

## Holism, Context and Content\*

### **Introduction**

While straightforwardly ambiguous words like “bank” and obviously indexical words like “I” are unproblematically treated as referring to different things in different contexts, such variations are displayed by terms that seem neither ambiguous nor indexical. This paper will argue that while traditional accounts of word meaning (in which a single fixed semantic value is attached to each entry in one’s ‘mental lexicon’) have problems accounting for how the referent of a non-ambiguous/non-indexical term can shift from context to context, a moderate version of semantic holism can do so by understanding the comparative weight of the extension-determining beliefs as itself something which can vary from context to context. The view will then be used to give an account of some of the more problematic cases in the literature associated with semantic externalism.

### **Moderate Holism**

There are two traditional ways in which a word’s semantic value can be context sensitive. The first is to be ambiguous. “Bank,” for instance, has two entries in one’s mental lexicon: one designating a financial institution, and another designating the edge of a river. The context-sensitivity of “bank” is thus explained in terms of the different lexical entries being accessed in different contexts. The second is for the word’s semantic value to incorporate an ‘indexical’ component, allowing the entry for the word in one’s mental lexicon to make reference to various contextual features. The word “here,” for instance, is context-sensitive because the entry for it in one’s lexicon makes reference to its place of utterance.<sup>1</sup> However, there are many cases where words seem to refer to different things in different contexts without being straightforwardly ambiguous or indexical, and such contextual variation is exactly what semantic holism predicts.<sup>2</sup>

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<sup>1</sup> For the most influential account of prototypical indexicals, see Kaplan 1989.

<sup>2</sup> Such cases are often addressed by arguing that either (1) the terms in question, while not obviously so, are still ambiguous, with multiple entries in our mental lexicon for each term, or (2) each term does only have one meaning, and the appearance to the contrary results from ‘confused’ or ‘sloppy’ usage that is not ‘strictly speaking’ true. I don’t have the time to argue against such approaches here. I only hope to suggest that an account of context-sensitivity preferable to these approaches is open to the semantic holist.

Semantic holism is here (very) roughly characterized as the doctrine that the semantic values of one's words is a function of all of one's explicit and implicit commitments that involve those words.<sup>3</sup> The semantic value of, say, "pen" in my language is determined by my beliefs that pens are writing instruments, that they contain ink, that the cylindrical objects on my desk are pens, etc. Such holistic accounts have a 'fineness of grain' which, I hope to show, makes them particularly apt to deal with the contextual aspects of our words' semantic values.

Nevertheless, I should first address the common charge that this same fineness of grain leaves holistic accounts of leave the semantic values of our words too unstable. In particular, holistic theories of semantic value are often criticized for entailing that *any* difference between beliefs will result in a difference in semantic value. For instance, if the semantic value of "pen" in my language is a function of my "pen"-beliefs, and one of these beliefs changes, then what I mean by "pen" would seem to change as well. Holistic theories of semantic value are thus typically accused of (among other things) entailing that no two people (or no person at two times) ever attach the same semantic value to any of their words.<sup>4</sup>

Fortunately, such criticisms are misconceived. Holism only requires that the semantic value of a term be a *function* of the beliefs associated with it, and *this* claim need not commit one to the thesis that semantic values are unstable. The holist need only claim, plausibly enough, that the function between sets of beliefs and semantic values is not one-to-one. After all, consider the claim that one's final grade is a function of one's grades on one's exams and quizzes. The truth of *this* claim certainly doesn't entail that any change to one's quiz grades will produce a change in one's final grade. Each grade makes *some* contribution to one's final grade, but not every change among the contributors will produce a corresponding change in the ultimate outcome. The function from one's test and quiz grades to one's final grade allows a good deal of stability in the output in the face of considerable variation in the input.

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<sup>3</sup> For a more detailed account of holism and the motivations for it, see Block 1998, Jackman 1999.

<sup>4</sup> For a much more exhaustive list purported problems with holistic theories, see Fodor and LePore 1992.

In much the same way, a holist about semantic value can consistently claim that the semantic value of one's words mean is a function of *all* of one's beliefs without suggesting that *any* change to these beliefs would produce a corresponding change in semantic value. The lack of immediate effect on semantic value that some belief changes may have no more entails that those changed beliefs didn't contribute to the semantic value than the lack of immediate affect on one's final grade that some quiz-grade changes may have entails that those quizzes did not contribute to the final grade. If the function from belief to semantic value allows some constancy of output through variations in input, then holism won't entail that semantic values are unstable.<sup>5</sup>

We can arrive at such a holistic account of semantic value by tying the semantic value of a speaker's terms to whatever object or set of objects maximizes the (weighted) total number of truths the speaker is committed to.<sup>6</sup> Such an account of semantic value will undoubtedly be holistic: a term picks out the object it does because of the role that object plays in contributing, either directly or indirectly, to the truth of countless beliefs. Nevertheless, even if countless beliefs played some role in determining the term's reference, there is little reason to think that a change in one (or even a considerable number) of these beliefs will change what is referred to. For instance, the truth of two different sets of 'pen' beliefs may, in spite of their differences, be maximized by precisely the same set of objects.

### **Holistic contextualism**

Such holism may not make semantic value too unstable, but how does it account for the context-sensitivity discussed earlier? If, as the holist maintains, what we refer to is determined by what we believe, it might seem that there could be no changes in what our terms refer to without any changes of

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<sup>5</sup> Such holistic accounts are dealt with in more detail Jackman 1999, 2003. It should be noted that some holistic accounts (e.g.: conceptual role semantics) probably do require that meaning be unstable.

<sup>6</sup> The proposal is thus very sympathetic to the so-called "principle of charity" (see Jackman 2003), as well as the type of 'causal' theory of reference developed in Evans 1973. Furthermore, while I have been talking here about "beliefs" a more careful and detailed formulation of this position would have to be in terms of the agents commitments, many of which would not be explicitly formulated by the agent. For a discussion of the importance of such background commitments to presenting a version of charity and holism compatible with semantic externalism, see Jackman 2003.

belief. However, there cases of contextual variation can involve the reference of a speaker's term changing without the speaker forming any new, or giving up any old, beliefs.

For instance, we can see a type of context-sensitivity when various aspects of the 'prototype' associated with a word break up.<sup>7</sup> Consider the following two sentences:

(1) John behaves so badly in school that the principal should call his mother.

(2) John probably gets his freckles from his mother.

If John is adopted, then (whether the speaker knows about the adoption or not) the extension of these two instances of "mother" will probably be different. (Assuming that we are acquainted with John but neither of his 'mothers'.) We typically should call the woman bringing him up if he is in trouble, but assume that the woman who contributed to his genetic make-up is responsible for his freckles. Somebody uttering the two sentences may thus refer to two different people with the word "mother" even though there may be no difference in their beliefs to account for the change.<sup>8</sup>

Nevertheless, the function which maximizes the number of truths believed by the speaker can account for these contextual features by looking to maximize not just the total number of true beliefs, but rather some *weighted* total of them. Some beliefs will be more important to the speaker than others, and preserving the truth of these beliefs will have a higher priority than preserving the truth of the beliefs assigned less weight.<sup>9</sup> Once such weighted totals are in the picture, holistic accounts can

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<sup>7</sup> Such cases are discussed extensively in Rosch 1975 and Lakoff 1987.

<sup>8</sup> The phenomenon can also show up with some proper names, and perhaps the classic illustration of this is Wittgenstein's discussion of "Moses":

If one says "Moses did not exist", this may mean various things. It may mean: the Israelites did not have a single leader when they withdrew from Egypt -- or: their leader was not called Moses -- or: there cannot have been anyone who accomplished all that the Bible relates of Moses --or: etc. etc. (PI §79)

"Moses" seems as if it can be used to mean a number of things, but, as Wittgenstein points out later, the suggestion that the term is ambiguous is not especially plausible. While Wittgenstein's discussion of "Moses" has traditionally been credited for pointing out that a cluster of descriptions, rather than a single one, is associated with most proper names (See, for instance, Searle 1958, Fogelin 1976), the mere fact that the reference of a given name is determined by a cluster of descriptions does not explain how the name's meaning could be context-sensitive. If "Moses" simply referred to whatever satisfied most of the cluster, its referent would seem to be context-invariant. A bias towards non-contextualist semantic theories led philosophers to read these passages as arguing that one's non-contextualist account of meaning needed to be more complex (replacing single descriptions with clusters of them) while what was actually provided was an argument for the inadequacy of non-contextualist accounts, no matter how complex.

<sup>9</sup> The context which the weighing is sensitive to is thus not our physical context, but rather our interests at the time of utterance.

allow for changes of semantic value without changes of beliefs. It is not the beliefs themselves, but rather how heavily they are weighed, that can change from context to context.

The variance in the semantic value for “mother” can thus be understood as being produced by our various interests leading different ‘mother-beliefs’ to be more-or-less heavily weighed. When I am talking about John’s disciplinary problems my belief that John is being brought up by his mother will be weighed more heavily than my belief about his mother contributing to his genetic make-up. When I am talking about his freckles, the opposite will usually be the case. Different aspects of our ‘mother-prototype’ are given greater weight in the two contexts.<sup>10</sup>

This presentation of holistic contextualism is, admittedly, very sketchy. Nevertheless, it suggests how a single item in one’s mental lexicon could pick out different objects, or sets of objects, depending upon one’s context. The proposed holistic account allows a word’s semantic value to be both stable through changes in belief, and flexible through changes of context. It thus explains how the truth conditions of our utterances can be non-indexically context-sensitive without suggesting that our words are ambiguous.

### **Semantic Externalism**

The literature on semantic externalism is often driven by conflicting intuitions about what to say about a number of key cases, and such disputes are notoriously hard to resolve. However, such conflicting intuitions may be at least partially explained in terms of the cases involved being subject to a good deal of contextual variation.

#### **(i) Bert’s ‘arthritis’**

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<sup>10</sup> Who, if anyone, we are referring to by “Moses” will also depend upon how heavily our beliefs are weighed. Someone who is interested in the history of the Middle East may weigh heavily the belief that Moses led the Israelites out of Egypt, but not put much weight on beliefs relating to the miracles Moses purportedly performed (even if he does believe that they were, in fact, performed). On the other hand, someone who is only interested in the miraculous aspects of the story might weigh the miracles the most heavily, and if there turns out to be no one who took the ten commandments from God and parted the red sea, then his term “Moses” would not refer to anyone. On the other hand, someone may be both of these, interested sometimes in history, and sometimes in miracles, and the reference of the name may shift for him accordingly.

For instance, consider Tyler Burge's well-known example of Bert and his idiosyncratic use of "arthritis". Bert uses "arthritis" much as the rest of us do but, notoriously, he also applies "arthritis" to the pains in his thigh.<sup>11</sup> Burge treats Bert here as still referring to *arthritis* by "arthritis", while writers such as Davidson and Bilgrami argue that Bert should be understood as referring to *tharthritis* (a condition which includes both arthritis and rheumatoid ailments of the limbs, particularly the thigh) by "arthritis."<sup>12</sup>

This lack of consensus about what to say about Bert, may reflect the fact that what Bert means by "arthritis" is contextually sensitive. When Bert goes to the doctor and complains "my arthritis has spread to my thigh" it may be correct to take him to be referring to *arthritis* by "arthritis." On the other hand, when he is sitting around with his brother and complains "my arthritis is too bad for me to mow the lawn today" it may be equally correct to treat him as referring to *tharthritis*.

This is exactly what the sort of holistic contextualism outlined above would predict. In addition to a large set of beliefs which would be true of both *arthritis* and *tharthritis* Bert has one set of beliefs (such as "I have arthritis in my thigh" and "My arthritis is keeping me from cleaning out the garage today") which would be true only of *tharthritis*, and another set of beliefs (such as "Doctors have studied how to treat arthritis" and "The man from the insurance company said that people with arthritis should go see a doctor about it") which would be true only of *arthritis*. When he is complaining to his brother, the former set of beliefs will be given greater weight than the latter (and so he will refer to *tharthritis*), while when he is consulting his doctor, the latter set of beliefs will be given greater weight (and so he will refer to *arthritis*). What Bert means by "arthritis" shifts from context to context,<sup>13</sup> and such context-sensitivity may be characteristic of cases where someone's idiosyncratic usage of a word can be understood in terms of either an idiosyncratic belief or an idiosyncratic semantic value.

## (ii) Switching 1: Memory content

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<sup>11</sup> See Burge 1979.

<sup>12</sup> Bilgrami 1992, Davidson 1993, 1994. (Though Davidson seems to have reconsidered his views on the example in Davidson 2003.)

<sup>13</sup> Burge, of course, gives no sign that he takes "arthritis" to be context-sensitive in this way.

The account sketched above also applies usefully to the problem of how to ascribe thought (and memory) content to people who have ‘switched’ environments. For instance, there has been much discussion about cases such as the following: John is, at the age of 20, taken from Earth and moved to Twin Earth (which is just like Earth but whose ‘water’ is made up of XYZ (*twater*) rather than H<sub>2</sub>O) and lives there for another 20 years without being aware of the switch. Most externalists agree that at age 20, John’s use of “water” refers to H<sub>2</sub>O but at some time over the next few years his term comes to typically pick out XYZ, so that when he asks for a glass of “water” he is talking about *twater*, and no longer talking about water. There is, however, less consensus about whether John has (1) simply acquired a *second* ‘water’ concept, so that he is able to have thoughts about both *water* and *twater* (the pluralistic view),<sup>14</sup> or (2) had his original *water* concept *replaced* by a *twater* concept, so that he is now unable to have any *water* thoughts (the monistic view).<sup>15</sup>

The difference between the pluralistic and monistic views manifests itself when we try to interpret claims/thoughts of John’s such as “I remember swimming at my Grandfather’s cottage when I was 18 and thinking ‘this water was freezing!’”. Defenders of the monistic view typically claim that in such attributions “water” picks out *twater* and that John has simply lost the ability to remember what he thought before. Defenders of the pluralistic view, on the other hand, may treat this as one of the cases where John was able to apply his original *water* concept, so that the recollection turns out to be a true one. Monists view even memory content to be determined by one’s current environment, while pluralists typically treat memory content as reflecting the environment in which the thought remembered originally occurred.

The view defended here is clearly more pluralistic than monistic. However, it is in a position to allow that the monist may occasionally be right about what we should say about particular memories. The holistic view allows that there are a variety of ‘water’-concepts available to the speaker in the switching cases, and which one, say, John applies will depend upon his interests at the time. At 40 John typically refers to *twater* by “water” since most of his ‘water’-beliefs are tied to his contact with XYZ. However, if the purpose of his recollection were simply to reflect on his youth, most of these

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<sup>14</sup> See, for instance, Gibbons 1996.

<sup>15</sup> See, for instance, Ludlow 1995.

later water beliefs may not be relevant, while the belief that he did, in fact, experience the freezing water would be very heavily weighed. In such a case, he would plausibly be seen as thinking about *water* rather than *twater*. On the other hand, if the recollection comes up in the context of debating whether a lake<sup>16</sup> he and his family are about to visit will be pleasant to swim in, then non-*water* friendly beliefs of his such as “there is a lake full of water to the north of me that I’m thinking of vacationing at” will be heavily weighed, and the suggestion that he refers to *twater* by the term (and thus misremembers what he originally thought ) will seem much more plausible.

Whether a speaker’s use of “water” refers to H2O or XYZ will depend at least partially on his context. In those contexts where his commitments associated with his original environment have more weight, it will refer to *water* while in those where those relating to his new environment have more weight, it will refer to *twater*. Of course, as the speaker spends more time on Twin Earth, the number and strength of his *twater* commitments is bound to grow, but the *water* commitments don’t simply disappear, and in some contexts they may be important enough to outweigh the more recent *twater*-commitments.

(iii) ‘General’ (not narrow) contents

To extend what came above, we should note that, in some contexts commitments involving *both* H2O and XYZ may outweigh our commitment to “water” picking out a natural kind, and in such contexts “water” may be best interpreted as picking out a phenomenal or functional kind that includes both *water* and *twater*. After all, the belief that water is a natural kind is not sacrosanct, and it may be easier to give up that belief than it is to give up on one’s commitment to having had contact with ‘water’ in one’s teens.<sup>17</sup>

It is important to note that this does not amount to saying that in such cases “water” can have both a ‘narrow’ and a ‘wide’ semantic value. In particular, there is no reason to think that the interpretations that include both *water* and *twater* in the term’s extension should be understood as

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<sup>16</sup> Which he mistakenly thinks is the one he once swam in.

<sup>17</sup> This is one respect in which talk of kinds is much different than the cases of proper names in Evans 1973. The assumption that a name picks out a single person rather than a set of people is much stronger than the assumption that a term picks out a natural kind.



'narrow'. The concept may pick out a functional or phenomenal kind that can encompass both *water* and *twater*, but such kinds aren't narrow in any internalist sense. Rather, they reflect the functional/phenomenal qualities of the *actual* substances in the two environments, and so they can go beyond (and need not fully match) the agent's 'conception' of 'water'.<sup>18</sup> If John believes that 'water' boils at one hundred degrees Fahrenheit, this belief will still count as mistaken even when "water" is interpreted in the more expansive sense.

In much the same way, the availability of *tharthritis* thoughts to Bert depends on their being a set of rheumatoid ailments that actually corresponds to his conception of "arthritis". If Bert believes that "arthritis" is caused by dust-mites, and no rheumatoid ailment is so caused, then he should not be treated as referring to, say, *dharthritis* (a rheumatoid ailment caused by dust mites) when he complains about his "arthritis", since there is no such disease causing pains in his body.<sup>19</sup>

#### (iv) Switching 2: Externalism and Inference

We should also note that the understanding of the switching cases available to the holistic contextualist also allows one to put to rest Boghossian's worry that "externalism is inconsistent with very important aspects of our intuitive conception of the mind – namely, with the a priority of our logical abilities."<sup>20</sup> Boghossian's argument, it will turn out to rely on ignoring how arguments and inferences take place against the background of a fixed context, and such contexts do not switch as one moves from premise to premise.

Boghossian argues for this conclusion by considering the following case: Paul is an Opera fan and inhabitant of Earth. While vacationing in New Zealand he encounters Luciano Pavarotti floating in Lake Taupo and, much to his delight, has an extended conversation with the famous tenor. Some time later, and without his knowledge, Paul is switched to Twin Earth and over a number of years most of his terms come to refer to the standard semantic values associated with Twin English, so that we he

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<sup>18</sup> See Jackman 2001.

<sup>19</sup> This is assuming, of course, that his idiosyncratic belief about the origin of 'arthritis' is not more heavily weighed than all his other 'arthritis-commitments' put together. In such a case, which I doubt ever occurs, the term would be taken to be non-denoting in those contexts.

<sup>20</sup> Boghossian 1992, p. 17.

claims that he saw “Pavarotti” sing the day before, he is talking about *Twin*-Pavarotti. Still, it seems as if he can still have memory-based thoughts about the Pavarotti on Earth, and when he reminisces about the time that he saw ‘Pavarotti’ swimming in Lake Taupo, he seems to be thinking of our Pavarotti, not his twin. This, however, could, Boghossian claims, result in Paul’s engaging in reasoning like the following:

- (1) Pavarotti once swam in Lake Taupo.
- (2) The singer I heard yesterday is Pavarotti.
- (3) Therefore, the singer I heard yesterday once swam in Lake Taupo,

According to Boghossian “Pavarotti” refers to Earth’s Pavarotti in the initial premise, but to *Twin*-Pavarotti in the second, so that “True premises conspire, through a fallacy of equivocation that Peter is in principle not able to notice, to produce a false conclusion.”<sup>21</sup> What would seem to Paul to be a perfectly valid inference would thus turn out not to be since “the thesis of a priority of logical abilities is ... inconsistent with externalist assumptions.”<sup>22</sup> This is a surprising result, and is sure to make externalism look less appealing.

However, there is reason to be suspicious of Boghossian’s claim that the references of our terms could switch mid-argument in such a fashion. In particular, just because, when considered in isolation the occurrence of “Pavarotti” in (1) would refer to Pavarotti, while, when considered in isolation, the occurrence of “Pavarotti” in (2) would refer to Pavarotti’s twin, it need not follow that the term can support multiple semantic values in arguments that involve both (1) and (2). Indeed, the contextualist account outlined above would seem to rule out the sorts of introspectively undetectable equivocation described by Boghossian.

Paul has, after all, a set of ‘Pavarotti-commitments’ that are tied to two men, and which of the two Pavarotti’s he refers to will depend on which subset of his commitments carries the most weight in a given context. It seems likely that a sentence like (1) would typically be uttered in the context of Paul’s reminiscing about his encounter’s with the great tenor, and the commitments tying the term to Pavarotti will in such cases be more heavily weighted than those attached to his twin. Of course, this

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<sup>21</sup> Boghossian 1992, p. 22.

<sup>22</sup> Boghossian 1992, p. 22.

need not *always* be the case, and (1) could be uttered in contexts where the commitments associated with Pavarotti's twin carried more weight.

By contrast, a sentence like (2) would be more likely uttered in contexts where the commitments tied to Pavarotti's twin are more entrenched, and in that case "Pavarotti" would refer to Pavarotti's twin. (Though, once again, there could be contexts where the occurrence of the name in (2) might refer to Pavarotti as well).

However, while there can be contexts where "Pavarotti" refers to Pavarotti, and other contexts where the name picks out Pavarotti's twin, these are clearly *different* contexts, and while isolated instances of either (1) and (2) can each be true in some context, there is no context in which they are *both* true. However, when (1) and (2) are incorporated into a *single argument*, they have to be interpreted in terms of *single* context, and so the term will need to be assigned a single semantic value in both (1) and (2). Consequently, the sorts of hidden equivocation that Boghossian treats the externalist as committed to will not arise.

## **Conclusion**

The holistic contextualist can, then, argue that many of the debates surrounding semantic externalism arise from the fact that both sides mistakenly assume that there is a single answer to questions like "what is the semantic value of 'arthritis' in Bert's language?" or "what is the content of John's 'water' memories?", when the answers to such questions are, in fact, highly context dependent. I'm inclined to think that semantic holism is independently plausible, but the added flexibility it provides when dealing with the more problematic cases associated with semantic externalism gives one all the more reason to endorse it.

2845 Words

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