

PUTNAM AGAINST METAPHYSICAL REALISM

Axel Bühler
Universität Mannheim, BRD

In this paper I want to examine Putnam's argument against metaphysical realism as he expounds it in "Models and Reality".¹ Even though this argument has recently received a good deal of attention,² I hope that I might perhaps shed some new light upon it. In the first section I briefly rehearse the argument. In the second section I give a reconstruction of the argument which allows me to isolate its premises. In section III one crucial premise is subjected to closer scrutiny.

I

I begin with a concise summary of the argument given by Benacerraff and Putnam:³

Call our "theory of the world" some set of our beliefs, augmented by their logical consequences and indeed corrected and extended by any canons of reasoning, inductive or deductive, that might ever find favor with us. By a famous theorem due to Löwenheim and Skolem, such a theory—far vaster than any theory anyone has ever actually held or conceivably ever could hold—if it is consistent, has among its models (interpretations) ones of every cardinality from \aleph_0 on up, as well as others with even more horrifying pathologies. Which, if any, of these models is "the real world"? There is, *for us*, no distinguishing among them; for any distinctions that could be made on the basis of any principles we might hold or observations we might make *have already been taken into account* in constructing the theory (and therefore in selecting the models). Putnam now asks if there is a fact of the matter as to *which* (if any) of the models of this theory (assuming it has some) is "the real world" . . . His pragmatist answer is no.

Putnam starts out with the assumption of an ideal theory which he considers as a set of uninterpreted formulae. Because uninterpreted language admits of many different interpretations and because there is allegedly no way to justify preferring one of these interpretations over another, Putnam concludes that there is no fact of the matter which is the correct interpretation.

In which sense is this argument an argument against metaphysical realism? Let us look first at its conclusion. It states that there is no fact of the matter which would consist in some model of the theory being the "real world". This amounts to the rejection of correspondence theories of truth, and especially to the negation of the view that there are unique relations like denotation and satisfaction between the "real world" and our language. Because we have to abandon this thesis we are forced—Putnam urges—to give up the classical notion of truth and replace it with the notions of verification and proof. So far, Putnam argues for a verificationist account of truth and we may ask how this ties up with the rejection of metaphysical realism. Metaphysical realism—according to Putnam—is the conjunction of a correspondence theory of truth with a view regarding the epistemological status of truth: metaphysical realism requires that "there *be* a determinate relation between terms in L and pieces . . . of THE WORLD . . . THE WORLD is *independent* of any particular representations we have of it . . . *truth is radically non-epistemic*".⁴ The first half of this doctrine has to be abandoned because its negation is the conclusion of the argument; that the second half has to be rejected follows from Putnam's adoption of the verificationist account of truth.

II

Let me now consider the structure of Putnam's argument. It consists essentially in an application of model theoretic results to the interpretation of uninterpreted language, and proceeds as follows:

- (1) We consider an uninterpreted language *L* in which the ideal theory *T* is formulated.
- (2) An interpretation of *L* is considered adequate if it assigns the truth-value "true" to all sentences of *T*.
- (3) Given that *T* is consistent there exist many adequate alternative interpretations for *L*. This is guaranteed by various metalogical and model theoretic results, and holds whether *T* is satisfiable in a finite or in an infinite structure.

Given (1), (2) and (3) we conclude (4):

- (4) The question which of the alternative interpretations is correct does not concern any genuine matter of fact.

Let me briefly comment upon (3). Putnam's argument presupposes that *T* is satisfiable in an infinite structure. But as Wallace has shown,⁵ a similar argument can be set up when a theory is satisfiable in only a finite domain. Hence in the formulation of (3) I have removed the restriction of Putnam's argument to sets of sentences satisfiable only in infinite structures.

Now one may ask how one can conclude (4) on the basis of (1), (2) and (3). This step might be warranted by the following principle:

- (5) When, given several alternative interpretations, no means are available to discriminate between them, so that we cannot know which is the correct one, then there is no objective matter of fact which of these interpretations is correct.

It seems to me that this principle follows from a more general one, namely:

- (6) If we cannot know a matter of fact this matter of fact does not exist.

If we accept (6) and consider it an analytical or logical principle (not a methodological nor an epistemological one) we are stuck with a verificationist understanding of truth; for (6) seems to imply:

- (7) If *p* is true, then we can know that *p*.

That is, the possibility of knowing that *p* is taken as a necessary condition for the truth of *p*. Putnam wants to argue for a verificationist understanding of truth and—if we adopt the analytical or logical reading of (7)—it turns out that he presupposes verificationism in the final step of his argument, thus committing a *petitio principii*. But, of course, there are—as I said—alternative interpretations of (7) and therefore it may well be possible to obviate this objection against Putnam's argument.

III

Another questionable assumption of the argument is (2), namely the assumption that an interpretation of *L* is to be considered adequate if it assigns "true" to all sentences of *T*. On the face of it, (2) appears to be very shaky. For, when we want to see whether an interpretation is correct, the fact that this interpretation makes a set of uninterpreted formulae true cannot suffice to decide that it is correct. For uninterpreted formulae are of course not what we normally deal in. And thus there are many more considerations which can and have to be taken into account here. There are uses of indexical expressions in definite contexts of use; there is, in particular, the use of the pronoun "I" which normally guarantees a reference for the word at any occasion; there is, quite generally, the fact that uses of language are taking

place in causal interaction with a world of objects and people, an interaction which comprises far more than just reactions of assent and dissent in given situations. Furthermore, all uses of language must be seen from the vantage point of pertinent empirical theories, for instance psychological ones about perception, information processing and so on.

If we take such considerations into account, it no longer seems to be quite so easy to find equally satisfactory interpretations for a given set of formulae. But, according to Putnam, these considerations cannot help us with regard to the problem at hand. For they, too, are part of the (uninterpreted) theory *T*, and hence also subject to the Löwenheim-Skolem-type problems. Hence they cannot be used to narrow down the range of admissible models. And so it seems that there is no way to avoid the conclusion that all these models have to be counted as adequate.

Putnam himself helps us out of this impasse. He says: "To adopt a theory of meaning according to which a language whose whole use is specified still lacks something, viz. its 'interpretation'—is to accept a problem which *can* only have crazy solutions".⁶ I agree: once we have specified the use of the language we already have given the interpretation for the uninterpreted formulae. But—and here I disagree with Putnam—this specification cannot consist in the writing down of uninterpreted formulae: the specification itself has to use interpreted language. I take it that the above-mentioned considerations concerning our use of language as taking place in causal interaction with the world of objects and people make up what Putnam calls "the specification of the use of a language". Let me call the set of these sentences and of all other sentences specifying the use of language "*U*". Taken as a set of uninterpreted formulae *U* is part of the ideal theory *T*, i.e. $U \subset T$. But, we can also take *U* as a set of interpreted sentences and in this role *U* cuts down the number of admissible models of *T*. It is then not the case that any putative interpretation or model which assigns "true" to all sentences of *T* can correctly be accepted for the interpretation of the language *L*. Only those models which agree with the considerations in *U* can be allowed to be adequate. Hence, we can reject the premise (2) of Putnam's argument.

Before concluding, let me make two remarks. The first concerns the relative force of the model-theoretic arguments when applied in mathematics on the one hand and when applied in the empirical sciences on the other hand. The "problem of a surprising relativity of our notions", as Putnam puts it, seems to be much more serious in the case of mathematics. The presumed mathematical objects have a more precarious status than the objects posited in empirical theories. The latter are endowed with causal powers. This makes it possible and reasonable to suppose that they act upon us in determinate ways. But if and how mathematical objects can interact with us are open questions. We lack indications as to how our language connects with the presumed realm of mathematical entities.⁷ Therefore we cannot narrow down the range of admissible models for mathematical theories in the same way as we can for language used about objects posited in empirical theories. Because of this, the prospects of metaphysical realism appear to be dimmer for mathematics than for empirical theories invoking causal statements.

My second remark concerns the argument pattern of which Putnam's argument is an instance. First, one is setting up several competing theses about a subject matter; in our case, different interpretations for a language are proposed. Then, one makes it appear that the alternative theses are equally strong, equally satisfactory from a methodological and epistemological point of view. Finally, one goes on to assert that the subject matter treated by the competing theses is somehow indeterminate: that there is "no fact of the matter". This kind of argument has been very popular in attempts to establish antirealism in matters semantic and psychological. Most of the arguments for the indeterminacy of translation and the inscrutability of reference proposed by Quine, Davidson and others follow this pattern.⁸ And as my reconstruction in section II tries to show, Putnam too has adopted this mode of argumentation. Only so long as we are kept in the dark about the criteria of evaluation presupposed in the judgment that the alternative theses are equally satisfactory, does an argument of this type seem to be compelling. Once, however, we begin to reflect upon the

evaluation criteria which are to decide between the alternatives, we realize that it is extremely difficult to find alternative incompatible theses which are equally satisfactory. And then the argument simply does not get off the ground.

NOTES

- ¹ Putnam, Hilary, "Models and Reality", *Journal of Symbolic Logic* Vol. 45, 1977, pp. 464–82; reprinted in Benaceraff, P., and Putnam, H., (eds.), *Philosophy of Mathematics. Selected Readings*, (Cambridge etc. 1983), pp. 421–444. I quote from the Benaceraff–Putnam volume. Putnam has reported on this argument also in other places, especially in *Meaning and the Moral Sciences* (London 1978) and in *Reason, Truth and History* (Cambridge etc. 1981). – The research on which this paper is based was financed by a "Forschungsstipendium" of the Deutsche Forschungsgemeinschaft.
- ² The argument has been discussed e.g. by Devitt, Merrill and Lewis. See: Devitt, Michael, "Realism and the Renegade Putnam: A Critical Study of *Meaning and the Moral Sciences*", *Noûs* Vol. 17 (1983), pp. 291–301; Merrill, G. H., "The Model-Theoretic Argument against Realism", *Philosophy of Science* Vol. 47 (1980), pp. 69–81; Lewis, David, "Putnam's Paradox", *Australasian Journal of Philosophy* Vol. 62 (1984), pp. 221–236.
- ³ I quote from Benaceraff and Putnam, "Introduction" to the volume edited by them cited in note 1 (pp. 1–37). The quotation is from p. 25.
- ⁴ *Meaning and the Moral Sciences*, p. 125.
- ⁵ See Wallace, John, "Only in the Context of a Sentence Do Words Have Any Meaning" in: French, Peter A., Uehling, Theodore E., and Wettstein, Howard K. (eds.), *Contemporary Perspectives in the Philosophy of Language* (Minneapolis 1979), pp. 305–325.
- ⁶ "Models and Reality", p. 443.
- ⁷ Compare Benaceraff, Paul, "Mathematical Truth", *Journal of Philosophy* Vol. 70 (1973), pp. 661–80.
- ⁸ Compare my *Bedeutung, Gegenstandsbezug, Skepsis. Eine Untersuchung sprachphilosophischer Argumente zum Erkenntnisanspruch der Sozialwissenschaften* (Tübingen 1987).

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