commentary on a quote from the target article: "The problem is that the received view of concepts confuses what are, properly construed, internal (i.e., logical) relations with *causal* relations and, inadvertently, conflates conceptual and empirical issues—to ask 'What is a concept?' is not an empirical question; rather, it is a matter of grammar and, so, can only be meaningfully answered through a conceptual analysis of the concept 'concept'." (Slaney & Racine, 2011, p. 86).

This position privileges the normative grammatical realm of use over that of whatever dynamics might be involved in the mind (or brain). That can certainly be done, and I agree that results of such analyses can be interesting and important. But I do not agree that the question about the nature of concepts is solely a question about the concept of concept—I do not agree that it can be fully answered, and only answered, via conceptual analysis. And, as it turns out, my disagreement regarding this point is a manifestation of more fundamental disagreements with some general Wittgensteinian positions.

I begin with some related questions: Does it make sense to do a conceptual analysis of "electron" or "water"? Of course it does. What would we learn? Perhaps more about how the words are used. What would that tell us about electrons or water? Perhaps some things, but not necessarily very much. Why should we accept that a conceptual analysis of "concept" would tell us more about concepts?

Some phenomena are constituted in the ways in which we interact and talk with one another—some things have a social ontology, such as marriage or money. In particular, the normativities of word use are constituted in the social practices of those uses. Perhaps what concepts are is determined by the normative uses of the relevant terms, and nothing else could trump such use. Perhaps what concepts are is (fully) constituted by such use. That would be so, for example, if concepts were constituted in the uses of the term "concept", in the *normative criteria* for using "concept".

But why wouldn't that reasoning apply to "water"? Because "water" is used to talk about something independent of the word's use per se, and those uses may be wrong or incomplete in some ways about what they refer to. They may not refer at all: phlogiston. They may refer to more than one kind of thing: jade. They may refer, but with incorrect presuppositions: for example, that water is a basic stuff, in the class "earth, air, fire, water". They may refer, but in ways that don't fully match the natural divisions in the world—for example, we call muddy water "water", but not tea, even though tea has a higher percentage of H_2O than most muddy water (Malt, 1994).

In fact, even for clear social ontologies, such as money, what does a conceptual analysis tell us? Could our standard uses of the term "money" be in error in some way or ways about what money really is and how it really works? Clearly the answer is yes: money may be constitute socially, but it is not constitute solely in the grammar of the term.

A Diagnosis

If these critical points are valid, then there is something wrong with the framework that yields those conclusions. I suggest that the problematic presuppositions are deep in Wittgenstein's work.

One important source of the development of logical positivism was the recognition that extant empiricisms, such as that of Mach, could not account for the modalities involved in mathematics—such as the mathematics of relativity theory. Wittgenstein's *Tractatus* provided an account of modality in terms of the combinatoric possibilities of the atomic elements in the world and atomic representations that corresponded to them. Together with Whitehead and Russell's *Principia Mathematica*, this yielded a model of the emergence of logic and mathematics out of the grammar of language—an emergence that was argued to be consistent with a basic empiricism of representation and meaning.

Such accounts of modality were assumed to also be able to account for normativities more generally (though ultimately this failed, e.g., regarding the normativities of action—e.g., Rouse, 2002). Correspondingly, just as modality was taken to be located in the realm of language, so also was normativity located in the grammar of language—or, more broadly, in social forms of life.

This is manifest in common assumptions that there are two realms of consideration: the realm of facts and the realm of norms, or of causes and of reasons, of science and of philosophy, and so on. The later Wittgenstein took meaning to be an autonomous normative phenomena, and such normativities were constituted in grammatical internal relations in sociolinguistic practice.

But, if this dichotomy is correct and is exhaustive, then all normative phenomena, such as the norms of word use, are constituted solely in the social realm, not in the causal realm, such as that of brain processes. After all, so he argued, the only way for error to exist is in terms of social feedback of such error (thus private languages are not possible, because private error is not possible).

In particular, the normativities of language, including those of the uses of terms, such as that of "concept", are constituted solely in the internal relations of the grammars of sociolinguistic practices. Meaning, then, such as that of the concept of concept, is solely constituted in the normativities of the grammar of the uses of the term, and "conceptual" analysis is the sole way to determine what is being talked about. Any analysis of central nervous system or mental phenomena could at best be causal, and,

thus, not directly relevant to what concepts really are (though they might be revealing about how those sociolinguistic processes are realized at a strictly causal level).

This overall picture, however, cannot be correct. It is clear that there are multiple normativities involved in sociolinguistic practices, but these cannot exhaust all normativity. For one example, the normativities of the epistemological relationships between individual persons and their sociolinguistic contexts cannot themselves be sociolinguistic (on pain of being committed to a full linguistic idealism, Bickhard, 1987). We can, after all, get our understandings, uses, and interpretations of sociolinguistic phenomena *wrong*. We have to be able to understand social error feedback as error feedback, not just as causal feedback, in order for sociolinguistic normativity to get "off the ground". Even more simply, we each have normative epistemic relationships with our nonsocial environments; for example, presupposing that empty space will support you or that you can walk through a solid object quickly proves to be in error.

The dichotomy between cause and normativity, then, cannot be exhaustive. There is more to the ontology of the world than that, including more to the normative ontology of the world.

Conclusion

Such a point, of course, issues a promissory note to be able to account for such normativity at the level of individual organisms, as well as at the level of sociolinguistic processes—note that standard representational theories of mind cannot even begin to do this. I have made some suggestions in those directions elsewhere (Bickhard, 2003, 2007, 2009b), but there is not the time or space to review them here. Even absent such alternative models of normativity, however, it should be clear that not all normativity is sociolinguistic in nature, and, thus, that "conceptual" analysis of the grammar of uses of terms is not the only way to learn about what those terms are talking about.

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Received January 7, 2011
Revision received January 7, 2011
Accepted February 4, 2011 ■