

How is Descartes's Argument Against Skepticism Better Than Putnam's?

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This paper has three parts. In a brief first part, I argue that one of Descartes's arguments that God exists is better than a certain version of Putnam's argument that we aren't brains in vats. Better, in this sense: if Putnam's argument is sound, then so is Descartes's, but the converse does not hold. In the second part, I argue that a subtler understanding of Putnam's semantic theory, one that takes into account the intricacies of "The Meaning of 'Meaning,'" can't sustain an argument against the hypothesis that we are brains in vats. In the third part, I conclude with some sympathetic remarks on Descartes's approach to the problem of Cartesian skepticism.

1. A Comparison

On a straightforward but simple reconstruction, Putnam argues:

- 1P. If a person can think of an F, then that person has come into causal contact with an F in the right way.
- 2P. We can think of brains and vats.
- 3P. If we are brains in vats, then we have not come into causal contact with brains and vats in the right way.
- So, 4P. We are not brains in vats.¹

Descartes (CSM 2.28-32 AT 7.40-46) argues:²

- 1D. If a person can think of an F, then that person has come into causal contact with an F or with something at least as good as an F.
- 2D. Descartes can think of a maximally perfect being.
- 3D. Anything that's at least as good as a maximally perfect being is God.
- So, 4D. Descartes has come into causal contact with God.

¹ H. Putnam, *Reason, Truth and History* (Cambridge: Cambridge University Press, 1981), at pp. 7-17.

² References to Descartes's works are to *The Philosophical Writings of Descartes*, translated by Cottingham, Stoothoff, Murdoch, and Kenny (3 vols., Cambridge: Cambridge University Press, 1984-91) and then to *Oeuvres de Descartes*, edited by Adam and Tannery (11 vols., Paris: Vrin, 1983).

If we can trust Descartes, 2D is a matter of careful introspection, and I say we can trust him.³ Since anything that's a maximally perfect being would be God, and nothing is better than something that's maximally perfect, 3D is obviously true. Descartes's argument is valid as I've presented it. Since 1P entails 1D,⁴ but not the other way around, Descartes's argument is better in my stipulated sense.

Colin McGinn presents a version of Putnam's argument against thinking that we are brains in vats and proclaims, "This is a bold and exciting line of argument against the sceptic. It suggests that epistemology has fretted at the cruel feet of the sceptic for so long because it has never enquired into the conditions of mental representation."⁵ A few pages later, he adds, "In effect, I can achieve the anti-sceptical result Descartes needed God to vouchsafe by exploiting considerations about what determines content. Ah, the wonders of analytical philosophy!"⁶

Even though McGinn's remarks are ironic and comic—that's why the skeptic has cruel feet—they are uncharitable to Descartes in two respects. First, they suggest that Descartes's assumptions are stronger than Putnam's though at first sight they are weaker. Second, they suggest that Putnam came up with the idea of refuting skepticism by appealing to the causal preconditions of thought, even though Descartes had the idea first.

Putnam himself doesn't acknowledge Descartes as a forerunner. In the "Meaning of 'Meaning,'" he wrote that the "that no psychological state, properly so called, presupposes

³ "As long as his statement remains biographical," Boyce Gibson concedes, we don't have "any right to contradict him," *The Philosophy of Descartes* (New York: Russell & Russell, 1932), at pp. 107-08.

⁴ Descartes is willing, at least for the sake of argument, to grant that the causal connection might have the form of a chain. In reply to Pierre Gassendi, he writes, "Where you go on to say that the idea of God is to be had only from what we might have heard spoken about certain predicates of God, I would have wished you had gone on to add where the first humans, from whom we heard this stuff, had gotten the same idea of God. For if from themselves, then why can't we also get the same idea from ourselves? If from God's revelation, then God exists" (CSM 2.251-52 AT 7.364, cf. CSM 2.98 AT 7.136). Here and elsewhere, the translation is mine.

⁵ C. McGinn, *Mental Content* (Oxford: Basil Blackwell, 1989), at p. 109.

⁶ *Ibid.*, p. 113.

the existence of any individual other than the subject of whom that state is ascribed . . . is pretty explicit in Descartes.”⁷ It isn’t explicit in Descartes, and it’s obviously false with respect to the idea of God. I suspect that Putnam hadn’t thought his assertion all the way through. In a recent book, he writes,

The ability to refer to things is not something that is guaranteed by the nature of the mind, as Descartes mistakenly thought; reference to things requires information-carrying interaction with those things, and that is enough to rule out the possibility that truth is in all cases radically independent of what we can verify.⁸

It’s true that Descartes doesn’t believe that we need to causally interact with every object of possible contemplation, but no one really thinks that. Descartes puts a causal restriction on thought and, for that reason, believes that the psychological state of having a certain idea of God proves the existence of God. Consequently, Descartes rules out skeptical possibilities where truth would diverge radically from what we can verify. He denies that what we clearly and distinctly perceive might be false (CSM 2.43 AT 7.61-62), and he denies that we might have a strong propensity to mistakenly believe in the existence of external bodies with no faculty to correct that false judgment (CSM 2.55 AT 7.79).

Descartes’s causal principle (1D in my reconstruction of his argument) seems unconstraining relative to Putnam’s. Dan Kaufman describes Descartes’s principle as “quite weak” and adds, “I think that this is an attractive feature of Descartes’ theory because it is true that sometimes ideas are caused by something other than their formal counterparts.”⁹ He then drops a footnote citing three critics of more recent causal theories of reference.¹⁰

⁷ Putnam, “The Meaning of ‘Meaning’”, repr. in his *Mind, Language, and Reality: Philosophical Papers*, volume 2 (Cambridge: Cambridge University Press, 1975), pp. 215-71, at p. 220.

⁸ Putnam, *The Collapse of the Fact/Value Dichotomy and Other Essays* (Cambridge, Mass.: Harvard University Press, 2002), at p. 108.

⁹ D. Kaufman, ‘Descartes on the Objective Reality of Materially False Ideas’, *Pacific Philosophical Quarterly*, 81 (2000), pp. 385-408, at p. 394.

¹⁰ *Ibid.*, p. 406n41.

After remarking that “the general cast of Descartes’s account is in many ways congenial to anti-individualism,” Tyler Burge also observes the relative mildness of Descartes’s causal principle, noting that it “is too weak to entail anti-individualism.”¹¹ Of course, on reasonable assumptions, Descartes’s principle entails the existence of God, so we shouldn’t overemphasize its triviality.

2. Subtler Interpretations of Putnam’s Argument

Having drawn attention to this similarity of structure between Putnam’s argument and Descartes’s, let me concede that my reconstruction of Putnam’s argument is problematic. If we hew more carefully to Putnam’s most careful formulations of his theory of meaning, then his principles would not entail the soundness of Descartes’s argument. Upon careful consideration of these subtleties, however, it turns out that no anti-skeptical consequences follow from Putnam’s theory.

2.1. The Loose Causal Principle

That Putnam believes premise 2P is obvious from an inference he makes: “What I shall show is that the supposition that we are brains in a vat has just this property [*sic*. of being self-refuting]. If we can consider whether it is true or false, then it is not true (I shall show). Hence it is not true.”¹² Obviously, the inference requires that he believes the antecedent of the conditional.

Putnam expresses premise 3P by writing that for brains in vats, the word ‘vat’, “certainly” does not refer

¹¹ T. Burge, ‘Descartes, Bare Concepts, and Anti-Individualism: Reply to Normore’, in Martin Hahn and Bjørn Ramberg (eds), *Reflections and Replies: Essays on the Philosophy of Tyler Burge* (Cambridge, Massachusetts: MIT Press, 2003), pp. 291-334, at pp. 291-92.

¹² *Reason, Truth and History*, p. 8.

to real vats, since the use of ‘vat’ in vat-English has no causal connection to real vats (apart from the connection that the brains in a vat wouldn’t be able to use the word ‘vat’, if it were not for the presence of one particular vat—the vat they are in; but this connection obtains between the use of *every* word in vat-English and that one particular vat; it is not a special connection between the use of the *particular* word ‘vat’ and vats).¹³

According to Putnam, brain in vats cannot think about vats, since the word ‘vat’ in vat English (and presumably every other word) does not have the right connection to vats.

I’ll call 1P (that *if a person can think of an F, then that person has come into causal contact with an F in the right way*) ‘The Loose Causal Principle.’ Putnam does not assert it; rather he asserts the much weaker premise “that one cannot refer to certain kinds of things, e.g. *trees*, if one has no causal interaction at all with them, or with things in terms of which they can be described.”¹⁴ There are two caveats here. First, Putnam initially restricts the principle to ‘certain kinds’, which implies that other kinds (e.g., perhaps, mathematical kinds)¹⁵ don’t require causal contact in order for us to think of them. Second, at the end of the sentence, he allows that we might be able to think of some kinds of things (e.g. golden mountains) by coming into causal contact with other kinds of things. So much is cautious and plausible.

Once we consider these hedges, we ought to conclude that the Loose Causal Principle is false. Indeed, in Chapter 3 of *Reason, Truth, and History*, Putnam offers a decisive example against it: “The idea that causal connection is necessary [for reference] is refuted by the fact that ‘extraterrestrials’ certainly refers to extraterrestrials whether or not we have ever causally interacted with any extraterrestrials or not.”¹⁶ Ted Warfield gives unicorns and

¹³ Ibid., pp. 14-15.

¹⁴ Ibid., pp. 16-17

¹⁵ “There are real puzzles, especially if one holds a causal theory of reference in some form, as to how one can refer to mathematical objects at all,” H. Putnam, ‘What is Mathematical Truth?’, in his *Mathematics, Matter, and Method: Philosophical Papers*, volume 1, 2nd ed. (Cambridge: Cambridge University Press, 1979), pp. 60-78, at p. 72.

¹⁶ *Reason, Truth and History*, p. 52

phlogiston as counter-examples to the principle.¹⁷ Descartes (CSM 2.26 AT 7.38) offers sirens and hippogriffs as examples of ideas that he has constructed by himself.

Warfield is “pretty sure” that Putnam believes “that one can think about Xs only if one has had causal contact with instances of X.”¹⁸ I don’t think that the passage Warfield quotes shows that Putnam believes that. Rather, Putnam there writes that reference to objects and properties requires causal contact with *either* “those objects and properties, *or* objects and properties in terms of which they can be described.”¹⁹

Even so, as Warfield writes,²⁰ it isn’t clear how Putnam thinks the Loose Causal Principle should be revised to avoid counter-examples while sustaining his anti-skeptical argument. In Chapter 3 of *Reason, Truth, and History*, there’s a strange transposition, and a realist interlocutor ends up defending Putnam’s Chapter 1 refutation of skepticism. In the face of the counter-example of ‘extraterrestrial,’ the realist

gives up the requirement that we have some ‘real’ connection (e.g. causal connection) with *everything* we are able to refer to, and requires only that the *basic* terms refer to kinds of things (and relations) that we have some real connection to. Using the basic terms in complex combinations we can then, he says, build up descriptive expressions which refer to kinds of things we have no real connection to, and that may not even exist (e.g. extraterrestrials).²¹

So, according to Putnam’s interlocutor, there are basic terms, that is, terms that a person can use to refer to things that require that person to have come into causal contact in the right way with things of that sort.

In the text that follows, Putnam criticizes the realist’s realism about universals without denying the existence of basic terms. Restricting the causal requirement on

¹⁷ T.A. Warfield, ‘A Priori Knowledge of the World: Knowing the World by Knowing Our Minds’, *Philosophical Studies* 92 (1998), pp. 127-47, at p. 130.

¹⁸ *Ibid.*, p. 130.

¹⁹ Putnam, ‘Replies’, *Philosophical Topics* 20 (1992), pp. 347-408, at p. 369, italics added.

²⁰ ‘A Priori Knowledge’, p. 134.

²¹ *Reason, Truth and History*, p. 52.

reference to basic terms makes sense of the caveats that he offers in Chapter 1 according to which thinking of trees requires either coming into contact with either trees or things in terms of which trees can be described.

Putnam doesn't say, however, with what other terms trees might be described, or why thinking of their referents should require causal contact with them. Thomas Nagel describes the difficulty of the task,

To show that I couldn't think there were no trees if there were none, it would have to be shown that this thought could not be accounted for in more basic terms which would be available to me even if all my impressions of trees had been artificially produced The skeptic may not be able to produce on request an account of these terms which is independent of the existence of their referents, but he is not refuted unless reason has been given to believe such an account is impossible. This has not been attempted and seems on the face of it a hopeless enterprise.²²

As Anthony Brueckner observes,²³ Descartes tentatively took up the task of specifying the basic elements out of which we build references to external things. In response to the possibility that he may be dreaming, Descartes writes,

Still, it really should be conceded that things seen while asleep are like a kind of painted images, which cannot be made except as resemblances of real things, and, therefore, at least these general things--eyes, head, hands, and the whole body--exist not as a kind of imaginary things but as real ones (CSM 2.13 AT 7.19).

On reflection, the meditator concludes that the simpler elements out of which more complex thoughts of bodies are formed are not those of biological parts and wholes, but rather simple metaphysical natures:

By similar reasoning, although even these general things—eyes, head, hands, and the like—might be imaginary, it must still be admitted that at least certain other simpler and more universal things are real. From these, as it were, real colors, all those images of things in our thought, whether real or not, are

²² T. Nagel, *The View from Nowhere* (Oxford: Oxford University Press, 1986), at p. 72.

²³ A. Brueckner, 'Transcendental Arguments from Content Externalism', in R. Stern (ed.), *Transcendental Arguments: Problems and Prospects*, pp. 229-50, at p. 243.

shaped. Shared corporeal nature seems to be of this kind, as does its extension; likewise shapes of extended things; likewise quantity, that is, the magnitude and number of these; likewise the place in which they may exist, and the time in which they may endure, and the like (CSM 2.13-14 AT 7.20).

Clearly, these mathematical raw materials aren't what Putnam has in mind.²⁴ His examples of the caricature of Churchill and the drawing of the tree show that he doesn't believe that there can be referring, purely geometrical representations of people or plants.²⁵

2.2. Our Knowledge of Our Basic Terms

We may distinguish between strong, medium, and weak ways that the postulation of basic terms could be used against skepticism. The strong use would be to argue that we can specify all the basic terms in English and infer that the corresponding objects exist or at least existed. The medium use would be to argue that we can specify at least some of the basic terms in English and infer that the corresponding objects exist or at least existed. The weak use would be to argue that though we don't know what the basic terms are in the language, we know that there are at least some, and that to acquire those terms, we must have spent some time outside of a vat.

I'll begin with an examination of the strong use. For this to work against a form of radical skepticism that denies the reliability of the senses, we would be able to tell by armchair reflection which terms are basic. (I'll call this doctrine 'the *A Priority* of Basic Terms.')

Generally speaking, defenders of causal theories of reference tend not to aver the *A Priority of Basic Terms*. Rather, the doctrine is foisted upon them by foes trying to push them into awkward epistemic positions. The semantic externalist needs to beware of

²⁴ Cf. Burge's treatment of Descartes's "extremely austere ontology, which admits only geometrical forms of matter as simple physical natures," 'Reply to Normore', p. 317.

²⁵ *Reason, Truth and History*. pp. 1-4.

epistemic *reductios*. Certainly, Ctesias wasn't able to tell through introspection whether there were unicorns, Joseph Priestley wasn't able to tell through introspection whether phlogiston existed, and scientists today aren't able to tell through introspection whether monopoles exist. Without supplementary premises, however, these are just facts that the semantic externalist needs to take into account, and not knockdown objections against either the doctrine that there are causal preconditions to some thoughts or the doctrine that thoughts about molybdenum are necessarily about molybdenum.

Paul Boghossian argues that theories of meanings such as Putnam's and the doctrine we have privileged access to our own minds leads to an epistemic *reductio*. On the way to that conclusion, Boghossian defends the attribution of the *A Prioricity* of Basic Terms to semantic externalists. If we have privileged access to our own mind and if semantic externalism is true, he argues, we would always be able to tell our atomic natural-kind terms with elements in their extensions from those without by the following simple trick: the referring terms will have concepts associated with them, while the ones with empty extensions will not.

Boghossian imagines a world in which it seems like water exists, though "these appearances are systematically false, and constitute a sort of pervasive collective mirage."²⁶ According to him, there is "a compelling argument showing that the externalist will not be able to say what atomic concept is expressed by the non-referring tokens of 'water', because by his own lights there can't be such a concept."²⁷ Putnam and his followers can't produce the required concept because there isn't a corresponding property. Boghossian writes,

²⁶ P. A. Boghossian, 'What the Externalist Can Know A Priori', *Proceedings of the Aristotelian Society*, 97 (1997), pp. 161-75, at p. 170.

²⁷ *Ibid.*, p. 173. It seems to me that under the described circumstances the word 'water' (like 'rainbow') would refer to a certain optical phenomenon, but that's contrary to the spirit of the example.

On the line we are currently investigating, the answer has to be that there is no fact of the matter what truth-condition is expressed by sentences involving ‘water’ on Dry Earth, for there is no fact of the matter what property is denoted by those tokens of ‘water’. Since there is no natural kind at the end of the relevant causal chain leading up to uses of ‘water’ on Dry Earth, there is no fact of the matter what the referent of ‘water’ is, and so no fact of the matter what proposition is expressed by sentence involving it. But on an externalist view, this admission is fatal to the claim that there is a concept there in the first place, for an externalism about concepts is fuelled in part by the conviction that thought contents must possess context-invariant conditions of satisfaction or, as appropriate, of truth. If, in a given context, there is no fact of the matter what the referent of a given concept is, then to that extent there is also no fact of the matter what the concept is.²⁸

According to Boghossian, on the externalist picture, for want of a property, the truth-conditions are lost, and for want of truth-conditions, the concept is lost. If we have enough self-knowledge to tell whether a concept is associated with a term, he reasons, externalism would entail that we could know *a priori* that atomic natural-kind concepts belong to basic terms.

Boghossian’s argument turns on the externalist’s inability to provide a concept for empty natural-kind terms. His targets “are externalist theses that are motivated by Putnamian Twin Earth experiments regarding natural kind concepts.”²⁹ That should include Putnam’s theses in the “Meaning of ‘Meaning’.” For Boghossian’s argument to succeed, it must succeed against Putnam’s account of concepts.

Putnam identifies meanings with a quadruple of syntactic category, semantic category, stereotype, and extension.³⁰ A stereotype is what people must know about, e.g. stereotypical tigers, “in order to count as having acquired the word ‘tiger’.”³¹ The first three

²⁸ Ibid., pp. 173-74.

²⁹ Ibid., p. 163n3.

³⁰ ‘Meaning of ‘Meaning’’, p. 269.

³¹ Ibid., p. 248.

elements of Putnam's quadruple are elements of "the individual speaker's competence."³²

They are what one needs to know in order to know the meaning of a word.

According to Putnam, "my *concept* of an elm tree is exactly the same as my concept of a beech tree."³³ He also believes that if the words 'beech' and 'elm' are switched on Twin Earth, there would be no difference between the concepts that he and his *Doppelgänger* assign to the words.³⁴ From context, it seems clear that Putnam identifies the concept of a word with the first three elements of its meaning—syntactic category, semantic category, and stereotype. These elements can be grasped independently of experience without our knowing whether the fourth element, extension, is empty or not. Thus, Putnam has what Boghossian argues can't be had, an externalist account of meaning that allows for introspective comprehension of a word's concept without *a priori* knowledge of whether the word denotes anything.

Boghossian challenges the externalist as follows: "can he tell us, in line with his overriding commitment, what concept *is* expressed by the empty tokens of 'water'?"³⁵ If we use 'concept' as Putnam does to refer to the first three elements in his quadruple, the answer will be syntactic category, semantic category, stereotype. For water, those would be: <{mass noun, concrete}, {natural kind, liquid}, {colorless, transparent, tasteless, thirst-quenching, etc.}>.³⁶

If we use 'concept' to refer to *meaning* as Boghossian does,³⁷ then, on Putnam's account, we should add the extension, which, by hypothesis, turns out to be the empty set.

True, on this understanding of concept, it follows that someone can use a word competently

³² Ibid.

³³ Ibid., p. 226.

³⁴ Ibid., pp. 245-46.

³⁵ 'What the Externalist Can Know', p. 173.

³⁶ 'Meaning of 'Meaning'', p. 269.

³⁷ 'What the Externalist Can Know', p.163.

without having complete epistemic access to every element in the associated concept. That's hardly an unforeseen *reductio*, but rather another way of expressing Putnam's thesis that meanings aren't entirely in the head.

As for Boghossian's demand for truth-conditions for sentences including the Dry-Earthian predicate 'water,' the standard external account is that such predicates aren't satisfied by any actual or possible stuffs.³⁸ If the objection is that the externalist can't provide truth conditions, then *any* account of the truth conditions will count as a rebuttal. Though they later adopt the standard semantic account of the satisfaction conditions for 'phlogiston',³⁹ Gallois and O'Leary-Hawthorne initially provide an alternative: "a plausible semantic treatment of that term is to regard there as being a default option enforced by our semantic intentions such that if 'phlogiston' fails to rigidly designate a natural kind, it is synonymous with a non-rigid designator."⁴⁰ I don't think that a request for modal truth conditions can be at the heart of Boghossian's objection, or he would not tell us: "Never mind if such sentences are ruled false in the actual world, or even in all worlds."⁴¹

One might argue that Putnam is committed to the *A Prioricity* of Basic Terms since otherwise the thesis that basic terms exist would be a triviality. Michael McKinsey argues that, for Putnam and Burge, the thought of a natural kind must conceptually entail the existence of facts that can only be known through empirical investigation. Otherwise, he argues, their doctrines would reduce to triviality. McKinsey writes,

anti-individualism is the thesis that some neutral *de dicto* cognitive attitudes are wide states, and to say that a state is wide (not narrow) cannot mean

³⁸ S. Kripke, *Naming and Necessity* (Cambridge, Mass.: Harvard University Press, 1972), at pp. 156-58, T. Stoneham, 'Boghossian on Empty Natural Kind Concepts', *Proceedings of the Aristotelian Society*, N.S. 99 (1999), pp. 119-22, at p. 121.

³⁹ A. Gallois and J. O'Leary-Hawthorne, 'Externalism and Scepticism', *Philosophical Studies* 81 (1996), pp. 1-26, at p. 13.

⁴⁰ *Ibid.*, p. 7.

⁴¹ 'What the Externalist Can Know', p. 282.

merely that the state metaphysically entails the existence of external objects. For if it did, then given certain materialistic assumptions that are pretty widely held, it would follow that probably *all* psychological states of *any* kind would be wide, so that the concept of a narrow state would have no application at all, and anti-individualism would be merely a trivial consequence of (token) materialism.⁴²

Putnam can't be expected to worry about the proper construal of 'anti-individualism', since the term is Burge's. Nor, I think, would he be distressed if it turned out that there are no psychological states in the narrow sense. Overemphasis on narrow psychological states are at the heart of what he calls "three centuries of failure of mentalistic psychology."⁴³

What of the existence of basic terms? To assert their existence is to assert that in order to grasp the meaning of some terms, we need the right kind of causal contact with their referents. Would that doctrine be trivial if not for the *A Priority* of Basic Terms? It would not. McKinsey doesn't even believe the doctrine. According to him,

the facts about speakers' first person attitudes that determine the meanings of natural kind terms are *internal* facts, facts that are logically independent of any facts about the external (causal, historical, social) relations that the speakers may bear to other speakers of objects.⁴⁴

If McKinsey isn't willing to grant the existence of basic terms, he is hardly in a position to insist that the doctrine would be trivial if not supplemented by the *A Priority* of Basic Terms.

In any case, attributing false but interesting doctrines to one's opponents is a dubious application of the principle of charity. In hard cases the *A Priority* of Basic Terms seems plainly false. Ctesias could hardly be expected to know *a priori* that 'unicorn' isn't a basic term.

⁴² M. McKinsey, 'Anti-Individualism and Privileged Access', *Analysis* 55 (1991), pp. 9-16 at pp. 13-14.

⁴³ 'Meaning of 'Meaning'', p. 221.

⁴⁴ McKinsey, 'The Internal Basis of Meaning', *Pacific Philosophical Quarterly* 72 (1991), pp. 143-69, at p. 144.

Does Putnam believe in the *A Priority* of Basic Terms anyway? There are really two questions here. First, does Putnam believe that the theoretical framework that he's advancing is knowable *a priori* and, second, does he believe that we can know *a priori*, of each basic term, that it is a basic term and requires ordinary causal contact with its referent. The answer to the first question is yes, in a sense. The answer to the second question is no.

In discussing his arguments that we aren't brains in vats, Putnam writes,

What we have been doing is considering the *preconditions* for *thinking about, representing, referring to*, etc. We have investigated these preconditions *not* by investigating the meaning of these words and phrases (as a linguist might, for example) but by *reasoning a priori*. Not in the old 'absolute' sense (since we don't claim that magical theories of reference are *a priori* wrong), but in the sense of inquiring into what is *reasonably* possible *assuming* certain general premises, or making certain very broad theoretical assumptions.⁴⁵

By '*a priori*' in the old sense, he means, I think, knowable with certainty independently of experience. By the new sense of '*a priori*' he means, I think, knowable without absolute certainty from armchair reflection tutored by common sense and ordinary experience.

As for the second question, consider Putnam's later treatment of the question "Why doesn't *phlogiston* denote valence electrons?"⁴⁶ Valence electrons are usually lost in combustion and this loss partly explains the difference between the characteristics of metals and their calces. Those are two central features that were attributed to phlogiston. If, as Philip Kitcher suggests, Stahl took "phlogiston as being, *by definition*, that which is emitted in combustion" and "the phlogistonian tradition repeats Stahl's definition and honors his usage,"⁴⁷ then it seems as if 'phlogiston' ought to denote valence electrons.⁴⁸

⁴⁵ *Reason, Truth and History*, p. 16.

⁴⁶ Putnam, 'How Old is the Mind?', repr. in his *Words and Life*, J. Conant (ed.) (Cambridge, Mass.: Harvard University Press, 1994), pp. 3-21, at p. 15. Putnam's presentation of the puzzle is elliptical, so my reconstruction is somewhat speculative.

⁴⁷ P. Kitcher, 'Theories, Theorists, and Theoretical Change', *The Philosophical Review* 85 (1978), pp. 519-47, at p. 531.

But, of course, it doesn't. The reason cannot simply be that advocates of phlogiston believed many things about it that aren't true of valence electrons, since advocates of electrons in 1900 managed to refer to them with the word 'electron,' even though they believed many false things about them. Putnam concludes,

causal constraints on reference have to be balanced against other constraints in the actual practice of interpretation. Interpreting someone is not something you can reduce to an algorithm. You can't do it by just looking at what he perceives, or looking at the phenomena he is trying to explain, or looking at all of this plus his beliefs, or rank-ordering his beliefs in terms of which are more or less central. We do manage to interpret one another; otherwise hermeneutics would be impossible and conversation would be impossible. But it takes all of the intelligence we have to do it.⁴⁹

Leora Weitzman distinguishes four approaches to causal theories of content: 1) ones in which some predicates are determined independently and others compositionally, 2) ones in which all predicates are determined independently, 3) ones in which all predicates are determined holistically, and 4) ones in which some predicates are determined holistically, some predicates are determined independently, and some predicates are determined compositionally.⁵⁰ Putnam's treatment of 'phlogiston' shows that, at least by the 1990s, he had embraced either the third or the fourth option.⁵¹

If Putnam believes that we can't today easily figure out why 'electron' is and 'phlogiston' isn't a basic term, he can hardly suppose that their statuses were transparent to

⁴⁸ Valence electrons aren't always lost in combustion, but, as a closely related fact, combustion doesn't always produce acids. That doesn't keep Lavoisier's 'generator of acids' from being both the reference-fixing description and the etymological source for the word 'oxygen'.

⁴⁹ 'How Old is the Mind?', p. 16.

⁵⁰ L. Weitzman, 'What Makes a Causal Theory of Content Anti-skeptical?', *Philosophy and Phenomenological Research* 55 (1996), pp. 299-318, p. 300.

⁵¹ Kitcher reaches a similar conclusion through a different route. Even though 'phlogiston' is not a referring expression, when Priestly used the expression 'dephlogistonated air,' he usually succeeded in referring to oxygen. Kitcher concludes that that reference ought to be determined charitably and holistically, 'Theories', p. 534.

Bohr and Priestley. So Putnam can't believe that the *A Priority* of Basic Terms obtains with complete generality.

2.3. Arguing From Particulars

Putnam might reply that generality is not the important thing here. This is what I earlier called the medium use of basic terms against skepticism and, in effect, Warfield's response.

Putnam might argue that though unicorns and extraterrestrials are exceptions to the principle that we must come into the right sort of causal contact with a thing in order to contemplate members of their kind, brains and vats are not.

This shouldn't be assumed without argument. A vat is a container for holding liquid. I doubt that people need to come into causal contact with actual vats in order to acquire that concept. It seems possible to me, moreover, that there could be quasi-geometrical definitions of containment and liquidity, definitions that might be accessible to brains in vats.

I find it even more doubtful that brains in vats couldn't form the concept of a brain. Suppose that an atom-for-atom replica of my brain exists in a vat and that this similarity is preserved for the duration of the following thought experiment. Suppose also that I think to myself: by 'brain' I mean whatsoever is the organ actually underlying my thought. If the apparent brains that I see every once in a while on documentaries turn out to be illusory, I don't mean to refer to one of those fictions by the word 'brain', but rather to whatever really does support my thought. Evidently, *I* have managed to refer to the organ that actually underlies my thought. Why hasn't my brain-analogue? Speaking for myself, when I consider the possibility that I might be a brain in a vat, I'm not worried that I am an illusory entity of

the kind that present themselves when I think I am watching a documentary.⁵² Rather, I am considering the hypothesis that whatever supports my capacity to think hooks up to the world in a way radically different from what I expect.

I don't insist that it's possible for brains in vats to think of brains and vats. I insist that it isn't obvious that brains in vats can't think of brains in vats. The only reason that Putnam gives for thinking that they can't is that they haven't come into the right sort of causal contact with brains or vats. Nor does he fully spell out the conditions under which causal contact is not necessary for thinking about something.

One might think that the tricky reflexivity of Putnam's argument isn't essential to the argument. He could have offered a cleaner version of his argument by observing that we can think of trees and Winston Churchill. If these thoughts require being in the right kind of causal contact with their referents, then he could more directly argue that we must have been outside of vats at least once.

Accordingly, Warfield switches thoughts. Instead of discussing the preconditions for wondering whether he is a brain in a vat, he discusses the preconditions for thinking that water is wet.⁵³ Water, of course, was one of the central examples in Putnam's "The Meaning of 'Meaning'." If the causal theory of reference applies anywhere, surely it applies there.

Maybe. We can think of extraterrestrials, hippogriffs, and phlogiston without coming into causal contact with them. Without some sort of general principle to guide us, what reason do we have to think that water isn't like those things? If there is water, and the world is pretty much as we think it is, then we needed to come into causal contact with water in order to think of it. On the other hand, if there isn't any water, and our thoughts of water

⁵² Here I'm indebted to Dominik Sklenar.

⁵³ 'A Priori Knowledge', p. 128.

are just the delusions of abused brains, then thoughts of water are like thoughts of phlogiston, and we don't need to be splashed with it to contemplate it.⁵⁴

In "The Meaning of 'Meaning,'" it seems to me, Putnam showed greater understanding of the epistemic contingency of reference. For one thing, he observed that sometimes we don't refer to what we are in causal contact with, even if we intend the causal contact to be an instance of ostensive definition:

My 'ostensive definition' of water has the following empirical presupposition: that the body of the liquid I am pointing to bears a certain sameness relation (say, *x is the same liquid as y*, or *x is the same_L as y*) to most of the stuff I and other speakers in my linguistic community have on other occasions called 'water'. If this presupposition is false because, say, I am without knowing it pointing to a glass of gin and not a glass of water, then I do not intend my ostensive definition to be accepted. Thus the ostensive definition conveys what might be called a defeasible necessary and sufficient condition for being water is bearing the relation *same_L* to the stuff in the glass; but this is the necessary and sufficient condition only if the empirical presupposition is satisfied. If it is not satisfied, then one of a series of, so to speak, 'fallback' conditions becomes activated.⁵⁵

Our kinds terms refer to what is physically similar to the target of an ostensive definition—unless something goes wrong.⁵⁶ If a purported natural kind term has an empty extension, then something has gone wrong. Whether something has gone wrong is harder to know than whether the kind term denotes something. This is why "The Meaning of 'Meaning'" would have been of no help to Ctesias or Priestley. Putnam's theory doesn't guarantee that any particular natural kind term hasn't misfired.

⁵⁴ Gallois and O'Leary-Hawthorne, 'Externalism and Scepticism', p. 7; A. Brueckner, 'A Priori Knowledge of the World Not Easily Available', *Philosophical Studies* 104 (2001), pp. 109-14, at p. 111-12.

⁵⁵ 'Meaning of 'Meaning'', p. 225.

⁵⁶ Cf. K. Donnellan, 'Speaking of Nothing', *The Philosophical Review* 83 (1974), pp. 3-31.

2.4. The Worst Case Scenario

The defender of the weakest appeal to basic terms will reply that though something can go wrong in any single case it doesn't follow that something can go wrong in every case. It seems to me, however, that the hypothesis that we might be brains in vats shows that something can go wrong in every case. For brains in vats, there are no basic terms; that is, there are no thoughts that require causal contact in the ordinary way with ordinary outside objects.⁵⁷ It follows that if we are brains in vats, then there aren't causal preconditions of that sort on our thoughts. So we can't assume that there are causal preconditions on our thoughts in arguing against the possibility that we are brains in vats.

This may seem to beg the question against Putnam's argument in *Reason, Truth, and History*, but it does not. Really, it just enunciates the strictures against confusing metaphysical and epistemological necessity that he made in earlier work. Consider his discussion of the possibility that 'water' might have misfired and not picked out a natural kind:

Another misunderstanding that should be avoided is the following: to take the account we have developed as implying that the members of the extension of a natural-kind word necessarily *have* a common hidden structure. It could have turned out that the bits of liquid we call 'water' had *no* important common physical characteristics *except* the superficial ones. In that case the necessary and sufficient condition of being 'water' would have been possession of sufficiently many of the superficial characteristics. Incidentally, the last statement does not imply that water could have failed to have a hidden structure (or that water could have been anything but H₂O). When we say that it could have *turned out* that water had no hidden structure what we

⁵⁷ Weitzman's central question is "whether one can know one's most basic concepts to have nonempty extensions," without asking the further question of "whether one can know which of one's concepts *are* basic" ("What Makes a Theory Anti-skeptical?", p. 299). This is analogous to what I've called the weakest appeal to basic terms, but lacks the proviso that basic concepts must be acquired in ordinary ways which brains in vats can't manage. For present purposes, Weitzman sets the bar too low. For one thing, knowledge that some of our concepts aren't empty doesn't exclude the possibility that we're brains in vats, since, if we were, our concepts *brain* and *vat* would be instantiated. For another, Descartes has already settled the question and proven beyond any conceivable doubt that the concept *thinking thing* has at least one member in its extension (cf. Brueckner, 'Transcendental Arguments', pp. 247-48).

mean is that a liquid with no hidden structure (i.e. many bits of different liquids, with nothing in common *except* superficial characteristics) could have looked like water, tasted like water, and have filled the lakes, etc., that are actually full of water.⁵⁸

Suppose we extend our notion of epistemic possibility to allow for desperately improbable events. In this sense, it's epistemically possible that there's a vast conspiracy by chemists and their lackeys to hide the fact that water is really a heterogeneous mixture of transparent liquids. We can grant this (bare) epistemic possibility even while maintaining that, as the world almost certainly is, water is necessarily H₂O.⁵⁹

Another epistemically barely possible way that it could turn out that water is radically different than we think it is would be if we are all brains in vats. Then water either does not exist or is a merely virtual stuff.

Warfield considers two ways in which someone could think of water without water existing:

first, perhaps one can, armed with a respectable knowledge of theoretical chemistry, think about water in a world containing hydrogen and oxygen, but no water. And perhaps one can, via complex chain of socio-linguistic deference to others in one's language community, think about water without personally having had causal contact with water.⁶⁰

We may add a third possibility: if it turned out that we were brains in vats, then we could think about water without having to come into causal contact with it, because water wouldn't actually exist. If we are going to take seriously as an epistemic possibility that we might be brains in vats in a dry world, then we have to take seriously the possibility that there is no

⁵⁸ 'Meaning of 'Meaning'', pp. 240-41. Putnam adds a reference to Kripke's discussion of whether a wooden lectern could have been made of ice.

⁵⁹ For reasons connected to the contingency of physical laws, Putnam's considered view ("Is Water Necessarily H₂O?," in his *Realism with a Human Face*, J. Conant (ed.) (Cambridge, Mass.: Harvard University Press, 1990), pp. 54-79) is that water is not necessarily H₂O.

⁶⁰ 'A Priori Knowledge', p. 131; cf. Burge, 'Other Bodies', in Andrew Woodfield (ed.), *Thought and Object: Essays on Intentionality* (Oxford: Oxford University Press, 1982), pp. 97-120, at p. 120n18; McGinn, *Mental Content*, pp. 34-36.

water, since that is part of the hypothesis. As Warfield himself emphasizes, you don't need to come into causal contact with things that don't exist in order to think of them. The examples and the theory that Putnam presented in "The Meaning of 'Meaning'" don't show that the Loose Causal Principle applies to brains in vats. They don't even show that those poor disembodied creatures use any basic terms.

These considerations, perhaps, give a point to what I earlier called the tricky reflexivity of Putnam's argument. Suppose the lesson of the causal theory of content were that for each natural kind concept, it either lacks an instance *or* its users have been causally connected to its instances in an ordinary way. That doctrine wouldn't entail the falsity of the skeptical possibilities Descartes offers at the beginning of the Second *Meditation*. ("I accordingly suppose everything I see to be false; I believe that nothing that my lying memory represents has ever existed; clearly I have no senses; body, shape, extension, motion and place are chimeras" CSM 2.16 AT 7.24.) So long as *brain* and *vat* are natural-kind concepts, however, the disjunction would entail the falsity of the skeptical hypothesis that I am a brain in a vat who has never been causally connected to brains or vats in an ordinary way.

One reasonable reaction to this kind of reassurance is Nagel's:

If I did accept the argument, I must conclude that a brain in a vat can't think truly that it is a brain in a vat, even though others can think this about it. What follows? Only that I can't express my skepticism by saying, "Perhaps I'm a brain in a vat." Instead I must say, "Perhaps I can't even *think* the truth about what I am, because I lack the necessary concepts and my circumstances make it impossible for me to acquire them!" If this doesn't count as skepticism, I don't know what does.⁶¹

⁶¹ *View from Nowhere*, p. 73.

Thomas Tymoczko accuses Nagel of being indefinite, “Nagel’s worry is not skepticism, not a problem about the possibility of knowledge, but a form of free-floating anxiety.”⁶² I don’t think that this is right: Nagel is worrying that we might be in a position as epistemically deprived as that of brains in vats, and that, if we were, we wouldn’t be able to grasp our essential nature. Tymoczko argues that brains in vats aren’t epistemically hampered, but they can’t walk around, they can’t see, and they can’t hear. If these are human brains, then these are epistemic disadvantages.

We don’t have to resolve the dispute between Nagel and Tymoczko, nor do we have to pursue a psychoanalytic reading of *The View From Nowhere*. As Nagel observes and as we’ve seen, we probably don’t need causal contact in the usual way in order to think of either vats or brains. ‘Vat’ isn’t a natural kind term, and we can worry about whether the organ that actually underlies our thought hooks up to the external world in anything like the way that we assume.

The Loose Causal Principle is false and thus can’t be a premise in a sound argument. When we appeal to intricacies in Putnam’s theory of meaning to avoid counter-examples, we get closer to the truth, but farther from a refutation of skepticism.

3. Skepticism and Descartes’s Idea of God

In a reply to Crispin Wright, Putnam tells us that his argument is only intended to rebut the ‘internal skeptic,’ who seeks “to convince us, on the basis of assumptions that we ourselves hold, that all or a large part of our claims about the empirical world cannot amount to

⁶² T. Tymoczko, ‘Brains Don’t Lie: They Don’t Even Make Many Mistakes’, in M. D. Roth and G. Ross (eds.), *Doubling: Contemporary Perspectives on Skepticism*, (Dordrecht: Kluwer Academic Publishers, 1990), pp. 195-213, at p. 212n11.

knowledge.”⁶³ Putnam’s reconstructs his reply as follows: “many of us—perhaps most of us, nowadays—believe that there are causal constraints upon reference If we do accept this much about reference, then the internal skeptic cannot, in fact, show on the basis of premises we accept that we may be brains in a vat.”⁶⁴ If I understand Putnam right, the internal skeptic is supposed to be refuted when we can show that something we believed prior to exposure to skepticism is incompatible with the skeptical hypothesis. Since the causal theory of reference is thus incompatible, epistemic progress has been made.

However, if that’s all that’s required for a refutation of the internal skeptic, then Putnam’s refutation is much subtler than it needs to be. After all, before we were exposed to the skeptical hypothesis, we all believed that we knew that we had hands, torsos, and legs and that the earth had existed for a very long time.⁶⁵ Those beliefs are incompatible with skeptical hypothesis and held with a higher degree of confidence than the causal theory of reference. Though such refutations might reassure us that things are pretty much as they seem,⁶⁶ they are worlds apart from the what Descartes calls the first rule of serious philosophy: “all previous judgments are to be gotten rid of” (CSM 1.221 AT 8a.38).

Indeed, Descartes offers his skeptical hypotheses in order to lead the mind away from erroneous judgments that keep us from clear and distinct perception. In his synopsis of the First *Meditation* he writes, “even though it may not appear at first glance, this degree of doubt has the utmost utility, since it may free us from all our previous judgments and smooth an easy path for leading the mind from the senses” (CSM 2.9 AT 7.12 cf. CSM 2.121

⁶³ “Comments and Replies,” in P. Clark and R. Hale (eds.), *Reading Putnam* (Oxford: Blackwell, 1994), pp. 242-295 at p. 284.

⁶⁴ *Ibid.*, pp. 284-85.

⁶⁵ G. E. Moore, ‘A Defence of Common Sense’, repr. in Thomas Baldwin (ed.), *G.E. Moore: Selected Writings* (London: Routledge, 1993), pp. 106-33, at pp. 107-08.

⁶⁶ According to Warfield, “the charge of begging the question does not stick as easily to my argument as it does to the argument of Moore,” ‘A Priori Knowledge’, p. 141.

AT 7.171). He thinks that our educations and our senses systematically obscure our innate ideas and distort our judgments about the natures of things.⁶⁷

Descartes had offered a briefer version of his causal argument for the existence of God in the *Discourse on the Method*. In a letter that's probably addressed to Antoine Vatiere, Descartes concedes, "It is true that I have been too obscure in what I have written on the existence of God in this treatise on the Method, and although this is the most important piece, I admit that it is the least elaborated of the entire work" (CSMK 3.85 AT 1.560). "The principal reason for its obscurity," he explains, "is that I did not dare to expand on the reasons of the skeptics or to say all that is necessary for leading the mind from the senses" (CSMK 3.86 AT 1.560 cf. CSMK 3.55 AT 1.353). He thinks of his skeptical exercises in large part as preparatory exercises that cleanse the mind of obscurities introduced by lifelong gullibility. He supposes that these exercises will allow the soundness of his proof for the existence of God to shine through more clearly.

The existence of the external world is certain beyond a reasonable doubt to begin with. In my opinion, we aren't likely to be able to raise it beyond unreasonable doubts through philosophical arguments. If we are willing to adopt unreasonable doubts, then we can reject Descartes's causal principle and any version of causal theory of reference.⁶⁸ Even so, if we want argue for the existence of the external world from principles about the preconditions of thought, then Descartes's idea of God makes for a nobler vessel than Putnam's ideas of brains or vats.

Consider the close of the Third *Meditation*, where Descartes describes the contemplation of the idea of God as the greatest pleasure on earth:

⁶⁷ Cf. S. Menn, *Descartes and Augustine* (Cambridge: Cambridge University Press, 1998), Ch. 5.

⁶⁸ Cf. K. DeRose, 'How Can We Know that We're Not Brains in Vats?', *The Southern Journal of Philosophy* 38 Supplement (2000), pp. 121-48, at pp. 131-32.

It seems right here to dwell at length upon God himself, to consider his attributes as they are to me, to gaze at, to admire, and to adore the beauty of this immense light, so far as the vision of my darkened intellect can bear it. For as we believe by faith that the greatest happiness of the other life consists solely in the contemplation of the divine majesty, then surely likewise, from the same contemplation, although much less perfect, we find by experience that we can feel the greatest pleasure we can possess in this life (CSM 2.35-36 AT 7.52).

According to Descartes, we shouldn't try to take hold of the idea of God so much as we should try to have it take hold of us:

those who attend to his individual perfections, not so much grasping them as being grasped by them, and try to occupy all the powers of their intellect contemplating them, actually find in this much ampler and easier material for clear and distinct thought than what they find in any created things (CSM 2.82 AT 7.114).

Could someone with such an idea of God rationally believe that it came from a source other than God? Impossible! Of course, the persuasiveness of this argument requires having something like Descartes's idea of God and being able to sweep away any ephemera that might obscure such visions.

In his contribution to *The Cambridge Companion to Levinas*, Putnam writes,

Levinas believes that what Descartes is reporting is not a step in a deductive reasoning, but a profound religious experience, an experience which might be described as the experience of a *fissure*, of a confrontation with something that disrupted all his categories. On this reading, Descartes is not so much proving something as *acknowledging* something, acknowledging a Reality that he could not have constructed, a Reality which proves its own existence by the very fact that its presence in my mind turns out to be a phenomenological impossibility.⁶⁹

This second-hand reading provides a relatively sympathetic description of the argument in the Third *Meditation*, but it effaces the distinction between ideas and the objects of our ideas,

⁶⁹ Putnam, 'Levinas and Judaism', in S. Critchley and R. Bernasconi (eds.), *The Cambridge Companion to Levinas* (Cambridge: Cambridge University Press, 2002), pp. 33-62, at p. 42.

a distinction that Descartes takes great pains to draw. It also effaces the likeness between Descartes's argument against skepticism and Putnam's.

Let me conclude by observing that Descartes's arguments in the Third *Meditation* are better than their reputation. Louis Loeb dislikes them so much that he thinks that Descartes might not have been serious: "Such glaring deficiencies as the appeal to the intrinsically implausible causal principle suggest the possibility that Descartes was not sincere in proposing them."⁷⁰ Whatever else may be said about Descartes's piety and orthodoxy, the comparison with *Reason, Truth, and History* shows that his first argument in the Third *Meditation* for the existence of God isn't that bad. It is at least as good as an obvious interpretation of Putnam's argument against skepticism. No one accuses Putnam of insincerity, let alone of secretly believing that we actually are brains in vats.

Both Descartes and Putnam argue that there are causal conditions on thought, and that our knowledge of these conditions can be used in arguments against skepticism. This deep structural similarity between Descartes's argument and Putnam's implies that epistemologists should make their evaluations of each compatible in letter and spirit. A criticism or defense that seems right when applied to one argument might seem implausible when applied, *mutatis mutandis*, to the other. We can learn both by casting new light on old problems and by casting old light on new problems.⁷¹

⁷⁰ L. E. Loeb, 'Is There Radical Dissimulation in Descartes' *Meditations*?', in A. O. Rorty (ed.), *Essays on Descartes' Meditations* (Berkeley: University of California Press, 1986), pp. 243-70, at p. 244.

⁷¹ I thank Mike Bergmann, Katy McNamee, and anonymous reviewers for helpful comments.