### COMMENTS AND CRITICISM

#### WHAT IS THE MODEL-THEORETIC ARGUMENT?\*

EARL of GURNEY: If there's anything you'd like me to explain, fire away.

CLAIRE: How do you know you're . . . God?

EARL of GURNEY: Simple. When I pray to Him I find I'm talking to myself.

-Peter Barnes

HAT exactly is the model-theoretic argument? Why does it continue to elicit such a strong response seventeen years after Hilary Putnam¹ first advanced it? Some would answer that Putnam's argument is genuinely important, worthy of sustained discussion. Many others, however, would insist that it is a deeply confused begging of the question, worthy only of quick dismissal.² In a recent contribution to this JOURNAL, James Van Cleve³ expresses the latter opinion, arguing that Putnam's application of the model-theoretic argument to causal realism (i.e., the ''just more theory'' response) is "completely wrongheaded," simply a "ploy."

\* I am grateful to the following people for their contributions to this paper: Ann Baker, Larry BonJour, Harry Deutsch, Kent Machina, Mark Siderits, Thomas Simon, and especially Pat Franken.

¹ Putnam has given the model-theoretic argument in numerous places, including: "Realism and Reason," in *Meaning and the Moral Sciences* (New York: Routledge, 1978), pp. 123–38; and "Introduction" (pp. viii–xiii), and "Models and Reality" (pp. 1–25), in *Realism and Reason: Philosophical Papers, Volume 3* (New York: Cambridge, 1983). The practical implications of the argument are explored in the "Brains in a Vat" argument (pp. 1–21) and the "cats & cherry's" argument (pp. 23–48), in *Reason, Truth and History* (New York: Cambridge, 1981). For his more recent reflections on the model-theoretic argument, see "Model Theory and the 'Factuality' of Semantics," in *Reflections on Chomsky*, Alexander George, ed. (Cambridge: Blackwell, 1989), pp. 213–32 and *Renewing Philosophy* (Cambridge: Harvard, 1992).

<sup>2</sup> The following is a representative sample of articles that express (at least implicitly) the worry that the model-theoretic argument imposes constraints on the realist which are ultimately question-begging: Anthony Brueckner, "Putnam's Model-theoretic Argument against Metaphysical Realism," Analysis, XLIV, 3 (June 1984): 134–40; Michael Devitt, Review of Putnam's Reason, Truth and History, in The Philosophical Review, XCII (1984): 274–7; Carsten Hansen, "Putnam's Indeterminacy Argument: The Skolemization of Absolutely Everything," Philosophical Studies, LI (1987): 77–99 (esp. p. 88); Mark Heller, "Putnam, Reference and Realism," Midwest Studies in Philosophy, XII, Realism and Antirealism, P. French, T. Uehling, H. Wettstein, eds. (Minneapolis: Minnesota UP, 1988), pp. 113–28 (esp. p. 124); and David Lewis, "Putnam's Paradox," Australasian Journal of Philosophy, LXII (1984): 221–36 (see esp. p. 225).

3 "Semantic Supervenience and Referential Indeterminacy," this JOURNAL,

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Van Cleve admits that his criticism has been made numerous times before (*ibid.* p. 349), but he is hopeful that a discussion of semantic (and epistemological) supervenience may help Putnam—and others bewitched by the model-theoretic argument—finally to "see the point" of the objection. Unfortunately, the argument that Van Cleve criticizes is *not* an argument that Putnam has ever given. More generally, and in common with numerous articles before his, Van Cleve misrepresents the argumentative strategy of the model-theoretic arguments. And while I do not suggest that the arguments force the reader to abandon metaphysical realism, they cannot be dismissed on the basis of Van-Cleve-type objections.

THE MODEL-THEORETIC ARGUMENT

The model-theoretic argument, in spite of the controversy over its proper interpretation, is in its main outline deceptively simple. Its goal is to undermine metaphysical realism. Instead of employing the more familiar twentieth-century strategy of attacking the very idea of mind-independent objects, Putnam borrows a page from Kant's book. Kant argued that, even if we assume that mind-independent objects exist, they are simply not the right kind of thing to be "objects of knowledge." Similarly, Putnam argues that, even if we assume (for the sake of argument) that mind-independent objects exist, they are not the right kind of thing to be the "objects of our semantic reference" (i.e., they are not the kind of object to which our words could conceivably bear a determinate referential relation). If this latter claim can be established, then the original assumption that we can indeed think and talk about mindindependent objects would itself be threatened. Ultimately, then, the model-theoretic argument is a reductio. First, the central theses of metaphysical realism are assumed as premises:

- P1. The world consists of mind-independent objects.
- P2. Our statements about the world express realist claims about mind-independent reality.

To these assumptions are added certain features of what it is to be a model<sup>5</sup> which make it clear (if it was not obvious already) that

<sup>&</sup>lt;sup>4</sup> I offer a general account of the role of Putnam's entire family of modeltheoretic arguments in "What is Realistic about Putnam's Internal Realism?" Philosophical Topics, xx, 20 (1992): 49–84.

<sup>&</sup>lt;sup>5</sup> Putnam appeals to the work of Löwenheim and Skolem. The basic principle at work, however, is very simple. Since every isomorphic image of a model will itself be a model, our global theory (which we assume is consistent) will have indefinitely many models. (I am grateful to Deutsch for helpful discussions on this topic.)

P3. Operational and theoretical constraints alone are not sufficient to fix a determinate reference relation between the terms of our language and mind-independent reality.

# Putnam then argues that

P4. There exists nothing else in the universe which (in addition to theoretical and operational constraints) could fix a determinate referential relation to mind-independent reality.

## He concludes that, therefore,

C. Our statements are semantically indeterminate. There is no fact of the matter concerning the reference of our terms. [The indeterminacy of reference.]

Putnam finds C absurd and thus the argument to be a reductio of the initial premises (P1 and P2).<sup>6</sup> Putnam spends very little time arguing for the absurdity of C. He trusts that most readers will be put off by its radically revisionist and largely counterintuitive consequences. Further, since the argument is directed against the metaphysical realist, he is undoubtedly relying on the fact that C will hold little charm for most realists.<sup>7</sup>

Putnam does not leave the argument here, however. He knows that the realist will not go down without a fight and that P4 is the premise that she will resist. C does not follow, the realist will argue, because the universe does contain a reference fixer. While there is no consensus among realists as to what in fact does the reference fixing,<sup>8</sup> it is not surprising that many contemporary physicalists insist that reference must not be an irreducibly intentional notion, that it must ultimately supervene upon a naturalistic relation. Hartry Field has suggested that the following schema

(1) x refers to y if and only if x bears R to y.

<sup>6</sup> At the least P2 must be abandoned. Since many will find P2 an inextricable part of the traditional realist picture, there will be reason to abandon P1 as well. Putnam is convinced that his own internal realism escapes this reductio because on his account the "objects" of which we speak will be objects as characterized by a theory (rather than mind-independent) and thus theoretical and operational constraints will be sufficient to fix reference.

<sup>7</sup> Lewis (op. cit., pp. 231–2) and Van Cleve (p. 348) both suggest that realism could survive even if reference is radically indeterminate. I suspect, however, that most realists (including Lewis and Van Cleve) would think twice before embracing

such an ugly version of realism.

<sup>8</sup> In addition to causality, there are at least two other possible reference fixers. First, there is the traditional realist presumption that speakers possess the capacity to *grasp* propositions. More recently, Lewis (*op. cit.*, p. 227) has suggested that there are "elite properties" possessed by the mind-independent objects themselves which provide a further constraint on reference (in addition to causality).

exhibits the proper form of an externalist theory of reference, where R is a relation characterizable in naturalistic terms. Most externalists assume that R is a causal relation of some specifiable type, giving us the beginnings of a causal theory of reference:

CT: x refers to y if and only if x bears a causal relation of the appropriate type to y.

The causal realist, thus, argues that the force of the model-theoretic argument has been broken because a reference fixer has been identified. Putnam's response is: No! You have not provided what the argument demands, you have "just added more theory." Certainly we can add to our global theory, T, sentences like: "'Cat' refers to mind-independent cats by virtue of a causal connection of the appropriate type." But that is just to add more sentences, more words. (T now becomes T-plus-CT.) Since it was the words that were threatened with indeterminacy in the first place, the new words will surely suffer the same fate as the old.

When characterized in this way, Putnam's "just more theory" response is admittedly cryptic and potentially vulnerable to the now popular rebuttal that Van Cleve offers. He says:

Several of Putnam's critics have thought that the foregoing objection to the causal theory is completely wrongheaded. They have pointed out that in putting forth the causal theory, one does not "just add more theory"; one poses an external constraint on reference, a constraint that works from outside the theory rather than within it . . . It is not causal language that fixes reference; it is causation itself (op. cit., p. 349).

On this reading, Putnam's demand is that CT not merely inform us of what the further constraint is that will fix reference, but rather that CT (i.e., the very pieces of language in which CT is expressed) must itself be the further constraint. Semantic externalism would fail, then, unless Field's act of asserting CT or possibly some product of that act (e.g., the existence of sentence tokens of a particular sentence type) is somehow capable of binding our words to mindindependent objects. Van Cleve is surely right to reject this demand. He says:

... if this principle [If x bears R to y, then x refers to y] is true, all that has to happen in order for x to refer to y is that x bear R to y. Nothing more is necessary; in particular, it is not necessary that we be able to say "what Field wants us to say." Contrary to what Putnam repeatedly

<sup>&</sup>lt;sup>9</sup> Realism and Reason, p. 18.

insists upon, we do not have to be able to "single out" one relation as the intended referent of 'R' before the causal theory (or the R-theory) can do its job. We can do the singling out later, as I shall show in the next paragraph, but we need not do it as a precondition of the successful working of the theory. One might put the point this way: as knowledge makers need not be known, so reference makers need not be referred to (op. cit., p. 351).

This assessment is beyond dispute. If the causal theory is true, then for x to refer determinately to y it is sufficient that x bear a causal relation of the appropriate type to y. Putnam, however, seems to demand that a further condition be met, that the realist herself must accomplish at least one (if not all) of the following: (i) refer to the causal relation in question, (ii) state the causal theory (i.e., "to say 'what Field wants us to say' ") and state it in words that somehow guarantee their own referential determinacy, and (iii) "single out"—i.e., have direct epistemic access to—the reference-fixing relation. Since this is to impose what is essentially an internalist requirement upon the externalist, it begs the question.

If this is Putnam's argument, then Van Cleve has a knockdown objection. The only difficulty is that neither Putnam nor anyone else has ever made this argument. To see what has gone wrong with this interpretation and to recover the intended force of the "just more theory" response, it is necessary to return to the basic structure of the model-theoretic argument. The argument is intended as a reductio of the realist premises. Unless there is something in addition to theoretical and operational constraints to fix reference, then metaphysical realism leads to referential indeterminacy. Note first that the force of Putnam's reductio is not automatically broken simply because the realist claims knowledge of a reference fixer. If it is not reasonable to think that the proposed candidate is capable of fixing reference, then the absurdity of semantic indeterminacy remains; if the reference fixer itself is of dubious ontological status, then ontological absurdity has replaced the semantic variety. (By Putnam's lights, medieval essentialism is no less absurd than referential indeterminacy.) The conditions that Putnam places upon the causal realist, then, are not conditions necessary for a word to refer to an object, but rather are conditions necessary for a theory of reference to be substantive and plausible. A candidate for reference fixer will fail to meet the latter requirement if it fits either of two descriptions: (i) it offers a plausible, empirical account of the determinates of reference, but because of its modesty lacks the resources necessary to "hook onto" mind-independent reality, or (ii) it postulates sufficiently potent metaphysical resources to ensure determinate reference, but because of its ontological extravagance is prima facie implausible. As we shall discover, Putnam argues that any substantive account of 'causality' will inevitably fit either one description or the other.

### THE CAUSALITY TRILEMMA

Is there a substantive version of the causal theory that meets the demands of the model-theoretic argument? One thing is certain: merely producing Field's schematic definition

(1) x refers to y if and only if x bears R to y.

does not. (1) is not a theory, it is a schema. As it stands, we have not been given a further constraint that fixes reference, we have been given a schematic letter—a placeholder—that tells us where we should write the name for the reference fixer in the event that we ever find it. There are times when both Putnam and Van Cleve speak of (1) as if it is a determinate theory, the causal theory of reference, for example. Such talk is harmless so long as one recognizes that this is appropriate only in contexts in which one may assume that there is a substantive, coherent theory on the table. But this is precisely what Putnam will not allow the realist to assume without argument. One of the main points of the "just more theory" response is to show the realist that it is less than obvious that she actually has a substantive and coherent theory in mind, even by her own lights. Yes, the causal realist offers a name for the reference fixer, 'causality'. But a name may or may not be a substantive advance over a placeholder for "something we know not what." (Dubbing mind-independent reality 'the noumena' or 'the thing in itself', for example, goes no distance at all toward explicating the notion for anyone who is otherwise uncomprehending.)

This, then, is the first lemma of what is ultimately a trilemma for the causal realist. The trilemma arises, if Putnam is correct, because each of the three most obvious ways of interpreting 'causality' fails to provide a plausible reference fixer.<sup>10</sup> The first lemma is to assume that 'causality' is a mere placeholder for something we know not what. Since the causal realist purports to give a substantive account of the nature of the reference fixer, this alternative is unacceptable.

<sup>&</sup>lt;sup>10</sup> While Putnam nowhere speaks of a "causality trilemma," it is clearly implied in his extensive writing on causality. See especially, *Meaning and the Moral Sciences*, pp. 123–38; *Reason, Truth and History*, pp. 22–66 (esp. 49–66); *Realism and Reason*, pp. x–xiii, 1–25 (esp. 17–8), 211–6, and 295–6; and "Is the Causal Structure of the Physical Itself Something Physical?" in *Realism with a Human Face*, James Conant, ed. (Cambridge: Harvard, 1990), pp. 80–95.

Those who embrace it simply refuse to accept the challenge of the model-theoretic argument.

According to a second interpretation of 'causality', it is a notion that we know a great deal about, as familiar to common sense as to science. Call this variety empirical causality. The very fact that it is uncontroversial and familiar is, however, its liability as a realist reference fixer. Since it functions entirely at the empirical level, empirical causality must ultimately be characterizable in terms of theoretical and operational constraints. Further, Putnam argues, empirical causality is an interest-relative notion ill-suited to producing determinate reference.<sup>11</sup> The second lemma, then, is to assume that causality is of the empirical kind. While empirical causality is a plausible thing for naturalists to believe in, it seems to be incapable of fixing reference to mind-independent objects. If causality is to reach beyond the empirical all the way to things in themselves, then causality must be something more than a creature of theoretical and operational constraints, it must be something metaphysical.

To assume that causality is a genuinely metaphysical notion constitutes the third lemma. On this reading, causality is not an empirical concept, it is a potent metaphysical force. Metaphysical causality will, then, lack the interest relatively of the empirical notion and should be better suited for securing determinate, realist reference. The problem, of course, is to make sense of such a notion. It is, apparently, a primitive notion that one must be capable of grasping as distinct from the empirical one. As far as Putnam is concerned, and especially given the demands of the model-theoretic argument, this sounds like an enigma wrapped in a mystery. And while one is free to assert that metaphysical causality hooks our words onto mind-independent reality, Putnam is hardly prepared to grant that this counts as anything like a plausible *naturalistic* explanation for how reference is fixed.12

So, how is this causality trilemma to be assessed? It is impossible to determine whether Putnam's dismissal of the causal theory (for failing to be both substantive and plausible) is reasonable until we assess his arguments about causality. I pretend to offer no such assessment here. The point, however, is that Van Cleve and company have of-

<sup>&</sup>lt;sup>11</sup> Realism and Reason, pp. 295–8.
<sup>12</sup> Richard Boyd is, in Putnam's opinion, one who bites the bullet and admits that something more than empirical causality is needed by the realist. Putnam refuses to grant that this "non-Humean causality" can be reconciled with physicalism. (See, Realism with a Human Face, pp. 85-6 and Realism and Reason, pp. 214-5.)

fered no such assessment either. Van Cleve acts as if there is a philosophically neutral interpretation of 'causality' to which the realist may uncontroversially appeal. Of course, this can hardly be. The dispute between realism and antirealism has, since the time of Hume and Kant, frequently centered upon what exactly it is to which the term, 'causality', refers. In the model-theoretic argument Putnam is willing to grant, for the sake of the argument, the intelligibility of mind-independent objects. What he will not concede is either the intelligibility of metaphysical causality or the realist reference-fixing capacity of empirical causality. The burden is on the realist to make one or the other of these plausible. Although the word 'causality' has been advanced, it remains "just more theory" until such time as a plausible account is forthcoming which takes us beyond theoretical and operational constraints. The phrase 'causal connections of the appropriate type' fails to meet that demand.

## SEMANTICS AND EPISTEMOLOGY

If Van Cleve's interpretation of Putnam's "just more theory" response is correct, if Putnam is demanding that the words of the causal theory do the reference fixing, then Putnam is begging the question against all forms of semantic externalism. (Van Cleve says: "the ploy used by Putnam against the causal theory could be used against any external constraint on reference" (op. cit., p. 349).) If, however, my interpretation is correct, his primary intent is to offer an indictment of causality as a substantive and plausible reference fixer. To clarify this point, I shall do for Van Cleve what he did for Putnam by providing an epistemological analogy. 13

Some people reject reliabilism in epistemology because they have a principled objection to externalism. (Laurence BonJour would fall into this category. He insists upon a metajustificatory requirement which no externalist theory can satisfy.) Others, however, while open in principle to the possibility that knowledge might supervene on "reliable belief-forming mechanisms," come to believe, upon careful scrutiny, that there simply is no reliabilist account of knowledge which is free from wildly counterintuitive outcomes. Richard Feldman<sup>14</sup> makes such an argument when he claims that reliabilists have failed to overcome the "generality problem." The problem is this. There are so many ways of classifying belief-forming mechanisms that every instance of an individual coming to hold a belief is a token of a variety of different belief-forming types, some which are

<sup>&</sup>lt;sup>18</sup> Van Cleve says (*op. cit.*, p. 349): "In the hope of getting more people to see the externalists' point, perhaps including Putnam himself, I propose to pursue some analogies between epistemology and semantics."

<sup>14</sup> "Reliability and Justification," *The Monist*, LXVIII (1985): 159–74.

reliable, some which are not. If no attempt is made to specify what the relevant type is, then we have a mere promissory note. If 'relevant' is glossed as "of the knowledge-preserving type" then an epistemic notion has been smuggled in and the definition becomes circular. Finally, Feldman argues, every attempt actually to specify the relevant type will be caught between the unacceptable extremes of specifying the type too narrowly ("the single-case problem") and specifying it too broadly ("the no-distinction problem") each producing unacceptable outcomes. His general strategy, then, might be roughly characterized as follows:

Sure we know what reliability is, but every one of my beliefs belongs to too many "reliable belief-forming types." The externalist's job is to cash-out the phrase, 'reliability of the relevant type', in a way that is both substantive and plausible. Every such attempt seems to be either an empty appeal to "reliability of the knowledge-preserving type" or a substantive account that is wholly implausible.

There is an important parallel to be drawn between Putnam's criticism of the causal theory and Feldman's criticism of reliabilism. In the "just more theory" objection, Putnam is providing an argument that is much closer in spirit to Feldman's than to BonJour's. Roughly, his strategy is this:

Sure we know what empirical causality is, but every word I use to speak about objects in the external world bears many different causal relations to each of a variety of different objects. The externalist's job is to cash-out the phrase, 'causality of the appropriate type', in a way that is both substantive and plausible. Every such attempt seems to be either an empty appeal to "causality of the reference-preserving type" or a substantive account that is wholly implausible. 15

On my interpretation, then, the "just more theory" response is a reductio directed specifically at causal realism. Here, the Earl of Gurney's argument which opens this paper will prove an instructive parallel. Just as we take the conclusion of that argument—that the Earl is God incarnate—to be a reductio of at least one of the premises, so too Putnam considers the conclusion of his argument—whether it is the referential indeterminacy that accompanies empirical causality or the extravagant ontology of metaphysical causality—to be a reductio of the fundamental premises of causal realism. Notice a second parallel: our judgment that the Earl's argument is

<sup>&</sup>lt;sup>15</sup> Thomas Blackburn has an enlightening paper on the difficulties of giving content to "causality of the appropriate type"—"The Elusiveness of Reference," *Midwest Studies in Philosophy*, XII, P. French, T. Uehling, H. Wettstein, eds. (Minneapolis: Minnesota UP, 1988), pp. 179–94.

absurd no more requires a principled rejection of the idea of incarnation than does the "just more theory" argument require a principled rejection of semantic externalism. Even those otherwise sympathetic to incarnation should find the idea that the Earl is God to be absurd; even those otherwise sympathetic to semantic externalism should (if Putnam is correct) find the idea that causality is the realist reference fixer to be absurd. Finally, if the Earl is going to break the reductio force of his argument, he must provide more than a defense of the coherence of incarnation. Likewise, if Van Cleve is going to break the reductio force of the model-theoretic argument, he must do more than demonstrate that according to externalism, "reference makers need not be referred to" (op. cit., p. 351).

The fundamental disagreement between Putnam and Van Cleve, therefore, centers on the question: What is required of an externalist theory of reference? Van Cleve is right to say that the theory's job is not to do the reference fixing, it is simply to tell the truth about the nature of the reference fixer. Van Cleve is quite wrong, however, if he thinks the causal realist has broken the force of Putnam's reductio merely by virtue of producing the phrase 'causal connections of the appropriate type'. Considerably more is required. Dubbing causality, 'the reference fixer', no more defeats Putnam's reductio than dubbing the Earl of Gurney, 'the Christ', defeats the Earl's (unintended) reductio.

It must be admitted that Putnam does sometimes express a general suspicion about semantic externalism and even offers sweeping dismissals of the entire project. Comments of this type have undoubtedly encouraged Van Cleve's interpretation. Nonetheless, Putnam actually devotes relatively little time to such attacks. He recognizes that dogmatic rejections of the externalist enterprise will sound hollow so long as there is an externalist theory on the table that many philosophers find compelling. After all, he himself once assumed that something like the causal theory was true. He did not abandon a physicalist picture of language and intentionality simply because internal realism had no room for it. Quite the reverse is true. It was the particular failure of a realist-physicalist picture of language that caused him to question his commitment to metaphysical realism. His goal in the model-theoretic argument is to force the reader to engage in a similar line of reasoning. Thus, just as he has attempted to show why functionalism does not work in the philosophy of mind, 16 he takes great care to show why causality does not

<sup>&</sup>lt;sup>16</sup> "Why Functionalism Didn't Work," in *Representation and Reality* (Cambridge: MIT, 1988), pp. 73–89.

work as a theory of reference. His reductio will have genuine force, he is convinced, if he can show that each substantive externalist theory, when carefully scrutinized, is no better off than the genuinely extravagant solution of medieval essentialism. And since he believes he has made such a case, he can hardly be faulted if, on occasion, he articulates the generalization to which an inductive inference would point—i.e., that *no* externalist theory is likely to be successful—especially since he believes that he has some insight as to why the failure has occurred.<sup>17</sup>

### CONCLUSION

If the preceding analysis is correct, does it mean that Putnam is right, that metaphysical realism is false? Not necessarily. Putnam has not demonstrated that realism is false, he has merely shown that it is going to be difficult to provide a realist theory of reference that is both long on substance and modest of ontology, especially given the contemporary fashions of naturalistic philosophy. In this I think Putnam has done a great service. For too long philosophers have gotten away with a wink and a nod parading as a substantive theory of reference. Putnam's reductio demands that realists make good on their claims. <sup>18</sup>

Yet reductios are inevitably in the eye of the beholder. And there are ways to rebuff them. The first option is for the causal realist simply to admit she does not have a terribly substantive theory to offer, but to claim, nonetheless, that it is rational to be a metaphysical realist without one. Putnam does not think that it is reasonable to leave reference a "mystery," but for those who do, Putnam has little left to say. A second option is to admit defeat on the plausibility condition rather than the substantiality condition. I tend to think that realist reference is going to require the metaphysical extravagance of not just one but several "embarrassing" reference fixers, including at least proposition-grasping capacities and metaphysical causality. Admittedly, these are not terribly popular among those faithful to (what we might call) *modest naturalism*. Yet, since Putnam's main weapon here is the incredulity (and penchant for name calling) of our peers, those of us unmoved by such things may go on

<sup>&</sup>lt;sup>17</sup> One of Putnam's "sweeping dismissals" of externalism is found in *Realism* and *Reason* (p. xii).

<sup>&</sup>lt;sup>18</sup> I am convinced that Putnam's "Brains in a Vat" argument—if it is interpreted as a reductio—applies a similar kind of pressure on the realist; cf. my "What Is Realistic about Putnam's Internal Realism?" *Philosophical Topics*, xx, (1992): 49–84.

<sup>&</sup>lt;sup>19</sup> While realists rarely admit that reference is a mystery, there are those who think that a realist who held such a view would be well within her rights. cf. Hansen, *op. cit.*, p. 89; and Lewis, *op. cit.*, p. 225.

our own merry (medieval) way, undeterred. And finally, one might turn the tables on Putnam, shifting the burden back on him by asking that he provide as developed a theory as he is demanding of the realist. One might argue that he himself has been fairly vague, to date, about how reference actually works given his *internalist* perspective. In this spirit, Van Cleve has offered (in an unpublished paper<sup>20</sup>) a direct attack upon the plausibility of Putnam's own position by arguing that referential indeterminacy is no less a threat to his internal realism than it is to metaphysical realism. Such an attack would clearly have force. The whole point of the model-theoretic argument is to be a mirror that shows the blemishes on metaphysical realist theories of reference, blemishes that do not appear once metaphysical realism is abandoned. If Van Cleve can show that the causal realist is no worse off than Putnam himself, then everybody's got problems and Putnam loses his leverage.

One final comment: I am convinced that Putnam's arguments are genuinely enlightening even if one does not accept their conclusion. They make the legitimate demand that our theories of reference deliver what we promise of them. We may be promising too much, but so long as promises are made, Putnam's reductio will hound us, insisting that the promises be kept. The argument that Van Cleve attributes to Putnam, on the other hand, is not in the least enlightening; it is, in fact, pathetic. And so, "the Putnam of Van Cleve's interpretation"—call him *Hilary van Putnam*—unlike certain other hypothetical philosophers (like "Kripkenstein," for example), is not worthy of our attention. Unfortunately, the arguments of *van Putnam* have received a surprising amount of attention for over fifteen years. It is time to put an end to the life and times of *Hilary van Putnam*. May he rest in peace.

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 $<sup>^{20}</sup>$  Van Cleve makes reference (p. 358, fn. 33) to an unpublished paper, "The Myth of Relative Reference."