ROBERT EAMON BRISCOE

INDIVIDUALISM, EXTERNALISM AND IDIOLECTICAL MEANING

ABSTRACT. Semantic externalism in contemporary philosophy of language typically – and often tacitly – combines two supervenience claims about idiolectical meaning (i.e., meaning in the language system of an individual speaker). The first claim is that the meaning of a word in a speaker's idiolect may vary without any variation in her *intrinsic, physical properties*. The second is that the meaning of a word in a speaker's idiolect may vary without any variation in her *understanding* of it. I here show that a conception of idiolectical meaning is possible that accepts the "anti-internalism" of the first claim while rejecting (what I shall refer to as) the "anti-individualism" of the second. According to this conception, externally constituted idiolectical meaning supervenes on idiolectical understanding. I begin by trying to show that it is possible to disentangle anti-internalist and anti-individualist strands of argument in Hilary Putnam's well-known and widely influential "The Meaning of 'Meaning'." Having once argued that the latter strand of argument is not cogent, I then try to show that individualism (in the sense above) can be reconciled with perhaps the most plausible reconstruction of Putnam's well-known and widely accepted "indexical" theory of natural kind terms. Integral to my defense of the possibility of an individualist externalism about idiolectical meaning are my efforts to demonstrate that, *pace* Putnam, there is no "division of linguistic labor" when it comes to the fixing the meanings of such terms in a speaker's idiolect. The fact that average speakers sometimes need defer to experts shows that not *reference*, but only *reliable recognition* of what belongs in the extension of a natural kind term is a "social phenomenon."

> A rule, so far as it interests us, does not act at a distance.
>
> Wittgenstein (1958, 14).

1. In this essay, I develop an individualist – but non-internalist – conception of idiolectical meaning.[1] The conception is "individualist" in that it denies need for a notion of idiolectical meaning that may potentially outrun or conflict with individual *understanding* or – perhaps what amounts to the same – need for a notion of first-person partial or partly erroneous understanding of idiolectical meaning. For the individualist, facts about the meanings

of the words in an agent's idiolect supervene on facts about her understanding of their use.[2] The conception is non-internalist in two respects. First, unlike semantic internalism, the individualism considered here is not a philosophical thesis about what does or doesn't supervene upon an agent's intrinsic (non-relational), physical properties. It makes no claim concerning the relation in which facts about what an agent means and thinks stand to facts about her that can be non-intentionally characterized. (Indeed not, for individualism is a conception of the relation between idiolectical *meaning* and *understanding*.) Second, and, more importantly, individualism, as I shall argue below, is in fact fully compatible with semantic externalism: an individualist is free to allow that the meanings of an agent's statements and the contents of her thoughts sometimes depend for their individuation on her relations to the surrounding environment and, so, that meanings and contents can vary without variation in an agent's intrinsic physical properties. What an individualist does not allow is that idiolectical meaning may vary while idiolectical *understanding* remains fixed.[3]

I begin in Sections 2–6 by clearly distinguishing individualism about idiolectical meaning from both semantic internalism and the description theory of naming. In Sections 7 and 8, I then show that it is possible to disentangle anti-internalist and anti-individualist strands of argument in Hilary Putnam's "The Meaning of 'Meaning'." Having once separated those strands, I argue that the assimilation of individualism and internalism in that essay is based on a confusion: when Putnam talks about what fixes or determines the reference of natural kind terms, he uses the words "fix" and "determine" in an equivocal manner. What is more, if the relevant, conflated *epistemic* and *non-epistemic* conceptions of fixing or determining the reference of a natural kind term are adequately distinguished, the form of externalism defended in the "The Meaning of 'Meaning" is shown to be fully compatible with an individualist perspective on idiolectical meaning (Section 10). More specifically, I argue that perhaps the most plausible interpretation of Putnam's well-known and widely accepted "indexical" theory of natural kind terms can be reconciled with individualism. According to theory (as I reconstruct it), *if* a particular natural kind x is present in a linguistically competent lay speaker's environment, and *if* paradigmatic instances of x share a certain underlying structure, then it is sufficient (but not necessary) for the speaker to refer to x by a term w that she intend to apply w to an item y if and only if y has the same

underlying structure as paradigmatic instances of x.[4] *Pace* Putnam, it is thus not the case that "the 'average' speaker who acquires [a natural kind term] does not acquire anything that fixes its extension." Rather, on the indexical theory, acquiring a natural kind term and fixing its extension coincide.

It also follows that the division of labor to which Putnam famously calls attention is not *linguistic* in character. The fact that average speakers sometimes need to defer to experts shows that not *reference,* but only *reliable recognition* of what belongs in extension of a natural kind term, is a "social phenomenon." There is no cogent argument for so-called social externalism (social anti-individualism) in "The Meaning of 'Meaning'."[5]

2. Semantic externalism (henceforth "externalism") is the doctrine that, at least sometimes, the meanings of an agent's statements and the contents of her thoughts depend for their individuation on her causal relations to the surrounding world. Equivalently, externalism can be made out as the denial of the view that the meanings of an agent's statements and the contents of her thoughts *supervene* on the physical make-up and history of her body considered in isolation from its causal relations to the environment, i.e., on her intrinsic (non-relational), physical properties. The best-known arguments for externalism contrive to demonstrate by means of certain thought experiments that, holding constant all of an agent's past and present intrinsic, physical properties, the meanings and contents properly attributable to her can vary with change in her natural and/or social environment. Since meaning and content can vary without variation in intrinsic physical properties, it follows that the former fail to supervene on the latter. *Semantic internalism* is precisely the denial of this view about how to individuate intentional kinds. An internalist holds that meaning and content cannot vary without variation in intrinsic, physical properties, and so supervene on the latter. In this sense, meaning and content are not "world-involving" from an internalist perspective.

On the assumption that the sorts of external factors relevant to determining the meaning of a referring term in a speaker's idiolect are also relevant to determining her *concept* of the item(s) to which it refers,[6] it will often be convenient in what follows to restrict my discussion of externalism to the individuation of meanings. I take it that the points I shall make about the external determination of the

meanings of statements apply, *mutatis mutandis,* to the conceptual contents of thoughts.

3. *Externalism comes in two flavors. Natural kind externalists* maintain that the extension of a natural kind term like "water" is determined by the underlying structure of paradigmatic instances or samples of the stuff to which it is ordinarily applied. It is correct to apply "water" to a liquid if and only if the liquid shares the underlying structure of paradigmatic instances or samples of water. What a competent English-speaking agent means by "water" thus depends not only on the perceptible properties by means of which she usually identifies water, but also on the liquid's sub-perceptible, microstructural properties – quite irrespective of whether these are known to or recognizable by her.[7]

Hilary Putnam, the progenitor and perhaps most prominent proponent of this view, has long maintained that there is "division of linguistic labor" with respect to the use of natural kind terms. As Putnam observes, the average (lay) speaker is not able to discriminate reliably between instances of a natural kind and counterfeits (look-alikes). The average speaker, to choose an obvious example, doesn't know enough about chemistry to discriminate between gold and pyrite (fool's gold), let alone to ascertain whether a sample of gold is pure. This shows that there is a division of labor when it comes to the application of the natural kind term "gold": the average speaker has to rely on experts reliably to recognize whether something falls in the term's extension. However, according to Putnam, it also shows that there a division of labor when it comes to fixing the *reference* of the term "gold" in the speaker's idiolect. "[T]he 'average' speaker who acquires [a natural kind term]," he writes, "does not acquire anything that fixes its extension." Rather, "it is only the sociolinguistic state of the collective linguistic body to which the speaker belongs that fixes the extension."[8] And since the meaning of a natural kind term, as Putnam argues, is partly determined by its extension, it also follows that it is only the sociolinguistic state of the collective linguistic body to which the speaker belongs that fixes the *meaning* of "gold" in her idiolect. This view about how the meanings of natural kind terms are to be individuated is a form of *social externalism,* the second of the two varieties of externalism to which I alluded above.

Social externalists typically hold that the meanings of words in an agent's idiolect sometimes partly depend for their individuation

on their meaning in the sociolect, or common language, of the agent's linguistic community.[9] What an agent means by a word thus does not always depend solely on facts about her *understanding* of its use. Indeed, in relevant cases, the agent may have only a partial or partly erroneous understanding of what she means by a word. It follows that, holding all facts about the agent's understanding fixed, meanings in her idiolect can vary with variation in how other speakers in her linguistic community use their words. Tyler Burge over several decades – most notably in Burge (1979) – has put forward a number of highly influential arguments in support of such social externalism about the individuation of idiolectical meanings.

It bears emphasizing that Putnam and Burge's claims concern the semantics of *idiolects*, i.e., meaning and reference in the language system of an individual speaker. They essay to show that what words in an agent's idiolect mean sometimes depends on the nature of the physical and/or social environment. Although Putnam is not always clear as Burge is about this, his central contention in "The Meaning of 'Meaning'" is that "it is possible for two speakers to be in exactly the *same* psychological state (in the narrow sense), even though the extension of the term A in the *idiolect* of the one is different from the extension of the term A in the *idiolect* of the other."[10] Indeed, it is merely truistic that meaning in a *sociolect* can vary without variation in an agent's intrinsic, physical properties and, so, that an agent from community C_1 can be identical in respect of all intrinsic, physical properties to another agent from a different community C_2 though a single word have one meaning in a dictionary deferred to in C_1 and another in a dictionary deferred to in C_2. (The relevant word need not even feature in the idiolect of either of the two agents for this possibility to obtain.) Both externalism and its denial are theses concerning the semantics of idiolects.

4. The picture of idiolectical meaning I should like to consider here can be made out in connection with Burge's well-known distinction between *explicational* and *translational meaning*. According to Burge, the explicational meaning of a word "articulates what the agent would give, under some reflection, as his understanding of the word."[11] The translational meaning of the word, by contrast, articulates the "exact translation" of its meaning in her idiolect. Applying this distinction, social externalism can be construed as the claim that the translational meanings of words in an agent's *idiolect* sometimes cannot be ascertained without reference to their meanings in

the *sociolect* of her linguistic community. An exhaustive explanation of how a mature, linguistically competent agent understands a word, in such cases, may fail fully to convey or even conflict with its translational meaning in her idiolect. It is thus false, according to Burge, that a "word's explicational meaning and its translational meaning are, for purposes of characterizing the individual's idiolect, always interchangeable; and that the individual's conceptual explication always completely exhausts her concept."[12]

Departing from entrenched terminology, I have been referring to the picture that Burge here eschews as "individualism." (Burge himself rather uses the term to refer both that view and semantic internalism.) Individualism, so narrowly construed, amounts to the denial that, when it comes to idiolects, there *is* a distinction to be drawn between explicational meaning and translational meaning. Or rather, it amounts to the denial that, in *addition* to explicational meaning, there is need for some further notion of idiolectical word meaning.[13] In what follows, I shall therefore speak of "idiolectical understanding" where Burge would speak of explicational meaning and of "idiolectical meaning" where Burge would speak of translational meaning.[14]

Individualism, as I am characterizing it, is the idea that there can be no variation in facts about meaning without variation in facts about understanding. Presuming that the latter facts are, under ordinary circumstances, cognitively accessible, it has the implication that the only reasons for thinking that the explanations a mature, linguistically competent speaker gives of the meaning of a word in her idiolect are incomplete or mistaken are particular and perfectly commonplace: e.g., the agent may have been deceitful, or deluded, or careless. In addition to such familiar reasons, there are no general reasons of a theoretical nature to be skeptical about the adequacy of an individual's own explanations of what she means.[15]

What I am calling "individualism" may have a familiar Wittgensteinian ring to it. In *Philosophical Investigations,* Wittgenstein asks: "What does it mean to know what a game is?" In answer to his question, he replies:

Isn't my knowledge, my *concept* of a game, completely expressed (*ganz ausgedrückt*) in the explanations (*Erklärungen*) that I could give? That is, in my describing examples of various kinds of game; showing how all sorts of other games can be constructed on analogy of these; saying that I should scarcely include this or this among games; and so on (§75).

By "completely expressed," Wittgenstein, of course, does not intend that his explanations of his concept provide *necessary and sufficient conditions* for its correct application. Nor does he intend that his explanations provide a criterion of correctness that can be extended to *every* new application of the word "game" – that, if only his explanations are understood, all possible disagreements about its application are logically forestalled. The use of the word "game," as he goes on to say, is not "everywhere bounded by rules." By "completely expressed," then, Wittgenstein does not intend that his explanations settle the propriety of *any* new application of the word "game" in advance. What he does intend is that what an agent means by a word is not properly thought of as something that transcends *her understanding of it* (as presumably manifested in the use she would make of the word in various contexts and the explanations of the word she would give). Similarly, for the individualist, there is no notion of correct explanation of idiolectical meaning such that even if an agent has provided what, by ordinary standards, is a correct explanation of her *understanding* of her use of a word in a certain context, she may have provided only an incomplete or partially incorrect explanation of what she actually *means* by it . (This, of course, is not to deny the obvious point that an individual may have a defective understanding of words in the *sociolect*.)

5. I should like to make two further points as a preliminary to my discussion of Putnam. First, both natural kind externalism and social externalism are commonly taken to be incompatible with what I am calling individualism. Indeed, one way of stating the conclusion of the argument set forward in "The Meaning of 'Meaning'" is that the extension of a natural kind term – and so its meaning – can vary while all facts about understanding remains fixed. The argument is premised on the uncontroversial observation that an agent cannot always distinguish instances of a natural kind from counterfeits on the basis of her understanding of the term in her idiolect that designates the kind in question. For example her understanding of "gold" may not cognitively equip her to tell gold and pyrite apart reliably. Given the constraint that the reference of a natural kind term places on its meaning (namely, that, necessarily, if any two such terms differ in extension then they differ in meaning), it is supposed to follow that her understanding of the term fails to determine its meaning. One of the my main undertakings here will be to show that natural kind externalism is not in fact incompatible

with individualism. Social externalism, by contrast, *is* genuinely incompatible with individualism. But, as I shall argue, "The Meaning of 'Meaning'" fails to make convincing case in its defense.

My second point reiterates that "individualism," as it has come to be used in the philosophy of language, often covers both internalism and the picture to which I am here referring by that name. While Burge is responsible for this usage, his arguments against individualism, as characterized above and internalism are, though seldom remarked, distinct. His argument against *internalism* is based on thought-experiments in which an agent's meanings and contents vary while her intrinsic, physical properties remain fixed.[16] By contrast, his argument against *individualism* is rather premised on the unobjectionable observation that "one might use 'feldspar', 'tiger', 'helium', 'water', 'oak', or 'spider', with definite referents even though one cannot use one's background knowledge to distinguish the referent from *all possible counterfeits*." From this, it is taken to follow that "the referents of such kind terms is simply not fixed entirely by the individual's background knowledge."[17] But if the extension of a natural kind term is not fixed by the individual's "background knowledge," i.e., by all facts about her understanding of the term, then, again, by the reasoning above, neither is its meaning. Since Burge's arguments against individualism and internalism are distinct, it possible to accept the conclusion of one but not the other. In Section 8, I shall show that it is also possible to disentangle anti-internalist and anti-individualist strands of argument in Putnam's "The Meaning of 'Meaning.'"

6. In addition to distinguishing between individualism and internalism, it is also necessary to distinguish between individualism and the so-called "description theory" of naming (the primary target of Kripke and Putnam's "causal theory"). According to the description theory, a name in a linguistically competent speaker's idiolect refers to what, if anything, uniquely satisfies or "fits" the descriptions that she associates with it (or, at least, the majority of them). The most obvious problem with the description theory, as Kripke famously argues, is that we do not ordinarily require of a speaker that in order for her to refer to an object she must be able to provide a description that is uniquely true of it. It *prima facie* does not seem *necessary* for a speaker to refer to Gödel that she have one or more beliefs about Gödel that pick him out uniquely. Further, the descriptions that a speaker associates with a name do not

in general appear to be *sufficient* to settle what the name refers to either. If, contrary to fact, an unknown mathematician named Schmidt had discovered the incompleteness of arithmetic, it would not follow that speakers in using "Gödel" – with the intention of referring to *the man who discovered the incompleteness of arithmetic* – were actually referring to Schmidt by that name. And if were it the case that *no one* uniquely satisfied that description (say because the theorem somehow turned out to be false), it plausibly would not follow that those speakers had all along been referring to no one at all.

A perhaps more profound problem with the description theory, taken as a general account of naming, as Michael Devitt has argued, is that it makes the phenomenon of reference utterly mysterious.[18] If the descriptions a speaker associates with a term manage to pick out an object or class of objects uniquely, then the descriptions must do so by virtue of what terms that figure in them refer to. If we again suppose that what those terms refer to is determined by associated descriptions, then we are, as Devitt puts it, simply "passing the referential buck." Either the reference of the contained terms is ultimately settled, at least in part, by something other than descriptions (e.g. Russellian acquaintance), or there is some "magic" at work that connects the terms they contain with the appropriate objects and properties in world. A description theory thus provides at best an incomplete understanding of reference.[19]

Individualism it should be clear is not a form of the description theory. It does not claim that a term in a speaker's idiolect refers to what if anything uniquely satisfies the descriptions she associates with it. (Indeed the individualist, like the externalist, can countenance significant shifts in theoretical descriptions of extensions of terms that do not constitute shifts in the extensions themselves.) Further, individualism, as I shall argue, is fully compatible with externalism and, so, with the denial that reference is settled by descriptions all the way down. Individualism, unlike the description theory, thus does not imply a magical view of naming.

PUTNAM'S SUPERVENIENCE ARGUMENT AGAINST INTERNALISM

7. In "The Meaning of 'Meaning,'" Putnam argues that no (general) notion of linguistic meaning can satisfy the following two assumptions:

(I) That to know the meaning of a term is to be in a certain "narrow" psychological state.

(II) That the meaning of a term determines its extension.

A narrow psychological state is one, according to Putnam, that does not presuppose the existence of anything external to the body of the subject to whom the state is ascribed. In other words, an agent's narrow psychological properties are intrinsic to her – they supervene on her non-relational physical properties. Putnam's argument that no notion of meaning can satisfy both (I) and (II) is, of course, based on a thought-experiment by means of which he endeavors to show that "it is possible for two speakers to be in exactly the *same* psychological state (in the narrow sense), even though the extension of the term *A* in the idiolect of the one is different from the extension of the term *A* in the idiolect of the other."[20] Since synonymous terms cannot differ in extension, it follows that the term has different meanings in the idiolects of the two speakers. I shall refer to agents conceived of as identical in respect of all intrinsic physical properties as "intrinsically identical."

In the thought experiment we are to conceive of a planet – Twin Earth – identical to Earth in all respects but one, namely, that the liquid Twin Earthians call "water" is not H_2O, but rather XYZ (where "XYZ" is an abbreviation for a long and complicated chemical formula). Superficially, there is nothing that distinguishes XYZ from H_2O, yet, according to Putnam, "water" in the idiolect of an Earthian English speaker and "water" in the idiolect of her intrinsically identical Twin Earthian counterpart differ in extension, and so, by the reasoning above, in meaning.[21] Further, the conclusion does not depend on the assumption that anyone on either planet knows or is able to discern the underlying structure of what speakers refer to as "water." The term, Putnam maintains, had the same extension and meaning in 1750, i.e., before the advent of modern chemistry, and in 1950.

As Burge has pointed out, not only does "water" vary in meaning in the idiolect of the Earth speaker and her intrinsically identical counterpart, the term varies in meaning in that-clauses that specify the contents of their respective thoughts.[22] In other words, neither meaning nor *content* supervenes on an agent's intrinsic physical properties. It is thus false that, if two speakers are intrinsically identical, we may suppose, as Putnam claims, that there is no *belief* that one, but not the other, has about water and that they are

exact duplicates in "feelings, thoughts, interior monologues, etc."[23] His argument, however, can be amended to bypass this difficulty by reformulating (I) as the assumption that *meaning supervenes on intrinsic physical properties*. Since the thought-experiment shows that it possible for the extension of a natural kind term in the idiolect of two speakers to vary without variation in their intrinsic physical properties, Putnam's conclusion that no notion of meaning can simultaneously satisfy both (I) and (II) ("'meanings' just ain't in the *head*") goes through as before.[24] This in brief is Putnam's case against internalism. In what follows, I shall refer to it as his "supervenience argument."

According to Putnam, natural kind terms like "water" have an "unnoticed indexical component" in that the extension of such a term in a linguistically competent speaker's idiolect is determined in part by the underlying structure of paradigmatic instances of the kind to which she applies the term. Further, he claims, this is an essential part of a linguistically competent speaker's *understanding* of the term, even when she has no knowledge of or means of discovering the underlying structure of the kind in question. *Given* that the fact that water (in each of its three states of physical aggregation) is H_2O, and *given* the fact that the speaker intends that "water" should refer to whatever has the same underlying structure as paradigmatic instances of water, it follows, Putnam claims, that "water" (in the speaker's mouth) refers to H_2O in every possible world.[25]

8. It is an implication of Putnam's "indexical theory" that appropriate causal contact with a kind is necessary in order to refer to it. As David Wiggins characterizes Putnam's view, "there are terms, such as 'lemon' or 'tiger', where to grasp what it would take for something to be a lemon or a tiger or whatever it is, you need *exposure* to the extension of the term."[26] The reason is that *ostension* in such cases is a means of indirectly individuating the extension-determining underlying structure of the kind. ("Water" refers to whatever has the same underlying structure as *this liquid*.) In contrast, where superficial characteristics (texture, color, etc.) rather are decisive for membership in the extension of a term, ostension would not seem to play any essential role.

That said, even when underlying structure is decisive for membership in a kind, the meaningfulness of a term designating the kind in question is compatible with there being *no instance* of the kind in the environment of a speaker who uses the term. Indeed, as Burge

has argued, the meaningfulness of the term in the speaker's idiolect is compatible with its extension being empty:

> . . . it is logically possible for an individual to have beliefs involving the concept of water (aluminum, and so on), even though there exists no water. An individual or a community might (logically speaking) have been wrong in thinking that there was such a thing as water. It is epistemically possible – it might have turned out – that contrary to an individual's beliefs, water did not exist.[27]

Burge's argument for the claim depends on the far-fetched possibility that the individual (or the community) is deluded about the existence of water in her environment, yet has enough knowledge of chemistry (in particular, about the elements hydrogen and oxygen) to have acquired the concept. The claim that the meaningfulness of a natural kind term does not presuppose any instantiation of the kind, however, would seem to be quite plausible independently of any assumptions about wild counterfactual situations. As Burge remarks in a footnote, "if one is sufficiently precise, one could introduce a 'natural kind' notion, like water without having had any causal contact with instances of it. This seems to happen when chemical or other kinds are anticipated in science before their discovery 'in nature'."[28] Mendelev's anticipation of the elements gallium, germanium and scandium (as well as their distinctive properties) presents a case in point. Not only does atomic-molecular theory enable scientists to anticipate the underlying structure of a kind like gold, as Thomas Kuhn points out, it enables them in principle to anticipate superficial properties like density, color, ductility, and conductivity.[29] (Such properties, though superficial in the sense that they can be detected in a sample of gold without knowledge of its underlying structure, are necessary in the sense that the absence of any one of them would provide reason to doubt that the sample was really Au.) *Pace* Putnam, fixing the extension and meaning of a natural kind term like "water," "gold," and so on, does not require causal contact with the relevant kind. *Ipso facto,* there need not be any "indexical component" in its correct explanation. What it is right to say is that *de re* beliefs of particular objects and properties *typically* play a role in fixing the application of natural terms.

In light of the foregoing, when, it what follows, I refer to the "indexical theory," I shall have in mind the view that *if* a particular natural kind x is present in a linguistically competent lay speaker's environment, and *if* paradigmatic instances of x share a certain underlying structure, then it is sufficient (but not necessary)

for the speaker to refer to x that she intend to apply a particular term to an item y if and only if y has the same underlying structure as paradigmatic instances of x. Hence, the indexical theory, as I reconstruct it, is not a theory about the semantics of natural kind terms, but rather a theory about their acquisition. It is not a semantical theory because it does not claim that an indexical relation to a (particular) natural kind is *necessary* in order to refer to it.[30]

There is thus a perfectly good sense in which it is correct to say that natural kind terms in a speaker's idiolect are "reality-involving" or "environmentally constituted" on the indexical theory. But it is not in the sense that the extension of such terms is necessarily fixed by reference to paradigmatic instances or samples in the speaker's environment. Rather, what the reality-involvingness of natural kind terms amounts to is that the possibility of acquiring beliefs about, e.g. gold, requires either that one is in causal contact with gold *or* with other natural kinds that enable one to theorize adequately about gold.

PUTNAM'S ARGUMENT AGAINST INDIVIDUALISM & THE "DIVISION OF LINGUISTIC LABOR"

9. As I suggested above, in addition to the anti-internalist strand of argument in "The Meaning of Meaning," there is also an anti-individualist strand. Whereas I think Putnam's supervenience argument against internalism is successful, I think that his argument against individualism is not. In what follows, I shall try to show that individualism is threatened neither by Putnam's claim that the extension of a natural kind term is determined by the underlying structure of paradigmatic instances or samples of the kind, nor by its corollary that lay speakers must rely on experts reliably to distinguish members of the term's extension from counterfeits. According to Putnam,

...the extension of a [natural kind] term is not fixed by a concept that the individual speaker has in his head, and this is true both because extension is, in general, determined *socially* – there is a division of linguistic labor as much as of 'real' labor – and because extension is, in part, determined *indexically*. The extension of our terms depends upon the actual nature of the particular things that serves as paradigms, and this actual nature is not, in general, fully known to the speaker.[31]

Substituting "an individual's understanding of its meaning" for "a concept that the individual speaker has in his head," yields a

two-part attack on individualism from the semantics of natural kind terms.[32] The first part of the attack is the claim (A) that a lay speaker's understanding of the meaning of a natural kind term like "water" fails to provide its meaning in her idiolect because it does not "determine" or "fix" the term's reference. Rather, as Putnam elsewhere writes, "the reference is partly fixed by the substance itself (through the use of examples)."[33]

Tyler Burge, as already noted, presents a similar argument against individualism. Although Burge's argument is meant to cover a broader class of terms ("nouns and verbs that apply to everyday, empirically discernible objects, stuffs, properties, and events"[34]), it has the same form for as Putnam's:

(1) The reference of non-indexical, empirical kind words like "tiger," "water," "mud," "stone," "bread," "knife," places a constraint on their meaning such that, for any two such words x and y, x and y differ in meaning if they differ in extension. Difference in extension between any two such words is sufficient for a difference in meaning.
(2) An agent cannot always distinguish on the basis of her understanding of such a word between a member of its extension and any possible counterfeit (look-alike).
(3) Hence an agent's understanding of the meaning of such a word does not always fix its *extension*.
(4) And, hence, by the constraint mentioned in 1), her understanding does not always fix its *meaning*.

One might call this the argument from the "indiscernibility of non-identicals." The challenge to individualism supposedly arises because an agent's understanding of a word does not cognitively equip her always to tell whether or not an object superficially indiscernible from F's actually is an F. I take it that the criticisms I shall put forward below of Putnam's version of the argument apply equally to Burge's version of it.

The second part of the attack is that the claim (B) that a lay speaker's explanation of her understanding of the meaning of a natural kind term does not determine its meaning in her mouth because the lay speaker must rely on experts to distinguish instances of the kind from counterfeits reliably. "[E]xtension is determined socially and not individually," Putnam says, "owing to the division of linguistic labor." This claim is articulated in a number of other passages both in "The Meaning of 'Meaning'" and in subsequent writings:

...everyone to whom gold is important for any reason has to *acquire* the word 'gold'; but he does not have to acquire the *method of recognizing* if something is or is not gold. He can rely on a special subclass of speakers [i.e. experts]. The features that are generally thought to be present in connection with a general name – necessary and sufficient conditions for membership in the extension, ways of recognizing if something is in the extension ('criteria') etc. – are all present in the linguistic community *considered as a collective body*; but that collective body divides the 'labor' of knowing and employing these various parts of the 'meaning' of 'gold'.[35]

Whenever a term is subject to the linguistic division of labor, the 'average' speaker who acquires it does not acquire anything that fixes its extension... it is only the sociolinguistic state of the collective linguist body to which the speaker belongs that fixes the extension.[36]

Reference is a social phenomenon. Individual speakers do not have to know how to distinguish the species Robin from other species reliably, or how to distinguish elms from beeches... They can always rely on experts to do this for them.[37]

Au is the substance experts refer to as 'gold'; and the cultural relations of semantic deference between us laypersons and those experts has everything to do with fixing the reference of 'gold' in our lay speech, I claim.[38]

Whereas the first part of the attack (claim A) consists in showing that a lay speaker's understanding of such a term *doesnot* determine its extension, the second part of the attack (claim B) consists in showing what *does* determine its extension, namely, expert classificatory practice. Either claim, if sustainable, would clearly compromise the individualist's contention that idiolectical understanding and idiolectical meaning are, as it were, interchangeable for purposes of characterizing a speaker's idiolect.

10. The most striking problem that besets the argument is that the claim that the extension of a natural kind term x in a linguistically competent lay speaker's idiolect is jointly determined by the empirical fact that paradigmatic instances of the relevant kind y share a certain underlying structure z and the speaker's intention that x should refer to just those things that possess z seems plainly incompatible with the claim that x's extension is determined, not by her understanding of $x,$ but by experts. A central point of Putnam's indexical theory of natural kind terms is that x's extension is determinate regardless of whether the speaker or *anyone else* knows what z is, can reliably discriminate genuine instances of y from counterfeits. Putnam's account of reference in *Reason, Truth and History*[39] seems to exhibit precisely this tension between the two claims.

On the one hand, he there argues that, since lay speakers who do
not how to distinguish between elms and beeches – and so do not
always know how correctly to apply "elm" and "beech" – can rely
on experts for classificatory assistance, "the determination of refer-
ence is social and not individual."[40] On the other hand, he explicitly
denies that it is expert knowledge that fixes the extension of natural
kind term like "water" on a lay speaker's lips:

If we agree that 'water' does not change *meaning*. . . when experts makes such
discoveries as 'water is H_2O'. . ., or does not change its ordinary meaning and
reference (of course it may develop more technical uses as a result of such discov-
eries), . . . then we must say that expert knowledge is not what accounts for the
difference in meaning of the word 'water' on Earth and Twin Earth. Nor does it
account for the reference. . . The word 'water' would still refer to different stuff
even if the collective mental state in the two communities were the same. . . In a
phrase due to Mill, 'the substance itself completes the job of fixing the extension
of the term.[41]

Although this seems in keeping with what Putnam wants to say
about the "indexicality" of natural kind terms, it also seems outright
to contradict the claim that "it is only the sociolinguistic state of
the collective linguist body to which the speaker belongs that fixes
the extension." Furthermore, Putnam's contention that the meaning
and extension of terms like "gold" and "water" are trans-theoreti-
cally invariant – indeed that they have not changed since the pre-
scientific past – seems difficult to make sense of if the determination
of reference is social for the reasons he adduces.

I think that a main source of the problem I am pointing to is
that when Putnam talks about what fixes or determines the refer-
ence of natural kind terms, he uses the words "fix" and "determine"
in an equivocal manner. If what the first claim (A) in his bi-partite
attack on individualism amounts to is the point that an exhaustive
explanation of a lay speaker's understanding of the meaning of a
natural kind term does not fix/determine its extension in the sense
of *providing a description of the underlying structure of the designated
kind in the theoretical vocabulary of the relevant science that would
enable her reliably to discriminate between instances of the kind and
counterfeits,* then it is obviously correct. "The extension of our terms
depends upon the actual nature of the particular things that serves
as paradigms, and this actual nature is not, in general, fully known
to the speaker." Since knowledge of the "actual nature" is necessary
for reliably discriminating between referents of a natural kind term

and counterfeits, facts about a speaker's understanding of the meaning of such a term do not fix/determine its extension in this sense.

Likewise, if what the second claim (B) amounts to is that an expert's explanation of the meaning of the term *does* fix/determine the extension in that sense, then it is obviously correct too. The chemist's understanding of "molybdenum" does usually equip her to distinguish samples of the element from superficially similar compounds. But, to repeat what I said above, I take it that a main point of Putnam's indexical theory is that the extension of a natural kind term *is* fixed/determined in a linguistically competent speaker's idiolect in that there is *a fact of the matter as to whether something does or does not belong in its extension* that is quite independent of whether *anyone* can so explain the term's meaning as to fix/determine its extension in the first (epistemic) sense. And I take it that the extension is fixed/determined in this second (non-epistemic) sense, according to the theory, by virtue of the fact that, first, paradigmatic instances of the kind possess a certain underlying structure and, second, that the speaker has an intention to apply the term to just those things that possess that underlying structure. The problem, as I see it, is that Putnam slides from the claim that facts about a lay speaker's understanding of the meaning of a natural kind term do not fix/determine its extension in the first, epistemic sense to the claim that facts about a lay speaker's explanation of the meaning of a natural kind term do not fix/determine its extension in the second, non-epistemic sense. In what follows, I shall refer to the first and second senses as *fixing/determining*$_e$ and *fixing/determining*$_{ne}$, respectively.

11. I take it that, if the foregoing considerations are persuasive, the argument against individualism from what I called the "indiscernibility of non-identicals" is not cogent. The fact that a lay speaker cannot always fix$_e$ the reference of a natural kind term in her idiolect on the basis of all facts about her understanding of its use does not mean that her understanding of its meaning sometimes does not suffice to fix$_{ne}$ its reference. Hence, it does not mean that her understanding sometimes does not suffice to determine its meaning.

Individualism can be construed as the denial that idiolectical meaning may vary while idiolectical understanding remains constant. (I.e., as the denial of the conclusion of the argument from the "indiscernibility of non-identicals.") Now, having devoted some consideration to the indexical theory, we are in better position to see

that in cases in which a natural kind term's *meaning* in an agent's idiolect varies with variation in environmental context (while the agent's intrinsic physical properties remain fixed), *the meanings of the words the agent uses in order to explain her understanding of the relevant term also vary.* According to the indexical theory, the extension of a natural kind term x in a linguistically competent agent's idiolect is determined by (1) the empirical fact that paradigmatic instances of the relevant kind y share a certain underlying structure z and (2) the agent's intention that x should refer to just those things that possess z. Putnam writes:

Suppose,... that I have not yet discovered what the important physical properties of water are (in the actual world) – i.e. I don't yet know that water is H_2O. I may have ways of *recognizing* water that are successful... but not know the microstructure of water. If I agree that a liquid with the superficial properties of 'water' but a different microstructure *isn't really water,* then my ways of recognizing water (my 'operational definition', so to speak) cannot be regarded as an analytical specification of *what is to be* water. Rather, the operational definition, like the ostensive one, is simply a way of pointing out a standard – pointing out the stuff *in the actual world* such that for x to be water, in *any* world, is for x to bear the relation [same liquid] to the *normal* members of the class of *local* entities that satisfy the operational definition.[42]

Putnam proposes that the normal form for the description of "water" in English should be a vector including at least four components including the word's syntactic markers; the word's semantic markers; a description of water's stereotype; and a specification of the word's extension. (All but the last component comprise a hypothesis, Putnam says, about the "individual speaker's competence.") According to Putnam, two descriptions of "water" are "equivalent" if they are the same except for the specification of the term's extension and the two specifications are coextensive. Equivalent descriptions of a natural kind term are either both correct or both incorrect in the meaning they attach to it.

Now, according to the indexical theory of natural kind terms, as I have reconstructed it, if a lay speaker in explaining (her understanding of) the meaning of the term "gold" points to a paradigmatic instance or sample of gold P as providing a standard for its correct application. ("'Gold' applies to a metal if and only if it has the same underlying structure as P, whatever that structure happens to be"), she thereby also fixes$_{ne}$ its extension ("Something *is* gold if and only if it has the same underlying structure as P, whatever that nature happens to be".) Further, as I pointed out, the specification

of the extension the agent gives is coextensive with the expert's specification, i.e. "Au." The fact that the agent is not able to fix_e the reference of "gold" in her idiolect – and so cannot reliably discriminate between "gold" and all imaginable counterfeits – does not have the implication that her understanding of the meaning of the term does not suffice to fix_{ne} its reference and so its meaning (given the constraint reference imposes upon the latter). The fact that her meaning what she does presumes that "gold" in her idiolect refer to Au and not to some other metal that would have determined a different meaning – a fact that she could not know solely on her basis of the understanding of "gold" – thus does not mean that she is not in a position to explain the meaning of "gold" in her idiolect correctly. For to explain what she means by the term correctly does not require that she *know* all of the empirical facts whose obtaining is *presumed* by her meaning what she means. It only requires that she can specify conditions for the term's correct application, and this she can do by reference to samples of the substance: "It is both *necessary* and *sufficient* for the correct application of "gold" that the metal to which the term is applied have the same underlying structure as *P,* whatever that structure is." The agent's ability to explain what "gold" means in her idiolect is not compromized by her inability to identify (provide an accurate theoretical characterization of) the underlying structure of the metal to which it refers. The former, as I have tried to show, requires only that she make appropriate indexical (non-theoretical) reference to that structure as fixing the term's extension in her explanation.[43]

Hence, the individualist can allow that meaning is "world-involving" in precisely the sense repudiated by the internalist. But, if meaning is world-involving from her perspective, then that is because is *understanding* is world-involving. The picture is not one in which the world determines meaning from without the sphere of understanding as on so-called "two-factor" versions of externalism. Understanding is not the "inner" correlate of meaning.

The insight, then, is that a lay speaker's having authoritative and immediate knowledge of the meanings of her words (and the conceptual contents of her beliefs) is compatible with her sometimes not being able to discern without empirical investigation whether she and another speaker mean the same by a word or whether two words in her own vocabulary (e.g., "beech"/"Buche") are synonyms. *What is important is that it is part of her understanding of what it is to apply the relevant term correctly (in the context of true empirical*

assertions) that there are ways of finding out whether she and another
speaker mean the same. She need not know what those ways are.
In providing an empirical standard for the correct use of "gold,"
the speaker's explanation of her understanding provides a sufficient
basis for determining whether "gold" in her idiolect is synonymous
with the same term (or some other term) in the idiolect of another
speaker. Just as the agent appreciates that there is an appearance-
reality distinction with respect to recognition of the substance in
question – "all that glitters isn't gold" – she appreciates that there is
also an appearance-reality distinction with respect to the use of the
term "gold." That is, it is part of her grasp of the first appearance-
reality distinction (of the understanding that comprises her knowl-
edge of the meaning of the term) that another speaker may appear
to be referring to gold in her use of "gold" and yet actually be refer-
ring to some other perceptibly similar substance.

   The point is related to my discussion of the so-called "divi-
sion of linguistic labor." The lay speaker, I suggested, does not
consult experts in order first to find out what she is referring to
by "gold", but rather only reliably to recognize whether some-
thing belongs in (the antecedently determined$_{ne}$) extension of the
term. Similarly, acquiring knowledge of gold's underlying structure
enables the speaker reliably to recognize whether she and another
speaker mean *the same* by "gold"; but this knowledge is not neces-
sary for her to understand and correctly explain what she had hith-
erto meant by the term. Not knowing that gold is Au is *not* a case
of not fully understanding what she *means* by "gold" or of not fully
understanding what she is *thinking* about when she thinks about the
substance.

12. It should be fairly clear that there is a connection between the
conception or way of thinking of idiolectical word meaning I am
considering here and the Fregean conception of sense (*Sinn*). As
Burge has pointed out, the notion of sense plays a number of roles
in Frege's theory: "One (sense$_1$) is that of representing the mode
of presentation to the thinker which is associated with an expres-
sion and of accounting for information value. A second (sense$_2$) is
that of determining the reference or denotation associated with the
expression..."[44] Like Kripke, [45] Burge argues that Frege's view that
the first and second notions of sense coincide is untenable:

A complete account of the mode in which an object is presented to us – the effect that it has on our cognitive representations or on our store of information – may be insufficient to determine that one object rather than another is the subject of our beliefs or statements... The individuation of the relevant object depends not only on information the thinker has about it but on his nonconceptual contextual [i.e. indexical] relations to it. These wider relations are necessary to characterize the second function of sense, but they go beyond what the thinker "grasps in thought."[46]

The connection between the approach to idiolectical word meaning I have been advocating and the "Fregean" conception that Burge here is criticizing should be obvious. Like Frege, I think that (1) idiolectical meaning is correlative with idiolectical understanding and (2) that this is fully compatible with saying that meaning determines extension. I have been concerned to argue, in particular, that natural kind terms provide no exception to this. For, as I have tried to show, it may be part of an individual's understanding of a natural kind term – part of the "mode" in which the relevant kind is "presented" to the individual – that paradigmatic instances or samples of the kind play a role in fixing$_{ne}$ its extension.

As Dummett has pointed out, the upshot of such a Fregean conception of meaning is that there is a "difficulty in principle over the thesis that there may be a gap between meaning and that which fixes the reference."[47] He goes on to write:

Suppose that the causal theory of reference [such as Putnam's] is correct in that it gives an accurate account of the way in which, in problematic cases, it is generally agreed that the reference of a name is to be determined; most speakers are tacitly aware that this is the proper procedure, and those who are not are prepared to abide by it a soon as they discover that it is generally accepted. Then the causal theory does not *replace* the thesis that proper names have senses; it merely gives an account of what sorts of senses they have...[48]

The relevant point is that such a Fregean conception of meaning can be extended to natural kind terms. It may be *part* of an individual's understanding of a natural kind term's meaning that its reference is to be determined by reference to paradigmatic instances or samples; these latter are not extraneous to her understanding, their relevance is part of what she "grasps in thought." Although the individual is not herself always able reliably to identify the referents of a natural kind term in her idiolect, she recognizes that what determines$_{ne}$ its extension is similarity to paradigmatic instances of the kind in respect of underlying structure and uses the term accordingly (i.e. relies on experts when in doubt as to the propriety of its application).

Dummett, however, in contrast with this suggestion, agrees with Putnam that it is only the "socially accepted" meaning of a natural kind term that determines$_{ne}$ its reference. The Fregean thesis that "knowledge is relevant to sense" (or that understanding and meaning are correlative notions as I would rather put it), he writes,

...is indeed false if it is interpreted as relating to each individual speaker taken separately; for that would prevent him from exploiting, in his use of any word of the language, the existence of a generally accepted means of determining its application, or the fact of division of [linguistic] labour.[49]

I have tried to show that this reasoning is faulty. The fact that a lay speaker must rely on experts to "determine the application" of a natural kind term, in the sense of that she must rely on the expert to tell her whether a particular item falls in its extension, does not have the implication that her understanding does not determine$_{ne}$ its extension. Like Putnam, Dummett slides from the (uncontroversial epistemological) claim that idiolectical understanding does not fix$_e$ reference to the (controversial metaphysical) claim that it does not fix$_{ne}$ reference. It strikes me that only commitment to an extreme form of verificationism could explain the inclination to think that an individual's understanding of a term cannot properly be taken to determine$_{ne}$ its extension unless the individual herself is in a position to determine whether his application of it to any particular item is correct. (For such an extreme verificationist, it is not enough that such a thing as expert verdict on the matter is *possible*.) But Dummett, I should think, would not go as far as to say something like this.

13. By way of conclusion, I should like to make five general points in connection with Putnam's claim that reference is "social":

(i) Contrary to what he has argued in numerous writings, Putnam on several occasions has stated that experts are *not* necessary in connection with fixing the reference of words like "water."[50] Rather, what is distinctive about the application of natural kind terms is the *possibility* of there being such a thing as expert knowledge about their referents. As Pettit and McDowell put it, "What is required is at most that there *could* be experts, and to say that is to say no more than that the stuff has a scientifically discoverable nature."[51] This seems to me (obviously) the correct thing to say, but it in no way implies that reference – in the sense of fixing$_{ne}$ – is a "social phenomenon." What *is* a social phenomenon (assuming the psychological impossibility of a single human being isolated from

any community acquiring the scientific wherewithal to recognize a kind like gold reliably) is *expert knowledge* about natural kinds, i.e. knowledge that enables one who possesses it to fix$_e$ the reference of natural kind terms. But, if this is all Putnam intended, it would neither be controversial nor of philosophical interest.

(ii) Putnam is no doubt right that everyone who acquires the word "gold" need not also acquire a scientifically reliable method of *recognizing* whether something is gold. They can rely on experts to help them when necessary. There is surely a division of labor in this sense. But, on my reconstructed version of the indexical theory (*qua* theory of acquisition), it is not the case that "the 'average' speaker who acquires it does not acquire anything that fixes [i.e. fixes$_{ne}$] its extension." The extension is fixed$_{ne}$, to reiterate, by virtue of the fact that, first, paradigmatic instances of the kind possess a certain underlying structure and, second, that the speaker has an intention to apply the term to just those things that possess that underlying structure. On the indexical theory, acquiring a natural kind term and fixing$_{ne}$ its extension coincide. What this shows, I think, is that the division of labor to which Putnam calls attention is not *linguistic* in character. The fact that average speakers defer to experts shows only that *reliable recognition* of what belongs in (the antecedently determined$_{ne}$) extension of a natural kind term is a social phenomenon. But this, again, is neither controversial nor of philosophical interest.

(iii) As Michael Dummett first pointed out, there is a marked difference between the kinds of cases Putnam adduces in support of his claim that there is a division of *linguistic* labor.[52] In addition to the case in which a lay speaker does not know how to discriminate between gold and counterfeits reliably, Putnam cites his own inability to discriminate between elms and beeches. The difference is that, unlike in the first case, sociolectical competence in the second case plausibly presupposes the lacking discriminatory ability. Elms and beeches appear quite dissimilar to the unarmed eye. It is easy to tell them apart on the basis of superficial, perceptible differences between their leaves, bark, and wood. Thus, if a speaker cannot distinguish between the referents of "elm" and "beech," she simply does not know, or has only a partial understanding, of what the terms respectively *mean* in English.[53] For, consider, in what contexts could the speaker correctly use the term "elm" other than to (1) relay information received from other speakers (the so-called *mouthpiece syndrome*); or (2) to inquire about correct usage ("Is

that an elm?"); or (3) to make the bland metalinguistic observation that "'Elm' in English refers to elms"?[54] The second kind of case adduced by Putnam thus does not show anything of sociolinguistic interest other than the fact that speakers can convey information, in certain contexts, using words whose common language meaning they do not fully understand. ("The mechanic says I need to have my gasket replaced.") Furthermore, as David Wiggins has pointed out, Putnam's claim that though he has no knowledge of how to distinguish between the referents of "elm" and "beech" – no empirical beliefs about elms or beeches that would enable him to tell them apart – he is not missing anything *semantic* seems to commit him to "the full analytic-synthetic distinction."[55]

It may appear that I do not sufficiently appreciate what Dummett calls "the chain-of-communication conception."[56] In what I take to be its most plausible form, namely, that put forward by Gareth Evans, it is the view that in using a name an individual generally intends to refer to the item that is causally responsible for or the "dominant source" of the body of information she associates with it; and that the mechanisms by means of which names along with their associated bodies of information are transmitted are often *social*.[57] I think that there is no conflict, however, between the chain-of-communication conception and the individualist tack I have been taking. The fact that some of the mechanisms that causally enable an individual to refer to a particular item are interpersonal does not imply anything about *what* the names in her idiolect refer to. For what a given name in her idiolect refers to, on the conception, is determined$_{ne}$ by what *body of information* she (as an individual) associates with it: "Information," as Evans writes, "is individuated by source; if *a* is the source of the body of information nothing else could have been."[58] The chain-of-communication conception thus does not show that *reference* is a "social phenomenon"; rather, it only shows that that the *channels* through which individuals acquire names often involve other people.[59]

(iv) In *Representation and Reality,* Putnam attributes to John Searle a metalinguistic construal of the meaning of "elm" in the idiolect of a speaker who is unable to identify elms from beeches.[60] "According to Searle, the way in which I am able to have a representation of elms which does in fact single out elms from all other species, even though I cannot identify elms, is this: my own personal 'concept' of an elm is simply tree which belongs to a species which experts on whom I rely (at this time) call by the name 'elm.'"[61]

Putnam's response is that Searle's suggested metalinguistic explanation of the meaning of "elm" does not provide the meaning of the term in English. "Few things," he writes, "could be more important, in fact, to an English speaker who wants to talk about the species than to know its name; but the importance of this fact doesn't make it part of the meaning of the name "elm" that these tree have that name in English."[62] The problem with this response is that Searle does not purport to be giving the meaning of "elm" *in English*. Rather, he is providing what he explicitly says is an explanation (of his understanding) of the meaning of the word in his idiolect – his own "personal concept" of elms. Putnam's response simply passes Searle's proposal by.

(Putnam goes on to say equating the meaning of "elm" in English with such a metalinguistic explanation would have the absurd conclusion that the word has no *synonyms* in foreign languages. Indeed, if one were to propose that "elm" in English means species of tree that English speakers call "elm," then, say, "Ulme" in German could not be a synonym. But a monolingual German radical translator who worked on Putnam's *idiolect* might come up with "Art von Baum die Englisch sprechende Leute «elm» nennen" as a plausible translation of "elm" in his idiolect. And this is what Searle seems to be claiming.)

Putnam admits that "I *can* incorporate my knowledge of the linguistic division of labor into my description of what I am referring to by using a phrase like species of tree which is called "elm" by such and such experts."[63] He reiterates the point that such descriptions do not specify sociolectical meaning. If there is a bird that speakers of Natool call "chooc" and there is no name for that species in English, then a description such as species of bird speakers of Natool call "chooc" does not give the meaning of the word in Natool:

such descriptions... do not give us synonyms for the words whose use is so explained; rather, they are a way of bypassing the need for a synonym. Once again what we see is the impossibility of identifying meanings with the descriptions that speakers "have in their heads," i.e., of identifying the notions of *meaning* and *mental representation*.

Putnam, however, is not addressing the claim at issue, namely, that such descriptions can sometimes specify idiolectical meanings. (No one is claiming either that species of bird speakers of Natool call "chooc" specifies the meaning of "chooc" in Natool or that tree

belonging to a species that experts on whom I rely call by the name "elm" specifies the meaning of "elm" in English.) I.e., in order to engage with Searle's proposal Putnam would need to consider the possible use of such descriptions in the context of translating a foreign *idiolect*. If a monolingual speaker of Natool had no further understanding of "chooc" than bird experts in my tribe call "chooc," then that, it would seem, would be a fitting translation of the term for purposes of characterizing his idiolect.[64]

(v) My last point is that expert classification of natural kinds in the special sciences, *pace* Putnam, is not always based on underlying structure. As Joe LaPorte writes with respect to mineralogical practice, "in their matching of structures to kind terms, scientists pay close attention to the observable properties of the matter in question, so that their division of the world into kinds reflects the observable properties of what is named."[65] In segregating minerals into species and varieties, mineralogists frequently take into account surface properties like color and, sometimes, even clearly *extrinsic* properties like origin (as in the case, LaPorte reports, of micas and amphiboles). LaPorte points out that although "topaz" originally referred only to the brilliant yellow variety of aluminum silicate ($AL_2Si(F,OH)_2$), it now used by experts as a species term and refers not only to yellow, but also blue, brown and pink varieties. "Ruby" and "sapphire," by contrast, are still regarded as distinct varieties even though they both consist of the same chemical compound (Al_2O_3). This is presumably because human beings attach greater value to rubies and sapphires than to topazes and because of the perceptible salience of their contrasting colors. What this shows is that there is sometimes a failure of match between the semantic intention Putnam ascribes to competent lay speakers in connection with the application of natural kind terms and actual expert reference assigning practice in the special sciences.[66]

NOTES

[1] By "idiolect" I understand the language system of an individual speaker as opposed to a common language or "sociolect" shared by multiple speakers.

[2] I thus depart somewhat from entrenched terminology in that the term "individualism" is often used to refer both to the conception of idiolectical meaning considered here and semantic internalism. My use of the term "individualism" is close, but not identical, to that of Akeel Bilgrami in Bilgrami (1992).

[3] Individualism, however, is not to be confused with the converse and more radical view that there can be no variation in facts about understanding without variation in facts about meaning, i.e. with the view that understanding supervenes on meaning. Such a radical view, e.g., is explicit in the inferentialist use theory of meaning articulated in Robert Brandom's *Making it Explicit*. See Brandom (1994, 509–510).

[4] The indexical theory on my reconstruction of it is not a theory about the semantics of natural kind terms, but rather a theory about their acquisition. It is not a semantical theory because it does not claim that an indexical relation (in Putnam's sense) to a particular natural kind is *necessary* in order to refer to it.

[5] It is important to stress that I make no claim below about what competent speakers' *actual* semantic intentions are in connection with natural kind terms. My effort in the present essay is merely to show that perhaps the most plausible version Putnam's well-known and widely influential indexical theory – quite irrespective of its intrinsic merits – is compatible with the individualism herein defended.

[6] See Burge (1979, 74–77; 1982, 100–102).

[7] Perceptible properties, however, need not be less "essential" to the identity of a natural kind than the underlying properties that support them since, as Thomas Kuhn has pointed out, the former are often physically necessitated by the latter. See Kuhn (2000, 83–84).

[8] Putnam (1975, 229).

[9] Richard Heck has pointed out in conversation that a social externalist need not countenance such a high-profile and controversial notion of shared language as that of sociolect. I.e., she may hold that idiolectical meanings are determined by a lower-profile and presumably more concrete notion of shared language. However, I take it that my criticisms of social externalism below hold irrespective of which particular notion of shared language is at issue.

[10] (Putnam, 1975, 222), my emphasis. Of course, Putnam in "The Meaning of 'Meaning'" intends also to give an account how meaning is shared in a linguistic community (especially between lay speakers and experts), but the striking claims he makes there are about the individuation of natural kind term meanings in idiolects. Putnam has stated in recent conversation that the notion of *idiolectical* meaning plays no essential role in the supervenience argument against internalism and that the notion of sociolectical meaning could have been employed instead. (Indeed, he now thinks that there is no coherent notion of idiolectical meaning.) However, it is merely truistic that meaning in a sociolect can vary without variation in an agent's intrinsic physical properties. "Oubliette," e.g., might (counterfactually) have referred to a certain *card game* instead of a kind of *dungeon*

without there having been any variation in my intrinsic physical properties prior
to my acquisition of the term.

[11] Burge (1989, 181).

[12] Burge (1989, 181). According to Michael Dummett, by contrast, "when an
utterance is made, what the speaker *says* depends on the meanings of his words
in the common language; but if he thereby expresses a belief, the content of that
belief depends on his personal understanding of those words, and thus on his
idiolect" Dummett (1991, 88). The same idea is emphasized in Dummett (1996,
321–322).

[13] Of course, in addition to the idiolectical word meaning, there is need for a
notion of meaning in a common language. What then is the relation between id-
iolectical and sociolectical meaning? As a partial answer to this question, I would
argue that from a speaker's first-person perspective the sociolect of her commu-
nity plays a *regulative* role. I (tacitly) intend, at least most of the time, to use my
words in accord with their sociolectical meanings and, so, defer to authoritative
usage. However, it is important to distinguish between saying that sociolectical
meaning plays a regulative role in this low-key sense and saying as many phi-
losophers have that it is partly determinative of idiolectical meaning. To say that
sociolectical meaning plays a regulative role for me is just to say that for obvi-
ous reasons, in most contexts, I will not knowingly flout convention. But the only
sense in which I use my words incorrectly when I do flout convention (knowingly
or unknowingly) is simply that I attach non-standard meanings to them.

[14] In so characterizing individualism, however, I do not wish to take on board
the theoretical presuppositions that might perhaps be associated with Burge's
notion of "exact translation." It goes without saying that there are better
and worse translations (explications) of meaning. One translation is better than
another, for instance, if is more likely to prevent misunderstandings about how
the translated word is to be correctly applied. When it comes to translating the
meaning of a word in a common language (as opposed to an idiolect), a good
translation will usually base itself on informed usage or dictionary entries. I do
not think, however, that there is such a thing as *the* correct explanation (indi-
viduation) of the use of a word in either an idiolect or a sociolect. Whether an
explanation of what individual means by a word, for purposes of characterizing
her idiolect, is correct depends on whether it meets our particular explanatory
and communicative needs. But, as Wittgenstein emphasizes, we have no way of
specifying in advance what *all* such needs might be; no explanation of meaning
is *guaranteed* to forestall misunderstanding.

[15] I am thus in agreement with Akeel Bilgrami when he writes:

Unlike syntax and the non-lexical and formal aspects of semantics, when the sub-
ject is the lexicon [of a particular speaker's idiolect] and its perspectival element,
self-knowledge. . . is taken for granted unless there are *psychological* obstacles to
it such as self-deception or inattention etc. What we will not allow. . . is precisely
what many philosophers have uncritically taken for granted: that self-knowledge
of our perspectives, beliefs and conceptions can be threatened by obstacles that
come from non-psychological sources. . . (Bilgrami 1993b, 65).

For related points see Bilgrami (1998, 113–114).

[16] Externalist repudiations of individualism in the philosophy of language, I should note, are also often premised on the assumption that idiolectical understanding is, to use Hilary Putnam's parlance, "in the head" and so supervenes on intrinsic, physical properties. Since externalism is precisely the view that (at least sometimes) idiolectical meaning is *not* in the head, the conclusion that idiolectical meaning fails to supervene on idiolectical understanding is taken straightforwardly to follow. One of my auxiliary objectives here is to call this long-standing assumption in question.

[17] Burge (1989, 180), my emphasis. Heck has pointed out in conversation that, for purposes of argument, Burge need not commit himself to so strong a claim about relevant discriminatory abilities.

[18] Devitt (1990, 79–104).

[19] For an insightful account of Wittgenstein's (perhaps more fundamental) criticisms of the description theory see Goldfarb (1997).

[20] Putnam (1975, 222).

[21] There are two problems with Putnam's choice of natural kind term. As Daniel Dennett points out, human beings are made mostly out of H_2O. So no Earthling has an intrinsically identical counterpart on Twin Earth. See Dennett (1987, 127). Second, as Kuhn has pointed out, it is *chemically impossible* that any liquid significantly unlike water in underlying structure should superficially resemble the latter in many respects. In fact, if a substance such as Putnam's XYZ were actually found to exist, it would "demonstrate the presence of fundamental errors in the chemical theory which gives meanings to compound names like 'H_2O' and the unabbreviated form of 'XYZ'." See Kuhn (2000, 80–81).

[22] See Burge (1982, 97–120). Putnam now eschews the very notion of narrow psychological content.

[23] Putnam (1975, 224).

[24] Putnam proposes a "meaning vector" theory to replace traditional intracerebral accounts. According to that theory, the meaning of a natural kind term in an idiolect is specified by a number of components, one of which is its extension. The rest indicate the minimum linguistic competence a speaker must exhibit if she is to acquire the term. (For Putnam, the standards of *minimum competence* a speaker must meet are culturally relative. What she is "linguistically obligated" to know about a natural kind in order to acquire the term associated with it varies depending on social environment.)

[25] According to Putnam in "The Meaning of 'Meaning'," "water" in one of its everyday senses refers not to H_2O, but rather to H_2O *give or take some impurities*. I do not find this plausible. What I think is correct is that barely detectable impurities in water are negligible for most ordinary purposes. No competent, knowledgeable English speaker, I take it would deny that "(liquid) H_2O give or take some impurities" and "(liquid) water give or take some impurities" are co-extensive. (Compare "Bring me Smith" and "Bring me Smith give or take some clothing.")

[26] Wiggins (1994, 209).

[27] Burge (1982, 114).

[28] Burge (1982, 120). Also see Burge (1998, 116) for a similar observation. As Burge understands Putnam's theory, it has the implication that terms like "water" shift in extension from context to context of application like "now," "here," and

"this." Burge rightly argues that "water" is manifestly not indexical in this sense. However, it is clear that when Putnam suggested that "water" means something like (a) "stuff that bears the same-liquid relation to the stuff we call 'water' around *here*" or (b) "whatever bears the same-liquid relation to the stuff *we* call 'water'" or (c) "whatever bears the same-liquid relation to *this* stuff," he intended the indexical expressions "here," "we" and "this" to be interpreted contextually, i.e., as referring, respectively, to Earth, English-speaking human beings, and a paradigmatic instance or sample of water. (Indeed, Putnam gives explicit warning against the interpretation Burge offers as a misunderstanding of his view. "Water," he says is not indexical in the sense that its *meaning* is constant but its *extension* relative to whatever environment in which the embedded "this" in (c) is used ostensively. "When I say 'this (liquid) is water', the 'this' is, so to speak, a *de re* 'this' – i.e. the force of my explanation is that 'water' is whatever bears a certain equivalence relation... to the piece of liquid referred to as 'this' *in the actual world*" (Putnam 1975, 231.) That said, I here try to show that Burge is quite correct to criticize Putnam's theory for its implication that, in order to explicate the meaning of "water," recourse to such ostensive definitions as (a)–(c) is *necessary*.

[29] Kuhn (2000, 83–84).

[30] It bears emphasizing that from the fact that causal interaction with instances of a *particular* natural kind is not, in general, a *necessary* condition for referring to that kind, it does not follow, as Gabriel Segal has claimed, that "[t]here is no barrier to empty kinds in general" and, hence, that "the thesis that natural-kind concepts are world-dependent is false" (Segal 2000, 53 and 56, respectively). Segal is correct that one could acquire the belief that *x is water iff x is a sample of* H_2O without standing in any causal relations to water, but it is false that one could acquire the relevant belief without standing in any causal relations to *other natural kinds*. It is false because the possibility of forming the concept of (and referring to) a non-instantiated kind plausibly depends on theorizing based on other kinds instantiated in the environment. In order to form the concept of water, one need not causally interact with (have any *de re* beliefs of) H_2O. But it is necessary, as Burge has argued, that one have causal interaction with kinds that provides a basis for developing chemical theory to the point where H_2O and its properties could be accurately described. The possibility of acquiring water-beliefs in a waterless environment requires that one already have acquired beliefs about a great many other natural kinds that are present in the environment. In this sense, all natural kinds are "world-dependent." Segal's claim that "there is nothing in the nature of natural kind terms that requires there to be an actual extension" is thus true only if taken to apply in particular cases and not generally. But the fact one need not stand in causal relations to a particular natural kind in order to refer to it offers no boon to the internalist.

[31] Putnam (1975, 245).

[32] Putnam in conversation has objected to this substitution. However, I think that it is in keeping with a common reading of relevant sections of "The Meaning of 'Meaning'." Such substitution, e.g., is clearly taken to be licensed on Burge's interpretation of the Twin Earth thought-experiment. If there is an interpretative problem, I would suggest, then it is partly due to the fact that in articulating the thought-experiment in subsequent writings, Putnam speaks interchangeably about

a speaker's "concepts," "conceptions," "conceptual contents," "mental representa-
tions," "mental state," and "notional world."

[33] Putnam (1990b, 288).

[34] Burge (1989, 181).

[35] Putnam (1975, 227–228).

[36] Putnam (1975, 229).

[37] Putnam (1988, 22).

[38] Putnam (1997, 36).

[39] Putnam (1981).

[40] Putnam (1981, 18).

[41] Putnam (1981, 25).

[42] Putnam (1975, 232).

[43] In *Representation and Reality,* Putnam raises the objection that such an index-
ical description of the application conditions for "gold" does not provide the
term's meaning. "Indexical descriptions," he writes, "can be extremely important
in fixing reference,... but they are not what we preserve in translation. The term
'gold' is not synonymous with... 'stuff that has the same behavior and ultimate
composition as this'" (Putnam 1988, 38). However, Putnam's point holds only of
the *sociolectical* meaning of "gold." Such an indexical description – together with
a description of the stereotype associated with "gold" – plausibly is synonymous
with the meaning of a term in a lay speaker's *idiolect*.

[44] Burge (1977, 356).

[45] See Kripke (1972, 59).

[46] Burge (1977, 358).

[47] Dummett (1978, 423).

[48] Dummett (1978, 423).

[49] Dummett (1978, 427).

[50] See his reply to David Wiggins in Putnam (1994, 283). Putnam says he is
baffled by Wiggins' suggestion that he should have stressed not the necessity of
experts in connection with natural kind terms, but rather "the necessity of the
possibility of experts" (Wiggins 1994, 213). Putnam is right in the reply when he
says that in "The Meaning of 'Meaning'" he observed that water did not exhibit
the division of linguistic labor prior to the rise of chemistry, but that just seems
to show that there he did not recognize the conflict between the two claims that
comprise what I have called his bi-partite attack on individualism.

[51] McDowell and Petit (1986, 9).

[52] Dummett (1978, 426).

[53] Dummett writes: "It may be that there are many people who use the word
'elm' without knowing how to identify an elm; and such people might rather
readily be brought to admit that they do not fully know the meaning of the word
'elm'. The reason is that the capacity to identify elms is a quite common capac-
ity, which is not possessed only by specialists" Dummett (1978, 427).

[54] I am here supposing that the speaker does not have any special knowledge
about elms. Obviously, it is possible to know quite a lot about elms (their charac-
teristic blights, habitat, evolutionary antecedents, etc.) without being able to rec-
ognize them by sight. The point is just that a speaker who neither is familiar
with the characteristic perceptible traits of elms nor has any special knowledge
about them cannot be said to know the meaning of "elm" in English.

[55] Wiggins (1994, 212). By contrast, the case of not being able to tell whether something is gold or pure gold (though one can otherwise use the term correctly) plausibly is *not* a case of missing something about the *meaning* of "gold."

[56] Dummett (1978, 425).

[57] See Evans (1985). Evans points out that, "[Kripke] has mislocated the causal relation; the important causal relation lies between that item's states and doings and the speaker's body of information – not between the item's being dubbed with a name and the speaker's contemporary use of it" (Evans 1985, 13). One central reason for this is that, although the name might not have entered the language were it not for the original act of dubbing in the past, in the interim, some other item may have become the dominant source of information contemporary users associate with it.

[58] Evans (1985, 22). "The [particular] causal origin of the speaker's familiarity with a name," Evan says, "save in certain specialized 'mouthpiece cases', does not seem to have a critical role to play" (Evans 1985, 10). That is, it does not matter what the mechanisms or channels are by which an individual acquires her information about an item. What matters is that the item is the dominant source of the information she has got.

[59] For a related approach, see Millikan (2000), especially Chapters 6 and 13.

[60] Putnam does not clearly indicate where Searle offers this construal.

[61] Putnam (1988, 26). Searle's approach, I should note, is similar to that of Noam Chomsky:

In the language of a given individual, many words are semantically indeterminate in a special sense: the person will 'defer' to experts to sharpen or fix their reference... In the lexicon of this person's language, the entries will be specified to the extent of his or her knowledge, with an indication that details are to be filled in by others, an idea that can be made precise in various ways without going beyond the study of the system of knowledge of language of a particular individual (Chomsky 1986, 18).

See Bilgrami (1992, 42) for a similar approach.

[62] Putnam (1988, 27).

[63] Putnam (1988, 28)

[64] It is worth noting that, unlike Putnam, Burge is willing to countenance the appropriateness of such a construal of the meanings of certain words in idiolectical contexts. See Burge (1989, 180).

[65] LaPorte (1996, 127).

[66] For other examples of adventitious factors affecting scientific classificatory practice see Wilson (1982).

REFERENCES

Bilgrami, A.: 1992, *Belief and Meaning,* Blackwell, Oxford.

Bilgrami, A.: 1993a, 'Can Externalism be Reconciled with Self-Knowledge?', *Philosophical Topics* **20**, 233–267.

Bilgrami, A.: 1993b, Comment on Chomsky in *Language and Thought,* Moyer Bell, London, pp. 57–68.

Bilgrami, A.: 1998, 'Why Holism is Harmless and Necessary', *Philosophical Perspectives* **12**, 105–126.

Brandom, R.: 1994, *Making it Explicit*, Harvard University Press, Cambridge, MA.

Burge, T.: 1977, 'Belief *De Re*', *The Journal of Philosophy* **LXXIV**, 338–362.

Burge, T.: 1979, 'Individualism and the Mental', *Midwest Studies* **IV**, 73–121.

Burge, T.: 1982, Other Bodies in *Thought and Object*, in A. Woodfield (ed.), Oxford University Press, Oxford, pp. 97–120.

Burge, T.: 1989, 'Wherein is Language Social?', in A. George (ed.), *Reflections on Chomsky*, Blackwell, Oxford, pp. 175–191.

Burge, T.: 1998, 'Individualism and Self-Knowledge', in P. Ludlow and N. Martin (eds.), *Externalism and Self-Knowledge*, CSLI Publications, Stanford, pp. 111–128.

Chomsky, N.: 1986, *Knowledge of Language,* Praeger, New York.

Chomsky, N.: 1993, *Language and Thought,* Moyer Bell, London.

Chomsky, N.: 2000, *New Horizons in the Study of Language and Mind,* Cambridge University Press, Cambridge.

Dennett, D.: 1987, *The Intentional Stance,* MIT Press, Cambridge, MA.

Devitt, M.: 1990, 'Meanings Just Ain't in the Head' in G. Boolos (ed.), *Essays in Honor of Hilary Putnam*, Cambridge University Press, Cambridge, pp. 79–104.

Dummett, M.: 1978, The Social Character of Meaning in *Truth and Other Enigmas,* Harvard University Press, Cambridge, MA, pp. 420–430.

Dummett, M.: 1991, *Logical Basis of Metaphysics,* Harvard University Press, Cambridge, MA.

Dummett, M.: 1996, The Relative Priority of Thought and Language in *Frege and Other Philosophers,* Oxford University Press, Oxford, pp. 315–324.

Evans, G.: 1985, The Causal Theory of Names in *Collected Papers*, Oxford University Press, Oxford, pp. 1–24.

Goldfarb, W.: 1997, 'Wittgenstein on Fixity of Meaning; in W. Tait (ed.), *Early Analytic Philosophy*, Open Court, Chicago, 75–91.

Kim, J.: 1993, *Supervenience and Mind,* Cambridge University Press, Cambridge.

Kripke, S.: 1972, *Naming and Necessity,* Harvard University Press, Cambridge, MA.

Kuhn, T.: 2000, 'Possible Worlds in the History of Science', in J. Conant and J. Haugeland (eds.), *The Road Since Structure*, Chicago University Press, Chicago, pp. 58–90.

LaPorte, J.: 1996, Chemical Kind Term Reference and the Discovery of Essence, *Nous* **30**, 112–132.

McDowell, J. and P. Pettit.: 1986, 'Introduction to *Subject', Thought and Context* Clarendon, Oxford, pp. 1–15.

Millikan, R. G.: 2000, *On Clear and Confused Ideas*, Cambridge University Press, Cambridge.

Putnam, H.: 1975, The Meaning of 'Meaning' in *Philosophical Papers*, Vol. II, Cambridge University Press, Cambridge, pp. 215–271.

Putnam, H.: 1981, *Reason, Truth and History,* Cambridge University Press, Cambridge.

Putnam, H.: 1988, *Representation and Reality,* MIT Press, Cambridge, MA.

Putnam, H.: 1990a, Is Water Necessarily H_2O? in *Realism with a Human Face,* Harvard University Press, Cambridge, MA, pp. 54–80.

Putnam, H.: 1990b, Meaning Holism in *Realism with a Human Face,* Harvard University Press, Cambridge, MA, pp. 278–302.

Putnam, H.: 1993, 'Reply to Akeel Bilgrami', *Philosophical Topics* **20**, 385–391.

Putnam, H.: 1994, 'Reply to David Wiggins', in P. Clark and B. Hale, (eds.), *Reading Putnam*, Blackwell, Oxford, 283.

Putnam, H.: 1997, 'Functionalism, Cognitive Science or Science Fiction?', in D. M. Johnson and C. E. Erneling, (eds.), *The Future of the Cognitive Revolution*, Oxford University, pp. 32–45.

Segal, G.: 2000, *A Slim Book About Narrow Content,* MIT Press, Cambridge, MA.

Wiggins, D.: 1994, 'Putnam's Doctrine of Natural Kind Words and Frege's Doctrines of Sense, Reference, and Extension: Can They Cohere?', in P. Clark and B. Hale (eds.), *Reading Putnam*, Blackwell, Oxford, pp. 201–215.

Wiggins, D.: 2001, *Sameness and Substance Renewed,* Cambridge University Press, Cambridge.

Wilson, M.: 1982, 'Predicate Meets Property,' *The Philosophical Review,* Vol. XCI, no. 4.

Wittgenstein, L.: 1953, *Philosophical Investigations,* Blackwell, Oxford.

Wittgenstein, L.: 1958, *The Blue and Brown Books,* Blackwell, Oxford.

Department of Philosophy
Loyola University New Orleans
6363 St. Charles Avenue
New Orleans, Louisiana 70118
USA
E-mail: eamonbriscoe@yahoo.com