## Plantinga's Theory of Proper Names

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In "The Boethian compromise," Alvin Plantinga proposes a theory of proper names. His theory, he argues, is superior to theories of proper names suggested by the work of Mill, Donnellan, Kripke, and Kaplan in its handling of at least three puzzles:

... those presented by empty (i.e., non-denoting) names, by negative existentials containing proper names, and by propositional identity in the context of propositional attitudes. ([7], p. 129)

Plantinga also argues that his theory avoids one criticism which he takes to be very damaging to theories of proper names held by Russell and Frege. I will argue that Plantinga's theory is unsatisfactory in its handling of the puzzle presented by propositional identity in the context of propositional attitudes.

In order to motivate Plantinga's theory, I will begin by giving a very brief statement of the criticism which Plantinga takes to be very damaging to Russell's and Frege's theories of naming. Then, I will state the puzzle as Plantinga renders it, presented by propositional identity in the context of propositional attitudes. Next, I will show how Plantinga's own theory avoids that criticism and at least appears to resolve the puzzle. Two objections to Plantinga's theory will then be presented. I will also consider some replies that Plantinga might reasonably make. In giving my objections, I have endeavored to present an "internal criticism" of Plantinga's view; that is, I have

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attempted to base my objections on assumptions that are either explicit or clearly implicit in Plantinga's presentation of his view.

To simplify discussion, I will restrict this essay to cases involving nonempty terms (i.e., names and other terms that denote existing entities).

- I At the beginning of [7], Plantinga states an objection, much like one made by Kripke, which Plantinga says shows that "... no (definite) description of the sort Russell and Frege had in mind is semantically equivalent to a name like 'Socrates'" ([7], p. 129). The objection may be illustrated by means of the following argument. Suppose, for purposes of a reductio, that
- (1) 'Aristotle' is short for 'the teacher of Alexander the Great'.<sup>2</sup>

Now it is contingently false that

(2) Aristotle is not the teacher of Alexander the Great.

But if (1) is true, then what (2) says is just that

- (3) The teacher of Alexander the Great is not the teacher of Alexander the Great.
- But (3) is necessarily false and (2) is not. So what (2) says is not just what (3) says. Hence, (1) is to be rejected. Similarly, the objection goes, for many other names and definite descriptions. (Of course, we need not suppose that the predicate is exactly what occurs in the description. Here, for example, 'is not a teacher' would have done as well as 'is not the teacher of Alexander the Great'.<sup>3</sup>) According to Plantinga, then, one test that any satisfactory theory of proper names must pass is that it must avoid objections of the sort illustrated by (1)-(3). Let us call this test the "Necessity Test".
- 2 The other test of interest here is provided by a puzzle presented by propositional identity in the context of propositional attitudes. I will quote Plantinga's own rendering of the puzzle and will then reformulate it as an argument. Plantinga's rendering is as follows:

If we think...that a proper name typically exhausts its semantic role in denoting its referent, then presumably the result of replacing it in a sentence like

(8) Mark Twain was a pessimist

or

(9) Mark Twain is the same person as Samuel Clemens

by another name of the same object will express the same proposition . . . But surely . . . (this) is wrong. Clearly a person could know the proposition expressed by (8) without knowing that expressed by

(10) Samuel Langhorne Clemens was a pessimist

... There are various expedients that might tempt anti-Fregeans here: none, I believe, is satisfactory. ([7], p. 131)

Here is my reformulation. Let us suppose, first, that 'knows' is a two-place predicate ('S knows p') that is true of ordered pairs of persons and proposi-

tions; and that the that-clauses below are terms denoting propositions expressed by the sentences embedded in the that-clauses. Assume, for *reductio*, that

(4) The only semantic contribution that the names 'Mark Twain' and 'Samuel Langhorne Clemens' make to the sentences 'Mark Twain was a pessimist' and 'Samuel Langhorne Clemens was a pessimist' is to denote their referents.

The other premises of the argument are:

- (5) If the only semantic contribution that the names 'Mark Twain' and 'Samuel Langhorne Clemens' make to the sentences 'Mark Twain was a pessimist' and 'Samuel Langhorne Clemens was a pessimist' is to denote their referents, and Mark Twain = Samuel Langhorne Clemens, then the proposition that Mark Twain was a pessimist = the proposition that Samuel Langhorne Clemens was a pessimist.
- (6)  $(\exists S) \diamond ((i) S \text{ knows that Mark Twain was a pessimist & } (ii) \sim S \text{ knows that Samuel Langhorne Clemens was a pessimist).}$
- (7) Mark Twain = Samuel Langhorne Clemens.

The negation of (4) is easily seen to follow. Hence, (4) is to be rejected. Similar arguments may be made for other pairs of codesignative names. Thus, according to Plantinga, a second test that any satisfactory theory of proper names must pass is that it must give a good explanation of supposed truths such as (6), and avoid assumptions such as (4).

The linguistic behavior usually cited as evidence for (6), and which needs to be taken into account in developing any satisfactory theory of proper names, is of the following sort: Smith, a competent speaker of English who is ignorant of the fact that 'Mark Twain' and 'Samuel Langhorne Clemens' are two names for the same object, may sincerely and reflectively assent to 'Mark Twain was a pessimist' and yet dissent from or withhold assent to both 'Samuel Langhorne Clemens was a pessimist' and 'Mark Twain is the same person as Samuel Langhorne Clemens'. There are a number of ways to take such linguistic behavior into account. Among these ways are the various expedients to which Plantinga alludes in the passage quoted above. I believe that Plantinga himself was at one time tempted by one of these expedients. We may sketch it as follows: One might reject (6), while holding that (4), (5), and (7) are true (and while continuing to hold that 'knows' is a two-place predicate that is true of ordered pairs of persons and propositions) and attempt to explain the apparent truth of (6) in the following way. While no one could both know that Mark Twain was a pessimist and fail to know that Samuel Langhorne Clemens was a pessimist (because the propositions are one and the same), one might fail to know that the proposition expressed by 'Samuel Langhorne Clemens was a pessimist' is the proposition that Mark Twain was a pessimist, even though one knows the latter proposition. And one might fail to know this because one fails to know that Mark Twain was also named 'Samuel Langhorne Clemens' (though, presumably, one would not fail to know that Mark Twain is Samuel Langhorne Clemens, i.e., that Mark Twain is Mark Twain). Such reasoning about our knowledge of which sentences express which propositions would seem to provide one plausible way of explaining our inclination to assert, "Someone might know Mark Twain was a pessimist without knowing that Samuel Langhorne Clemens was a pessimist", without thereby committing ourselves to the truth of (6).

Given, then, that the facts about linguistic behavior that must be explained are not necessarily those expressed by (6), let us redescribe this second test of a theory of proper names—call it the "Propositional Identity Test" (or, PIT)—as follows: there are facts about linguistic behavior that seem to be expressed by (6), and any satisfactory theory of proper names must take these facts into account; this can be done either by saying that (6) accurately describes these facts and is thus true; or, alternatively, by saying that (6) is false, but does not express the facts in question.

Remarking on an explanation that takes the second alternative, Plantinga writes, "Now perhaps this is not wholly implausible; it does have about it, however, a certain air of the arcane. In any event a better explanation is available..." ([7], p. 135; see also [1]), an explanation, Plantinga indicates, that allows us to hold on to a 'simple truth' ([7], p. 135) like (6). The 'better explanation' is provided by Plantinga's own theory of proper names, and I now turn to a brief exposition of that theory (Section 3) to show how it appears to pass both the Necessity Test and the PIT (Section 4).

- 3 The relevant part of Plantinga's theory of proper names may be summarized as follows:
- (E) Proper names express essences.

Plantinga's main proposal about which essences are expressed by proper names is:

(A) The essences that a proper name expresses are expressed by descriptions of the form 'the F-in- $\alpha$ ', where 'F-in- $\alpha$ ' is the  $\alpha$ -transform of the predicate 'F'.

In what follows, it is the conjunction of (E) and (A) that I will mean by 'Plantinga's theory of proper names'.<sup>4</sup>

Plantinga does not offer a general account of which descriptions express the essences expressed by proper names, though he makes several suggestions—parasitic on views about proper names held by Russell, by Frege, by Searle, and by Donnellan and Kripke—about which descriptions one might associate with proper names. I will not discuss those suggestions here; it will suffice for my purposes in this essay to use syntactically simple suggestions parasitic on Russell's views.

Both (A) and (E) (the  $\alpha$ -transform principle and the essence principle, respectively) need some further explanation; specifically, more needs to be said about what Plantinga means by 'essence', 'express', and ' $\alpha$ -transform'.

About what names and definite descriptions express, Plantinga has this to say:

(8) (a) A definite description, 'the F' expresses the same property as does 'is the sole F'.

(b) A proper name, N, expresses (in English) a property, F, if there is a definite description, D, in English or some extension of English, such that: (i) D expresses F and (ii) N and D are intersubstitutable salva propositione in sentences of the form 't is F'. ([7], p. 134)

(8b,ii) is based on the following principle of propositional identity, on which Plantinga seems clearly to rely:

(9) Proposition  $p = \text{proposition } q \text{ iff } \square(S)(A)((S \text{ is a person } \& A \text{ is a propositional attitude}) \supseteq (S \text{ has } A \text{ to } p \text{ iff } S \text{ has } A \text{ to } q)).$ 

I will not try to say exactly how (8b,ii) is based on (9); I hope that the connection is clear enough for present purposes.

Plantinga characterizes the notion of an essence of an existing entity as follows:

(10) e is an essence of  $x =_{df}$  (i) e is a property; (ii)  $\Diamond(x \text{ has } e)$ ; (iii)  $\Box(x \text{ exists } \supset x \text{ has } e)$ ; and (iv)  $\Box(y)(y \text{ has } e \supset x = y)$ .

Plantinga characterizes notions of  $\alpha$ -transform for both predicates and properties:

- (11) The  $\alpha$ -transform of a predicate, 'F', is 'F-in- $\alpha$ ', where ' $\alpha$ ' is a proper name of the actual world.
- (12) The  $\alpha$ -transform of a property, F, is the world-indexed property being F-in- $\alpha$ , where ' $\alpha$ ' is a proper name of the actual world.<sup>5</sup>

The following relationship is said to hold between  $\alpha$ -transform predicates and properties: if the predicate 'F' expresses the property F, then the  $\alpha$ -transform of 'F' (i.e., 'F-in- $\alpha$ ') expresses the property being F-in- $\alpha$  (see [7], p. 133). Finally,

(13) x has property F in state of affairs  $w =_{df} \square(w \text{ is actual } \supset x \text{ has } F)$ .

Plugging in ' $\alpha$ ' for 'w' in (13) yields a definition of 'x has F in  $\alpha$ '. It is not hard to show that for any object, x, and property, F, if x is the sole F, then the  $\alpha$ -transform of F, F-in- $\alpha$ , is an essence of x. (For a proof, see [5], p. 72.)

(It should be noted that Plantinga takes the notion of logical necessity as primitive, and explains the notion of possible world in terms of it, the notion of a state of affairs, the notion of a state of affairs' obtaining (or, being actual), and several logical notions (see [6]). For present purposes, we may assume that propositions just are states of affairs, and that possible worlds are maximal consistent propositions. Thus the actual world will be assumed to be the true maximal consistent proposition.)

4 Plantinga considers it to be one of the most important features of his theory that names may express essences that are logically equivalent but epistemically inequivalent. (Essence e is logically equivalent to essence  $e^*$  if there is no possible world in which e is exemplified by an object that does not exemplify  $e^*$ . Essence e is epistemically inequivalent to essence  $e^*$  if it is possible to know or believe that an object has e without knowing or believing that it has  $e^*$ . See [7], p. 133.) Among the examples he gives of pairs of

logically equivalent but epistemically inequivalent essences are being Socrates' best student in  $\alpha$ , being Aristotle's teacher in  $\alpha$  (both had by Plato); and being a heavenly body last visible in the morning in  $\alpha$ , being a heavenly body first visible in the evening in  $\alpha$  (both had by Venus). Presumably, Plantinga's reason for thinking that these pairs of properties are epistemically inequivalent is that their "non-world indexed portions" are epistemically inequivalent.

Let us now see how (A) and (E) allow Plantinga to meet the Necessity Test and the PIT.

Suppose that Smith is a competent speaker of English. When Smith is asked, "Who is Mark Twain?" he answers, sincerely and reflectively, "The author of *The Adventures of Tom Sawyer*". That, we may assume here, is the definite description that, on a Russellian theory of proper names, is semantically equivalent to (or short for) 'Mark Twain', at least for Smith. And suppose that with 'Samuel Clemens' there is associated for Smith 'the author of *Pudd'nhead Wilson*'. But Smith dissents from or withholds assent to both of these true sentences: 'the author of *The Adventures of Tom Sawyer* is the author of *Pudd'nhead Wilson*' and 'Mark Twain = Samuel Clemens'.

To see how Plantinga's theory meets the PIT, let us consider the following two assertions:

- (14) Smith knows that Mark Twain wrote *The Adventures of Tom Sawyer*.
- (15) ~Smith knows that Samuel Clemens wrote *The Adventures of Tom Sawyer*.
- (14) and (15), like (6), are to be understood so that 'knows' expresses a relation between a person and a proposition. So understood, (14) and (15) are plausible descriptions of Smith's epistemic status, given the linguistic behavior cited above. Plantinga's view provides an explanation for the apparent truth of (14) and (15): the two names involved in their expression express for Smith different, epistemically inequivalent essences; 'Mark Twain' expresses the property of being the author of *The Adventures of Tom Sawyer* in  $\alpha$ , whereas 'Samuel Clemens' expresses for Smith the property of being the author of *Pudd'nhead Wilson* in  $\alpha$ . (14) and (15) may thus be rewritten more perspicuously as
- (14') Smith knows that the author of *The Adventures of Tom Sawyer* in  $\alpha$  wrote *The Adventures of Tom Sawyer*.
- (15')  $\sim$  Smith knows that the author of *Pudd'nhead Wilson* in  $\alpha$  wrote *The Adventures of Tom Sawyer*.

Thus rewritten, it seems easy to explain how both could be true, for it seems clear that the object of Smith's knowledge in (14') is different from the object of his ignorance in (15').

Does Plantinga's theory pass the Necessity Test? It is not hard to see that it does. Suppose that

(16) 'Mark Twain' is short for 'the author of *The Adventures of Tom Sawyer* in  $\alpha$ '.

Parallel to the claim about (2), it is claimed that it is contingently false that

(17) Mark Twain did not write The Adventures of Tom Sawyer.

But if (16) is true, then what (17) says is just

(18) The author of The Adventures of Tom Sawyer in  $\alpha$  did not write The Adventures of Tom Sawyer.

And, like (17), (18) is contingent: Perhaps there are some worlds in which the person who in fact wrote *The Adventures of Tom Sawyer* exists but in which he did not write *The Adventures of Tom Sawyer*, worlds in which that person devoted his life to river-boating and authored no books at all. But not all worlds are like that; in particular,  $\alpha$  is not. So (18) is contingently false. The argument generalizes easily to other names and other definite descriptions involving  $\alpha$ -transforms.

So Plantinga's theory passes the Necessity Test and it appears to pass the PIT, too.

5 But here things are not as they appear. I will now argue that Plantinga's theory fails to account satisfactorily for some linguistic behavior that is just like that exhibited in cases such as those described by (14), (15), and (6).

My first criticism is a simple one. Suppose that bright Young Smith has been studying Aristotle in his 5th grade class, has learned a good deal about him by putting up a fact-crammed "Aristotle"-bulletin-board, and has gotten a perfect score on his Aristotle-test by answering correctly such questions as, "Who was the teacher of Alexander the Great?" and "Who was Plato's brightest student?" Then it would seem that we may truly say that

(19) Young Smith knows that Aristotle was the teacher of Alexander the Great.

Now, as Plantinga notes, there seem to be propositions that some of us are unable to believe because we do "... not even possess the concepts necessary to apprehend (them)..." ([7], p. 133). As an example, he mentions the proposition that twenty-seven eighths of the definite integral, from zero to two, of the function  $f(x) = x^2$  is odd, which he says, those of us with "an imperfect grasp of the calculus" are unable even to believe. Suppose then, that Young Smith, like most 5th graders, has never studied the *Nature of Necessity*, is unfamiliar with possible world semantics, has never heard of any work in recent semantical theory, and has never wondered about necessity. In short, suppose that Young Smith does not even possess the concepts necessary to apprehend propositions expressed by sentences of the form

(20) The F in  $\alpha$  is G,

and so, for example, is unable even to believe what is expressed by

(21) The teacher of Alexander the Great in  $\alpha$  was the teacher of Alexander the Great

(22) The brightest student of Plato in  $\alpha$  was the teacher of Alexander the Great.

Hence it seems true to say that

(23)  $\sim$  Young Smith knows that the F in  $\alpha$  was the teacher of Alexander the Great

expresses a truth, for any 'F' at all. I think that it is also true that most English speakers are unfamiliar with possible world semantics and so lack the concepts necessary to apprehend propositions such as those expressed by sentences of the form of (20) (call them ' $\alpha$ -transform propositions). This line of reasoning seems to establish the claim that

(24) For most ordinary proper names of English, N, and any description of the form 'the F in  $\alpha$ ', where ' $\alpha$ ' is a proper name of the actual world,  $\Diamond(\exists S)(S)$  is a user of English name N & S knows the proposition expressed by N concatenated with 'is F' &  $\sim S$  knows the proposition expressed by 'the F in  $\alpha$  is F').

(24) conflicts with (A), the  $\alpha$ -transform principle. Indeed, a stronger conclusion would seem to follow. Using (9), we can show that no proposition expressed using an English proper name is an  $\alpha$ -transform proposition, for it is possible for a person to believe a proposition of the former kind without being able to apprehend any proposition of the latter kind—or so linguistic behavior such as Young Smith's would suggest.

What might a defender of Plantinga's theory respond here? One thing he or she might do is to point out that I have not been as careful as I could have been in distinguishing between English and an extension of English into which \alpha-transforms have been introduced-call it 'English+' (see (8b), above). Perhaps no sentence of the form of (20) is a sentence of English, and thus my remarks about what English speakers know or don't know in the preceding are irrelevant; rather I ought to have been considering what speakers of English+ would or wouldn't know. Because I am unsure how to distinguish English from its extensions, I am not sure how to comment on this response. One reminder that may be useful here is that one need not have every concept expressible in a language in order to be counted a competent speaker of the language (at least, this is true about natural languages, such as English). So for at least some extensions of English, speakers of English might be counted as speakers of those extensions, at least to the extent that their linguistic behavior counts as evidence in assessing semantic theories about those extensions. And I think that present English speakers might reasonably be counted as speakers of English+, without also assuming that every speaker of English+ is conversant in possible world semantics. Besides, Plantinga clearly intends to be offering a theory about ordinary users of proper names, not a theory about extraordinary users of names in English+.

Plantinga might also try to argue that English speakers do not lack the concepts necessary to apprehend the  $\alpha$ -transform propositions. But since he is willing to grant that those with an imperfect grasp of the calculus may not be able to grasp many of its propositions, I don't see how he would argue for that claim. I doubt that he would try.

This kind of objection is one that must be met by any theory of proper names; it raises a problem for those who claim that names have descriptive content and who try to give a general specification of the content, as well as for those who claim that names lack descriptive content or are connotationless. (Ackerman has put this kind of objection to powerful and persuasive use against such theories. See [2].) I think that it is a serious kind of objection, not easily overcome. But what is distinctive of Plantinga's proposal is (A), the  $\alpha$ -transform principle, and it would be better to consider an objection that focuses more squarely on (A). Let us now consider such an objection.

6 My second criticism of Plantinga's theory is somewhat more complex than the first.

Recall the pair

- (14) Smith knows that Mark Twain wrote *The Adventures of Tom Sawyer*.
- (15) ~Smith knows that Samuel Clemens wrote *The Adventures of Tom Sawyer*.

The linguistic behavior which (14) and (15) were supposed to describe was this: Smith assents to the embedded sentence in (14) and dissents from or withholds assent to the embedded sentence in (15). (14) and (15) here require for their truth that the knowing relation obtains, or fails to obtain, between Smith and a proposition. One of the chief selling points of Plantinga's theory is its apparent ability to allow for the truth of (14) and (15), the truth of 'Mark Twain = Samuel Clemens', and also to account for Smith's linguistic behavior.

I will now describe a situation involving a pair of coreferential names in which linguistic behavior exactly like Smith's is exhibited, but for which Plantinga's theory is unable to account.

Suppose that the names 'Mark Twain' and 'Samuel Clemens' are fixed rigidly and connotationlessly on their referent by means of the definite descriptions 'the author of *The Adventures of Tom Sawyer*' and 'the author of *Pudd'nhead Wilson*', respectively. Perhaps we do not now speak a language in which any names are so fixed, but it seems that we could speak a language in which some names are so fixed. Suppose also that Jones is cognizant of the way in which 'Mark Twain' has been fixed, but ignorant of the fixing of 'Samuel Clemens' and of the truth value of 'Mark Twain = Samuel Clemens'. If we were to put the sentences 'Mark Twain wrote *The Adventures of Tom Sawyer*' and 'Samuel Clemens wrote *The Adventures of Tom Sawyer*' to Jones, he would assent to the first and dissent from or withhold assent to the second. So far, Jones's linguistic behavior matches Smith's.<sup>7</sup>

Now suppose that the referent of the name ' $\alpha$ ' is fixed, rigidly and connotationlessly, by means of the definite description 'the actual world'; and let

(25) The referent of ' $\beta$ ' be fixed, rigidly and connotationlessly, by means of the definite description 'the possible world most often named by Plantinga in "The Boethian compromise."

It seems that we could speak a language in which ' $\alpha$ ' and ' $\beta$ ' are so fixed. As a matter of fact, the actual world is the possible world most often named

by Plantinga in "The Boethian compromise". Suppose further that, although Jones is aware of the fixing of ' $\alpha$ ' and ' $\beta$ ', he doesn't keep up with the journals, so when

(26)  $\alpha = \beta$ 

is put to him, he either dissents from it or withholds assent to it. Thus although Jones assents to

(27) The author of *The Adventures of Tom Sawyer* in α wrote *The Adventures of Tom Sawyer*,

he either dissents from or withholds assent to

(28) The author of The Adventures of Tom Sawyer in  $\beta$  wrote The Adventures of Tom Sawyer.

Recall now the pair of paraphrases that Plantinga would offer to account for the apparent truth of both (14) and (15):

- (14') Smith knows that the author of *The Adventures of Tom Sawyer* in  $\alpha$  wrote *The Adventures of Tom Sawyer*
- (15')  $\sim$  Smith knows that the author of *Pudd'nhead Wilson* in  $\alpha$  wrote *The Adventures of Tom Sawyer*.

These paraphrases were introduced to help account for linguistic behavior (with respect to the embedded sentences in (14) and (15)) just like that exhibited by Jones with respect to (27) and (28).

(To make the parallel closer still, we may suppose that we have fixed 'Mark Twain' rigidly and connotationlessly by means of the definite description 'the author of *The Adventures of Tom Sawyer* in  $\alpha$ '; and 'Clyde Mudge' similarly by means of 'the author of *The Adventures of Tom Sawyer* in  $\beta$ '. Then we query Jones about Twain and Mudge. Corresponding to the embedded sentences in (14) and (15), we have 'Mark Twain wrote *The Adventures of Tom Sawyer*'; corresponding to the embedded sentences in (14') and (15'), we have (27) and (28).)

Can we account for Jones's linguistic behavior by holding that Jones bears the knowing relation to the proposition that (27) expresses and fails to bear it to the proposition that (28) expresses? No, for (27) and (28) differ only with respect to the names ' $\alpha$ ' and ' $\beta$ ', both of which have been stipulated to be connotationless; and if the only semantic contribution that a connotationless name makes to a sentence in which it is used is to denote the name's referent, then we may conclude, as in (5) above, that the proposition expressed by (27) is the very same proposition as the proposition expressed by (28). And yet the linguistic behavior that Jones exhibits with respect to (27) and (28) is exactly like the behavior for which (14') and (15') were supposed to account. The case of Jones thus presents us with linguistic behavior exactly like the linguistic behavior presented by the case of Smith, but the former case is not one for which Plantinga's theory can account.

This line of reasoning does not, of course, present a counterexample to (A), Plantinga's  $\alpha$ -transform principle. But it does, I think, detract con-

siderably from whatever appearance of explanatory power (A) derives from Smith's case and those like it.

How might Plantinga reasonably reply? He might either deny that we could speak a language in which some terms are rigidly and connotationlessly fixed—a denial which seems implausible—or he might insist that his theory is a theory about how, as a matter of fact, English proper names work, and that there are no connotationless names in English (where the evidence for how English names work is linguistic behavior like the linguistic behavior of Smith and Jones). The purpose of so insisting would be to provide room for application of (A) to ' $\alpha$ ' and ' $\beta$ '.

How could such application help? The problem now is to explain how pairs of sentences such as (14') and

(29)  $\sim$  Smith knows that the author of *The Adventures of Tom Sawyer* in  $\beta$  wrote *The Adventures of Tom Sawyer* 

could be true by positing some difference between the objects of Smith's propositional attitudes. This may be done by explaining how ' $\alpha$ ' and ' $\beta$ ' might differ from one another in connotation; they might have different connotations, or one might lack connotation while the other has connotation.

It might be held, as an empirical thesis about English, that by uttering (25) we bring it about that, contrary to our stated intention,

(30) ' $\beta$ ' expresses the essence: being the possible world most often named by Plantinga in "The Boethian compromise" in  $\alpha$ .

Hence what (29) says is just that

(31)  $\sim$  Smith knows that the author of *The Adventures of Tom Sawyer* in the possible world most often named by Plantinga in "The Boethian compromise" in  $\alpha$  wrote *The Adventures of Tom Sawyer*.

This still leaves open the question whether or not ' $\alpha$ ' has connotation. Let us examine what Plantinga's theory has to say in answer.

If ' $\alpha$ ' has connotation, then what is its connotation? Note that we could not explain the difference between (14') and (29) by claiming that, instead of fixing ' $\alpha$ ' connotationlessly on the actual world, we brought it about that, contrary to our stated intention,

(32) ' $\alpha$ ' expresses the property of being the actual world

(a property which is had only contingently by  $\alpha$ , the world that is in fact actual). For then we would be committed to saying that

(33) The author of The Adventures of Tom Sawyer in  $\alpha$  wrote The Adventures of Tom Sawyer,

which, presumably, expresses a contingent truth, is expressed by

(34) The author of *The Adventures of Tom Sawyer* in the actual world wrote *The Adventures of Tom Sawyer*,

and (34) is equivalent to

(35)  $(\exists x)(y)((y \text{ is an author of } The Adventures of Tom Sawyer in the actual world <math>\supset y = x) \& x \text{ wrote } The Adventures of Tom Sawyer),$ 

where, by (13),

(36) y is an author of The Adventures of Tom Sawyer in the actual world iff  $\Box$  (the actual world is actual  $\supset y$  wrote The Adventures of Tom Sawyer).

Given our assumption that all terms denote existing entities, it follows that what (34) expresses is necessarily true, and is thus not what (33) expresses.

Could we explain the difference between (14') and (29) by holding that

(37) ' $\alpha$ ' expresses the essence: being the actual world in  $\alpha$ ?

More generally we may ask: Should Plantinga hold that ' $\alpha$ ' expresses an essence that can also be expressed by some term or predicate containing a use of ' $\alpha$ '? Does (A), the  $\alpha$ -transform principle, apply to the proper name ' $\alpha$ ' as well as to other proper names?

The following line of reasoning suggests that Plantinga should not hold (37) and that the answer to the last two questions should be "No". (37) commits one to hold that what is expressed by

(38)  $\alpha$  is actual

is identical to what is expressed by

(39) The actual world in . . .  $\alpha$  is actual

where, in (39), '...' abbreviates, say, ten thousand occurrences of the phrase 'the actual world in'. And the claim that what (38) and (39) express is the same seems wrong; or it should seem wrong to anyone who, like Plantinga, uses syntax as a rough guide to what is expressed by a sentence. Similar reasoning may be supplied for other claims of the form: ' $\alpha$ ' expresses ...  $\alpha$  .... (Among the other claims is: ' $\alpha$ ' expresses the essence: being identical to  $\alpha$ .) Ultimately, what is wrong with such claims is that they simply don't answer the question, "What, in each of its uses, does ' $\alpha$ ' express?"

There are, of course, at least two alternatives open to Plantinga here: hold that (A) does not apply to ' $\alpha$ ' itself, though (E) does; or hold that only by means of the description 'the actual world' (or its synonyms) can one fix ' $\alpha$ ' on the actual world, rigidly and connotationlessly (and thus abandon both (A) and (E) in the case of ' $\alpha$ '). Of these two alternatives, I think that the first is to be preferred, and would be preferred, by Plantinga. In the next section, I will give a reason for that preference by presenting a line of reasoning that renders the second alternative implausible.

7 In this section, I will argue that if ' $\alpha$ ' is a connotationless, rigid designator, then Plantinga's theory has the results that: (i) when an English speaker uses a proper name in asserting a proposition, the proposition asserted is a proposition expressed by a sentence of the form: ' $\alpha$  is F' expresses some true proposition; and (ii) that the name-user expresses a proposition not known by the

name-user. My strategy here is this: I begin by describing a situation that does not involve reference to possible worlds; about this situation, I argue, Plantinga would hold a view strictly analogous to (i) and (ii). Then I describe a situation that does involve reference to possible worlds, and I employ reasoning parallel to that employed in dealing with the former situation to establish (i) and (ii). The work of this section consists mainly in making the parallel clear and precise. I turn now to a description of the first situation.

I begin by assuming that: (a) There is a class, O, of objects. (b) There is a subject, Brown, related to the objects in such a way that he can dub any one with a name, or demonstrate any one with the words 'this' or 'that'. (c) There are two descriptions, 'the M' and 'the E' (say, 'the morning star' and 'the evening star') such that (i) they designate the same member of O; (ii) Brown does not know that they codesignate in O; (iii) Brown knows that each designates some member of O; (iv) for each member, x, of O, Brown does not know whether or not the proposition expressed by 'that is the M' or 'that is the E', is true, when 'that' demonstrates x. (d) Brown knows that 'h' is a name, fixed rigidly and connotationlessly, by means of the description 'the M', and that 'p' is a name, similarly fixed, by 'the E'. Suppose also that

(40) The proposition expressed by 'h = h' is such that Brown knows of it that it is true.

But

(41) The proposition expressed by 'h = h' = the proposition expressed by 'h = p'.

Therefore.

(42) The proposition expressed by 'h = p' is such that Brown knows of it that it is true.

However,

(43) When asked, "Is h = p?" Brown answers, "I do not know."

To explain quartets like (40)-(43), Plantinga held, in [5], pp. 83-87, that

- (44) (i) Brown knows that h = p is true; and
  - (ii) Brown does not know that 'h = p' expresses the proposition that h = p.

Now suppose further that

- (45) (i) Brown learns that the M is G;
  - (ii) Brown concludes that 'h is G' expresses a true proposition; and
  - (iii) Brown announces that h is G (or, "I know that h is G").

In the situation as described,

(46) Brown knows that 'h is G' expresses either the proposition expressed by 'this is G' or 'that is G', etc., but he does not know which proposition it expresses.

So

- (47) Brown knows that 'h is G' expresses a true proposition, but
  - (i) he does not know (de re) of any proposition that 'h is G' expresses it; and
  - (ii) he does not know (de re) of the proposition that it does express that it is true.

There is substantial evidence in the discussion of the Hesperus/Phosphorus case in [5], pp. 83-87, that Plantinga would hold both (44) and (47) to be true of the situation described here (see also [1]). However, in "The Boethian compromise," he holds that for English proper names the situation is not as described here: 'Hesperus' and 'Phosphorus' (as names of English) are not fixed as 'h' and 'p' are in assumption (d) above; rather they express world indexed properties that are essences. However, if (d) were true of them, then, in such a situation as the one described, (44) and (47) would also be true of them. I turn now to a description of the second situation, which makes reference to possible worlds.

Begin by assuming, in precise analogy with the first situation, that: (a') There is a class, P, of propositions. (b') There is a subject, Brown, related to the members of P in such a way that he can refer to, think about, and demonstrate each one of them; he can demonstrate them with the words 'this proposition' and 'that proposition'. (c') There are two descriptions, 'the A' and 'the B' ('the actual world' and 'the possible world most often named by Plantinga in "The Boethian compromise," respectively) such that (i) they designate the same member of P; (ii) Brown does not know that they codesignate in P; (iii) Brown knows that each designates some member of P; and (iv) for each member of P, using 'this proposition' to demonstrate it, Brown does not know whether or not the proposition expressed by 'this proposition is the A' or 'this proposition is the B' is true. (d') Brown knows that ' $\alpha$ ' is fixed, rigidly and connotationlessly, by means of the description 'the A', and that ' $\beta$ ' is similarly fixed by 'the B'. Suppose also that

(40') The proposition expressed by ' $\alpha = \alpha$ ' is such that Brown knows of it that it is true.

But

(41') The proposition expressed by ' $\alpha = \alpha$ ' = the proposition expressed by ' $\alpha = \beta$ '.

Therefore,

(42') The proposition expressed by ' $\alpha = \beta$ ' is such that Brown knows of it that it is true.

However

(43') When asked "Is  $\alpha = \beta$ ?" Brown answers, "I do not know."

An explanation analogous to (44) would have Plantinga hold

(44') (i) Brown knows that  $\alpha = \beta$  is true; and

(ii) Brown does not know that ' $\alpha = \beta$ ' expresses the proposition that  $\alpha = \beta$ .

Let 'Tx' abbreviate 'x is a world such that the author of *The Adventures of Tom Sawyer* in x is the author of *The Adventures of Tom Sawyer*'. Assume that Mark Twain authored *The Adventures of Tom Sawyer* in more than one world. Now suppose further that

- (45') (i) Brown learns that the A is T;
  - (ii) Brown concludes that ' $\alpha$  is T' expresses a true proposition; and
  - (iii) Brown announces that  $\alpha$  is T (or, "I know that  $\alpha$  is T").

In the situation as described,

(46') Brown knows that ' $\alpha$  is T' expresses either the proposition expressed by 'this proposition is T' or 'that proposition is T', etc., but he does not know which of these it expresses (i.e., there is no member of P such that Brown knows de re of it that ' $\alpha$  is T' expresses the proposition that it is T).

So

- (47') Brown knows that ' $\alpha$  is T' expresses a true proposition, but
  - (i) he does not know (de re) of any proposition that ' $\alpha$  is T' expresses it; and
  - (ii) he does not know (de re) of the proposition that ' $\alpha$  is T' does express that it is true.

On analogy with his views in [5], Plantinga should hold that ' $\alpha$  is T' expresses a proposition that Brown does not know to be true; and when Brown uses ' $\alpha$  is T' to make an assertion, he must be understood as asserting a different proposition, namely, the proposition that: ' $\alpha$  is T' expresses some true proposition. In "The Boethian compromise," Plantinga wishes to avoid holding that the sentence

(48) Mark Twain is the author of *The Adventures of Tom Sawyer* 

(when it is used to make an assertion) expresses what is expressed by

(49) 'Mark Twain is the author of *The Adventures of Tom Sawyer*' expresses some true proposition,

(see the end of Section 2 above) and so he holds that what (48) expresses is what is expressed by

(50) The author of *The Adventures of Tom Sawyer* in  $\alpha$  is the author of *The Adventures of Tom Sawyer* 

which is what is expressed by

(51)  $\alpha$  is T.

But the result then is that (48) expresses a proposition that Brown does not know to be true; and when Brown utters (48) to make an assertion, the proposition he asserts is the proposition that: ' $\alpha$  is T' expresses some true

proposition. And the same is true for all English sentences containing proper names, if ' $\alpha$ ' is a connotationless, rigid designator.

Is there some way in which Plantinga could escape this result? It seems to me that the only assumption that Plantinga can reasonably challenge is (c'iv). This is the assumption that Brown does not know  $(de\ re)$  of any member of P, that it is the actual world. Plantinga might hold that Brown can pick out the actual world, that is, know the proposition expressed by 'that proposition is the actual world', where 'that proposition' is used by Brown to demonstrate some member of P.

But if he does hold that, then he owes us an explanation, for it appears that one could figure out which proposition it is only by comparing what he knows to be true with what some member of P entails. At best, however, this picks out infinitely many members of P. One could reasonably think of ongoing accumulation of knowledge as a narrowing down of the eligibles for actual world status (or, for denotation of 'the actual world'), without the process's ever terminating in discovery of which world it is.

8 How do things stand for Plantinga's theory? My first criticism, stated in Section 5, shows that the propositions which, according to Plantinga's theory, are expressed by English sentences containing proper names are not the propositions believed by the name-users, and are not, in most cases, propositions that the name-users can even apprehend (at the time of the use of the name). The second criticism, stated in Section 6, shows that Plantinga's theory is unable to account for linguistic behavior exactly like that for which it was designed to account. Furthermore, I argued in Section 7 that if ' $\alpha$ ' is a connotationless, rigid designator of the actual world, then, on assumptions that seem acceptable to Plantinga, the proposition asserted by uttering an English sentence containing a proper name is the proposition that the uttered sentence is true; and the proposition expressed is not one the name-user knows to be true—a result that Plantinga set out to avoid in offering his theory of proper names.

None of these criticisms weighs against (E), the essence principle. Each of them is directed at (A), the  $\alpha$ -transform principle. But since it is the latter principle that is distinctive of Plantinga's theory, these criticisms still raise serious questions about the acceptability of the view.

It is, of course, still open to Plantinga to hold that ' $\alpha$ ' expresses an essence of the actual world (or that some uses of ' $\alpha$ ' express different essences of the actual world). But then he owes us an account of how ordinary English speakers who use proper names come to grasp such an essence, without there being a specification of that essence in terms of  $\alpha$ -transforms, and without the speakers being able to "pick out" the object of which it is an essence. So, if my criticisms are correct, we might say that Plantinga's theory, too, has about it a certain air of the arcane.

## NOTES

- 2. Here I have used the phrase 'short for' where, presumably, Plantinga would use 'semantically equivalent'. I don't think that this affects the argument significantly, given present purposes.
- 3. If we wish, we may do without the assumption that 'Aristotle' is nonempty by reformulating (2) as (2'): If Aristotle exists, then Aristotle is not the teacher of Alexander the Great. To obtain the corresponding (3'), substitute the definite description in (1) for both occurrences of 'Aristotle' in (2'). The argument may then be rendered more perspicuously as follows:
  - (a) 'Aristotle' is short for 'the teacher of Alexander the Great' (assumption for reductio)
  - (b) Every reading of (3') is such that if it does not entail 'the teacher of Alexander the Great exists', then it expresses a necessary proposition
  - (c) There is a reading of (2') that does not entail 'Aristotle exists' and which expresses a contingent proposition
  - (d) There is a reading of (2') that does not entail 'the teacher of Alexander the Great exists', and which expresses a contingent proposition (by (a) and (c))
  - (e) Every reading of (2') is a reading of (3') (by (a))
  - (f) There is a reading of (3') such that it does not entail 'the teacher of Alexander the Great exists' and which expresses a contingent proposition (by (d) and (e))
  - (g) It is not the case that there is a reading of (3') such that it does not entail 'the teacher of Alexander the Great exists' and does not express a necessary proposition.
  - But (g) is equivalent to (b), which contradicts (f). So (a) is false. (b) is true, if, as intended, the scopes of the descriptions in (3') are in the antecedent, and in the consequent, respectively; and the 'not' has smallest scope, in the consequent.
- 4. What is essential to the Boethian compromise is: (E) and the claim that different proper names of the same object may express logically equivalent but epistemically inequivalent essences (see Section 4). Thus the compromise might be achieved even if (A) were false. But if (A) is false, then the compromise loses much of its interest, since we are not told which different essences of an object it is that different names of an object express.
- 5. (12) can be rewritten without a use/mention confusion. But I hope that the meaning is clear as it stands.
- 6. Again, if we wish, we may do without the assumption that 'Mark Twain' denotes by reformulating (17) as (17'): If Mark Twain exists, then Mark Twain did not write *The Adventures of Tom Sawyer*. To obtain the corresponding (18'), substitute the definite description in (16) for both occurrences of 'Mark Twain' in (17').
- 7. We may, if we wish, also imagine that Jones is acquainted with Mark Twain, is looking directly at him, and believes of him that he alone authored *The Adventures of Tom Sawyer*.
- 8. Five months after I developed the criticisms presented here, I had the good fortune to hear [3]. My first criticism closely resembles an argument on p. 16 of that paper. The line of reasoning presented on pp. 20-23 of that paper, where questions are raised about the connotation of 'α' in Plantinga's theory, addresses some of the same issues I raise in my second criticism, though I believe that it addresses them in significantly different ways. My criticisms were developed independently of Professor Ackerman's work; and I have benefited greatly from studying her papers.

Twenty-eight months after I developed the criticisms presented here, Saul Kripke gave a talk on April 27, 1980, at the APA Western Division meetings, in which he gave essentially the same criticism of Plantinga's theory as I give in Section 6 of this paper.

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