2. What's wrong with semantic theories which make no use of propositions?

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In this paper I'll focus on two arguments against semantic theories which wish to avoid commitment to propositions. Each has been discussed in various forms in the literature. The first holds that on the most plausible semantics of a class of natural language sentences, the truth of sentences in that class requires the existence of propositions; and some sentences in that class are true. The second holds that, on the best understanding of the form of a semantic theory, the truth of a semantic theory itself entails the existence of propositions.

1. Propositions as the referents of natural language expressions

Consider the following sentences:

> *The apple sentences*
>
> John ate something.
>
> The thing John ate was a delicious apple.
>
> Though what John ate was delicious, it would have been rotten if he'd waited another day before eating it.
>
> What John ate is what Mary gave him.

It is the job of a semantic theory for a language to give the meanings of expressions of the language, part of which task is revealing, in a sense which I will leave informal, the logical structure of sentences of the language. It seems plausible that, at a first pass, the logical forms of the apple sentences sentences are, respectively,

> $\exists x$ John ate x.
>
> [the x: John ate x] delicious apple(x)
>
> [the x: John ate x] delicious apple(x) & (John waits another day before eating x $\Box\!\!\rightarrow$ x is rotten)

[the x: John ate x] Mary gave x to John.

Some evidence for these interpretations of the apple sentences is that the apple sentences seem to jointly entail

> (1) There is something which John ate, which was a delicious apple, which could have been rotten, and which Mary gave him.

the logical form of which seems to be, roughly,

> (1F) $\exists x$ (John ate x & x is a delicious apple & x could have been rotten & Mary gave x to John)

We should want our interpretations of the logical structures of sentences to explain the logical relationships between those sentences; and the assignments of logical form to given to the apple sentences does explain why they entail (1)/(1F).[1]

Let's suppose for now that the interpretation of the logical forms of the apple sentences above is correct. It's correctness does not seem to depend on anything about the particular subject matter of those sentences — for example, that they are about apples rather than bananas, or that they concern John and Mary rather than other people. In fact, its correctness does not seem to depend upon anything which distinguishes the apple sentences from the sentences below which, for reasons which are probably obvious, I will call the *proposition sentences*:

> John said something.
>
> What John said was true.
>
> Though what John said was true, it would have been false, if things had gone differently.
>
> What John said is what Mary believed.

These sentences seem, at a first pass, to have the following as their logical forms:

> $\exists x$ John said x.
>
> [the x: John said x] x is true
>
> [the x: John said x] x is true & (things go differently $\Box\!\!\rightarrow$ x is false)
>
> [the x: John said x] Mary believed x.

As with the apple sentences, we can defend these interpretations of the proposition sentences by noting that the proposition sentences seem to jointly entail

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[1] I'm ignoring for simplicity worries about incomplete descriptions, and the assumption that the antecedent of the above counterfactual is possible.

(2) There is something which John said, which was true, which could have been false, and which Mary believed.

the logical form of which seems to be, roughly,

(2F) $\exists x$ (John said x & x is true & x could have been false & Mary believed x)

And the logical forms assigned to the proposition sentences explain why they entail (2F).

If (2F) is true, then there are things which are said and believed, which are the bearers of truth values and have modal properties like being possibly true. So if (2F) is true, there are propositions. Hence the claim that (2F) is true is a claim which anyone who wants to develop a semantic theory without commitment to propositions must deny.

The problem is that a plausible argument can be made that our semantic theory should be committed to the truth of (2F). We can think of this argument as having two independent premises: first, that sentences like the proposition sentences are sometimes true; and, second, that the correct semantic analysis of these sentences is (roughly) the one given above. So one who wants to deny that (2F) is true must either deny that the analyses of the proposition sentences given above is correct — and so deny that the proposition sentences really do jointly entail (2F), even if they do entail (2) — or must deny that the proposition sentences are true.

Before considering these two strategies for blocking the argument for (2F), let's pause for a moment to consider the claim that (2F) entails the existence of propositions. Though this claim might seem obvious, there is one complication here worth noting. What (2F) and related claims say is that there is a type of entity which is what speakers say, what subjects believe, and is the bearer of truth and falsity as well as possible truth and falsity. Couldn't one say that there is such a type of entity — but that it is not a proposition?

One could, because standardly propositions are taken not just to have the characteristics attributed by (2F), but also to be language-independent abstract objects. We can bring out the complication by considering a 'sententialist' view according to which sentences, rather than propositions, are the objects of attitudes like saying and believing, and the bearers of truth and falsity. According to this sort of sententialist view, (2F) is true — but still, one might think, we're not thereby committed to the existence of propositions.

Fortunately for our purposes, we can avoid this complication by pointing out that this version of sententialism is false.[2] Were this theory true, then the truth of "Violet

[2] The locus classicus for this objection is Church (1950).

Not every view which is standardly classified as "sententialist" fits this mold. For example, the paratactic analysis of Davidson (1968), which I discuss below, is often thought of as a sophisticated sententialist view, but according to the paratactic analysis (2F) does not give the form of (2), and is not true. Hence I discuss it under the heading of view which deny that the proposition sentences entail (2F), rather than as a view which aims to reconcile (2F) with the denial of the existence of propositions.

believes that the sky is blue" would entail that Violet stands in the belief relation to the sentence, "The sky is blue." But this ascription could be true even if Violet were a monolingual French speaker who stood in no special relation at all to this sentence — and indeed could be true even if Violet spoke no language at all.

And if sententialism is false, there are no other plausible candidates for objects which are *not* language-independent abstract objects which could satisfy (2F). (This, of course, leaves the question of the nature of the abstract objects which satisfy sentences like (2F) completely open — but at this stage, that's what we want.) Hence I'll proceed by ignoring sententialism, and assuming that if (2F) is true, then there are such things as propositions.

Let's turn to our first strategy for blocking the argument from the proposition sentences to (2F): the denial that this argument is valid. One question for the the proponent of a semantic theory which accepts the truth of the proposition sentences and (2) but denies (2F) is whether they want to say similar things about the apple sentences, (1), and (1F). Either way we go here, we seem to get in trouble. On the one hand, it is pretty hard to deny that (1F) gives an accurate rendering of (1).[3] On the other hand, it is pretty hard to deny that the relationship between the apple sentences and (1F) appears to be the same as the relationship between the proposition sentences and (2F). Semantic theories, like other theories, are to be judged in part by their capacity to give explanations which unify apparently similar phenomena. For this reason alone, we have some reason to doubt a semantic theory which offers radically different explanations of the fact that the apple sentences entail (1) and the fact that the proposition sentences entail (2).

But, setting aside the point that the apple sentences and the proposition sentences seem, on their face, to demand parallel treatment, there remains the problem of how — if not via the analyses above or some notational variant thereof — *to* understand the logical form of sentences like the proposition sentences and (2), while capturing entailments like that between the proposition sentences and (2). Many attempts have been made to provide analyses of sentences like the proposition sentences which, unlike (2F), don't entail the existence of propositions Here I'll focus on the most well-worked out attempt to give a semantics which captures the logical properties of the proposition sentences and their ilk without commitment to propositions: the paratactic analysis of that-clauses first proposed by Davidson (1968).

On this view, a sentence like

Violet believes that the sky is blue.

has the logical form of

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[3] Though, to be fair, some who, because of their views about mereology, doubt the existence of apples, are inclined to offer different interpretations of the apple sentences than the ones given above. (See, for example, van Inwagen (1990), ch. 10.) Someone with metaphysical scruples about propositions — whether or not they have doubts about applies — might on parallel grounds offer a reconstrual of the proposition sentences. I will consider some candidate reconstruals below.

Violet believes that. The sky is blue.

where "that" is functioning as a demonstrative referring to the utterance of "The sky is blue" which follows.

What, on this account, does it take for a belief ascription like the above to be true? Not, of course, for Violet to endorse the sentence "The sky is blue" to which "that" is supposed to refer — Violet might not, after all, speak English (or any language for that matter). Rather, what is required is that Violet stand in some belief-like relation to some sentence token which, as it's standardly put, "samesays" the relevant utterance of "The sky is blue."

This sort of account gives rise to two immediate questions: What is samesaying? And what is the relation in which the belief ascription requires Violet to stand to a sentence which samesays the utterance of "The sky is blue"?

Neither question is easy to answer. Intuitively, of course, for a pair of utterances to samesay each other is for the utterances to have the same content; the question is what this comes to if we don't believe that there are such things as contents. One can't, for instance, say that two sentence tokens samesay each other iff they express the same proposition, without undercutting the a central aim of the paratactic analysis, which is to avoid commitment to propositions. Some advocates of the paratactic analysis seem inclined to take the samesaying relation as primitive; LePore and Loewer (1989), for example, say that "it may prove impossible to explicate this relation in other terms" (103). To friends of propositions, this looks a bit suspicious. The samesaying relation is exactly the point in the paratactic analysis of attitude ascriptions which we should expect to force the theorist to appeal to propositions; hence it's reasonable to wonder whether it is an acceptable primitive for the proponent of the paratactic analysis.[4]

Let's now turn to the second question raised by our rough sketch of the paratactic analysis: what is the relation which Violet must stand to some sentence which samesays "The sky is blue"? The fact that we're focusing on what Violet believes — as opposed to, for example, what she says — seems to raise special problems here. Isn't it possible, after all, that Violet believe that the sky is blue without having ever uttered a sentence which samesays "The sky is blue"? Indeed, isn't this possible even if Violet has not yet learned the words to express her belief about the sky, and hence is not even disposed to accept any sentence which samesays "The sky is blue"?[5]

The best move for the friend of the paratactic analysis here is to appeal to token belief states — thought of as states of or events involving the brain — rather than natural language sentences.[6] One can then say that the above ascription is true iff Violet

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[4] Note that that it's not enough for the proponent of the paratactic analysis to point out that competent speakers of a language have some grip on when a pair of utterances samesay each other. It is quite plausible that they do. The relevant question is not whether there is such a thing as the samesaying relation, but whether this relation can be understood in a way which does not appeal to propositions.

[5] For discussion see, among other places, Schiffer (1987).

[6] See, for example, LePore and Loewer (1989), 112.

stands in the relation expressed by "believes" to some brain state which samesays "The sky is blue."

One might object that this view of belief ascriptions commits the paratactic analysis to a controversial theory of the mind — one according to which, necessarily, for every belief of every subject, there is a corresponding belief state which (intuitively) has the same content as the belief. Now this commitment by itself might not seem so bad — after all, even if not universally held, this sort of theory of belief widely held to be plausible.

What seems to me a bit worse is the fact that the paratactic account is not only committed to this theory of the mind, but also builds it into the meaning of belief ascriptions. On this sort of theory, when ordinary speakers talk about belief, they're quantifying over the brain states of subjects of ascriptions, and making claims about brain states samesaying particular utterances. I'm sympathetic to Stalnaker's worry that this sort of theory

> "makes a belief attribution carry more weight than it is plausible to assume that it carries. If it were correct, belief attributions would be far more speculative, and believers far less authoritative about their beliefs, than they seem to be. While theoretical and experimental developments in cognitive psychology may someday convince me that I store my beliefs in a form that is structurally similar to the form in which they are expressed and described in English, I don't think that my ordinary belief attributions commit me to thinking that they will."[7]

One way to bring out the oddness here is to imagine a philosopher expressing Stalnaker's skepticism by saying

> It is possible that a subject have the belief that the sky is blue without having any particular belief state with the content that the sky is blue.

On the paratactic analysis, what this sentence means is, roughly,

> Possibly ∃S ((∃x (x is a belief state of S & x samesays "The sky is blue")) & (¬∃y (y is a belief state of S & y samesays "The sky is blue")))

Maybe our imaginary philosopher is making a false claim about what is possible for believers; but could he really be uttering an outright contradiction?

But let's set these doubts about samesaying, and about the relation between belief ascriptions and belief states, to the side. The main source of objections to the paratactic analysis is that the analysis seems unable to capture all of the entailments which we should want our semantics for belief ascriptions to capture. Consider, for example, the following inference:

> 1. Violet believes that the sky is blue.

[7] Stalnaker (1990), 230.

2. The sky is blue.

C. Violet believes something true.

This argument certainly appears to be valid — in the (usual) sense that it is impossible for its premises to be true and its conclusion false. But according to the paratactic analysis, it is invalid.

For consider a world w in which "The sky is blue" means that the sky is red, and suppose that in w Violet has a belief state which samesays (in w) "The sky is blue" — and suppose that in w, as in @, the sky is blue. Then the second premise of our argument is true; and on the paratactic analysis the first must be as well, since in w Violet does have a belief state which samesays "The sky is blue." But the conclusion of our argument will be false — since, in w, Violet's belief is not true. And this contradicts our claim that the above argument is valid.

One might reply that this argument overlooks the fact that the paratactic analysis of the first premise attributes to Violet a belief state which samesays a particular *utterance* of "The sky is blue" — not the sentence type of which that utterance is a token. But this doesn't seem to help; just as sentences could have had different meanings than they actually have, particular utterances or inscriptions could have had different meanings than they actually have. To suppose the opposite would be to make the quite surprising claim that particular sounds, or marks on a page, could have their meanings essentially. Given that they don't have their meanings essentially, we can let w be a world in which the relevant utterance of "The sky is blue" has a different meaning than it actually does, and the argument proceeds as above.

A second reply would be to borrow a page from the post-Kripke descriptivist playbook, and introduce rigidification into the analysis. One might say, roughly, that "Violet believes that the sky is blue" is true iff Violet has a belief state which samesays the utterance of "The sky is blue" in @ (at a particular time and location). But this is open to what seems to me to be a decisive objection raised by Soames (2002). Consider the ascription "Amelia knows that Violet believes that the sky is blue." This could be true at a world w in which Amelia has no thoughts about @, the actual world. (Indeed, she may be in no position to refer to @, as opposed to worlds similar to @.) But on the proposed modification of the paratactic analysis, this will be impossible, since the analysis of "Violet believes that the sky is blue" will make reference to @.

A quite different line of reply, defended by LePore and Loewer (1989) (110) is to concede the conclusion that, according to the paratactic analysis, the above argument is invalid, and to try to explain away its seeming validity. Their strategy is to say that the argument seems valid to speakers because they are assuming the truth of an extra premise like

"The sky is blue" is true iff the sky is blue.

As competent English speakers, we know this premise to be true; and if we add this premise to the argument, this is enough to make the argument valid.

This seems to me unsatisfactory. In general, it is simply not true that arguments which would be valid were we to add a premise which we all agree to be true seem valid to us. Consider, for example,

Blue is my favorite color.

The color of the sky is my favorite color.

This argument does not even seem valid; students just introduced to the concept of validity can see that it is not. Does that mean that such students harbor some doubts about whether the sky is blue? Surely not. Rather, despite the fact that they know — and know that each other know — that the sky is blue, they are able to evaluate the validity of this argument without importing this assumption as an extra premise. It is therefore mysterious why we should not be able to do this with the argument above.[8]

Summing up: it seems to me plausible that even if we set aside doubts about the samesaying relation, and about the use of belief states in the semantics of belief ascriptions, the paratactic analysis fails to do the job which we wanted it to do: namely, to account for the validity of inferences involving sentences like the proposition sentences without appealing to propositions.[9]

Let's set aside attempts to explain the truth of proposition sentences, and the fact that they entail (2), without commitment to (2F) and the existence of propositions. A quite different line of response to the inference from the truth of the proposition sentences to the existence of propositions is not to deny its validity, but simply to deny its premise — namely, that sentences like the proposition sentences are true. This is, strictly speaking, an issue outside the scope of semantic theory, since semantic theories are committed to claims about what it takes for a sentence of the object language to be true rather than claims about which sentences of that language are true.[10]

But it is tempting to say that if any view deserves an incredulous stare, it is this one. Those who deny that any proposition sentence can be true are committed to denying that, strictly speaking, anyone ever says anything, believes anything, or wants anything. Indeed, it is one of those views that is, unless you're being careful, hard to state without self-refutation — as the preceding sentence illustrates.

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[8] One might reply that the difference is that while the students know that the sky is only contingently blue, we mistake the contingent truth that "The sky is blue" is true iff the sky is blue for a necessary truth. But of course philosophers are very familiar with the fact that biconditionals of this sort are only contingent, and the argument about Violet's beliefs still seems obviously valid to us.

[9] For an excellent summary of other objections, along with replies to those objections, see LePore and Loewer (1989).

[10] With the exception of logical truths and, in the case of a possible worlds semantics, truths which are true in every index.

How might one make plausible the denial that the proposition sentences are true? One currently popular strategy would be to endorse a fictionalist theory of our proposition-talk. On this view, we should take our discourse about propositions — i.e., our use of proposition sentences — as involving something other than outright assertions of the propositions corresponding to the surface form of the sentences uttered. Instead, in uttering those sentences we're engaging in a kind of pretense or pseudo-assertion. What exactly this comes to depends on the fictionalist view in question. On some views, it will be a matter of asserting some proposition other than the one corresponding to the surface form of the sentence uttered — like the proposition that that sentence is true according to a certain fiction. On other views, it will be a matter of speakers standing in some attitude other than assertion to the relevant proposition.[11]

Like the paratactic analysis, fictionalist approaches to various discourses have generated an large literature to which I can't aim to do justice here. It should be admitted that in some ways, our proposition talk seems ripe for a fictionalist treatment — one might, to borrow an example from Yablo (2000), feel impatient with someone worrying about whether we have beliefs on the basis of worries about whether propositions exist in much same way as one might feel impatient with someone worrying about whether 'creatures of metaphorical make-believe' like 'the green-eyed monster' really exist. Surely, one wants to say, such skepticism misses the point of our talk about belief! On the other hand, discourse about what we and others believe and desire, and what is true, can seem like the very paradigm of genuine assertion, and hence a quite implausible target for fictionalist treatment.[12]

The question of whether fictionalism about our use of the proposition sentences and the like can give an adequate treatment of their (seeming) truth conditions and logical properties is one which can only be answered by consideration of detailed fictionalist proposals, which is beyond the scope of this essay.[13] But, independent of such consideration, one might wonder whether whether fictionalism about proposition talk faces a special sort of self-referential problem which is not faced by fictionalism about other types of discourse. To see this, consider Mark Richard's well-known explanation of the notion of 'piggy-backing', which is part of the explanation of how one sort of fictional use of a sentence might work. Piggy-backing is, he says,

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[11] On either construal, this would be a 'hermeneutic' rather than a 'revolutionary' fictionalism, since it purports to describe proposition talk rather than to reform it. The distinction is due to Burgess (1983) and is applied to the case of fictionalism in Stanley (2001). Fictionalism about propositions is defended in Balaguer (1998). Crimmins (1998) and Kroon (2004) defend related but weaker theses.

Of course, one might worry in the present context that this description of fictionalism immediately entails the existence of propositions. More on this below.

12 This sort of objection to various fictionalist views is voiced in Stanley (2001), who objects that at least some fictionalist treatments of areas of discourse which we take to be perfectly literal involves an implausible attribution of "a novel and quite drastic form of failure of first-person authority over one's own mental states" (47).

[13] For two excellent examples, see Richard (2000) and Stanley (2001).

> "making an utterance u within a pretense in which u has a real world truth condition c, thereby actually asserting a proposition which is (in fact) true iff c obtains"[14]

The salient point, for our purposes, is that this account of what piggy-backing is — and hence, in part, of what the relevant sort of fictionalist theory says — involves claims about the assertion of propositions and hence can't be endorsed by anyone who denies that there are such things. And this is not just true of Richard's way of setting the issue up. Fictionalism is often introduced via a distinction between two different attitudes toward a class propositions — one which involves commitment to the propositions' truth, and one which does not. But no such way of explicating the doctrine can work, if the goal is fictionalism about propositions — we can't use talk of propositions in our (presumably non-fictional) explication of the theory while explaining them away with the theory so explicated.[15]

Similar remarks apply to Kendall Walton's fictionalist account of discourse about fictional characters, as Walton is well aware. As he says, "I have shamelessly helped myself to properties and propositions in the preceding chapters, and will use them now in explaining away fictional entities."[16] And the same goes for any fictionalist account which either explicitly makes reference to contents or uses sentences like the proposition sentences, since there's at least a serious suspicion of circularity about the method of stating a fictionalist theory of the proposition sentences by (presumably, non-fictionally) using those very sentences.

It's important not to overstate the importance of this point — not every fictionalist account makes use of piggy-backing, defined as Richard defines it, or is modeled on Walton's fictionalism about fictional characters. But it's at least not obvious that fictionalism about proposition talk can be explicated in a way which does not smuggle propositions in via the back door.

I will conclude this section with two general thoughts about the view that the proposition sentences are false, whether or not this is accompanied by a fictionalist story about our ordinary use of those sentences.

First, the best motivation for this view seems to be to, in effect, run the present argument in reverse, and say that, precisely because the proposition sentences do entail (2F), and because admitting propositions to our ontology is an unacceptably high cost to pay, we are forced to deny the truth of the proposition sentences. Answering this sort of argument involves showing that admitting propositions to our ontology is not an unacceptably high cost to pay, and this is best done by developing a positive theory of propositions — hence, to that extent, evaluation of this case for denying the proposition sentences must wait until the sketches of our positive theories of propositions in Part II.

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[14] Richard (2000), 214. Richard introduces this notion in the process of explicating and criticizing the fictionalism about modes of presentation defended in Crimmins (1998).

[15] Related points are made in Richard (2000), §5.

[16] Walton (1990), 390.

Second, there is a sense in which this strategy might be unstable. If the theorems of our best semantic theory are themselves relevantly like proposition sentences, then the semantic theorist, who is in the business of constructing a semantic theory, can hardly avoid commitment to propositions by denying all of the proposition sentences. (Unless, of course, she regards her own semantic theorizing as itself a kind of pretense.) As we'll see in the next section, a good case can be made that the most plausible semantic theories which do not make explicit reference to propositions do, in fact, have proposition sentences among their theorems.

2. Propositions and the theorems of semantic theory

The aim of a semantic theory is to state the meanings of expressions of the target language. So the output of such a theory should include, for every well-formed expression of the target language, a theorem which — in some sense or other — states that expression's meaning. But how exactly should we understand these theorems?

One possibility is that we should take the theorems of a semantic theory to provide a pairing between sentences of the language and the propositions expressed by those sentences.[17] This, obviously, is not a view of the theorems of a semantic theory of which a theorist who wants nothing to do with propositions can avail himself. So how should such a theorist think of the theorems of her semantic theory?

The main alternative to propositional semantics is due to the work of Donald Davidson.[18] For our purposes, the salient aspect of Davidson's approach to semantic theory is his view that the theorems of semantic theory should be, not pairings of sentences with propositions, but rather *T-sentences* of the form

> "Amelia sings" is T (in the language) if and only if Amelia sings.

The claim that sentences of this sort could be the theorems of semantic theories is, on the face of it, puzzling: why should a a theory which issues T-sentences, but makes no explicit claims about meaning or content, count as a semantic theory? Davidson's answer was that knowledge of such a theory would be sufficient to understand the language. If Davidson were right about this, then he would have a plausible argument that a semantic theory could take this form. After all, it is plausible that someone who understands a language knows the meanings of the expressions in the language; so, if knowledge of a Davidsonian semantic theory for the language were sufficient to understand the language,

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[17] Here, as above, I'm ignoring for simplicity the need to relativize the propositions expressed by sentences to contexts. Put in these terms, what a semantic theory should provide is a pairing between sentences and characters — where the latter are functions from contexts to propositions.

[18] See Davidson (1967). One might think that another main alternative is the view that a semantic theory should provide not a pairing between sentences and propositions, but rather a pairing between sentences and a set of indices in which those sentences are true. I'm setting this aside for two reasons. First, I take this to be not an alternative to a propositional semantics, but rather a version of it according to which propositions are sets of worlds, or situations, or whatever. Second, this view of semantic theory is the topic of Ch. 3.

then knowledge of what that theory says would be sufficient to know all the facts about the meanings of expressions in the language, in which case it seems that the theory *would* state all the facts about the meanings of expressions in the language.

Let's assume that we have in hand a complete Davidsonian semantic theory for a language — which entails, for every sentence of the language, a true *T*-sentence — and ask whether knowledge of such a theory would be sufficient to understand the language. There are two reasons — both ultimately due to Foster (1976) — for thinking that it would not. Following Larson and Segal (1995), I'll call these the *extension problem* and the *information problem*.

The extension problem stems from the fact that it is not enough for a semantic theory whose theorems are *T*-sentences to yield true theorems; the *T*-sentence

"Snow is white" is *T* in English iff grass is green.

is true, but tells us hardly anything about the meaning of "Snow is white." Rather, we want a semantic theory to entail, for each sentence of the object language, exactly one *interpretive* *T*-sentence: a *T*-sentence such that the sentence used on its right-hand side gives the meaning of the sentence mentioned on its left-hand side. Our theory must entail at least one such *T*-sentence for each sentence in the object language because the aim is to give the meaning of each sentence in the language; and it must entail no more than one because, if the theory had as theorems more than one *T*-sentence for a single sentence *S* of the object language, an agent who knew all the theorems of the theory would not yet understand S, since such an agent would not know which of the *T*-sentences which mention *S* was interpretive. The extension problem is the problem of designing a theory which can meet both of these requirements.

One reason why the extension problem is difficult is that it seems that any theory which implies at least one *T*-sentence for every sentence of the language will also imply more than one *T*-sentence for every sentence in the language. For any sentences *p,q*, if the theory entails a *T*-sentence

S is *T* in *L* iff p,

then, since *p* is logically equivalent to $p \,\&\, \sim(q \,\&\, \sim q)$, the theory will also entail the *T*-sentence

S is *T* in *L* iff $p \,\&\, \sim(q \,\&\, \sim q)$,

which, if the first is interpretive, won't be. But then the theory will entail at least one non-interpretive *T*-sentence, and someone who knows the theory will not know which of the relevant sentences is interpretive and which not; such a person therefore would not understand the language.

The information problem is that, even if our semantic theory entails all and only interpretive *T*-sentences, it is not the case that knowledge of what is said by these theorems would suffice for understanding the object language. For, it seems, I can know what is said by a series of interpretive *T*-sentences without knowing that they are interpretive. I may, for example, know what is said by the interpretive *T*-sentence

> "Londres est jolie" is T in French iff London is pretty

but still not know the meaning of the sentence mentioned on the left-hand side of the T-sentence. The truth of what is said by this sentence, after all, is compatible with the sentence used on the right-hand side being materially equivalent to, but different in meaning from, the sentence mentioned on the left.

In response to these objections, Davidsonians typically modify the bare sketch of Davidsonian semantic theory given above in two related ways. First (in response to the extension problem) they specify a set of canonical rules of inference which don't permit the derivation of non-interpretive T-sentences. Second (in response to the information problem) they add to the theory a rule of inference which takes us from canonically derived T-sentences to a different sort of sentence, like

> A theory meeting such-and-such formal and empirical constraints entails that S is T iff p

or a meaning theorem, like

> S means that p.[19]

This extra rule of inference helps with the information problem, because it seems that someone who knows what is said by, for example, a meaning theorem *will* know the meaning of S.

Let's take a step back here. The initial idea was that Davidson's approach to semantics might provide a viable avenue for the semantic theorist who wants to avoid commitment to the existence of propositions; the reason for thinking this was that the theorems of a Davidsonian semantic theory — T-sentences, rather than pairings of sentences with propositions — don't involve any commitment to the existence of propositions. But now we've given up the idea that T-sentences are the theorems of a Davidsonian semantic theory, and replaced these with sentences which are relevantly similar to the "proposition sentences" discussed in the previous section.

As noted above, a plausible case can be made that proposition sentences and others of the same form entail the existence of propositions. And above I noted that, for this reason, one might avoid commitment to propositions simply by saying that no sentence of this form is true. But this is plainly not something which our neo-Davidsonian semantic theorist can say, since she would then be denying the theorems of her own theory. The proposed modification of Davidsonian semantics thus ends up closing off one route for the semantic theorist who wants to avoid commitment to propositions.[20]

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[19] These responses are defended in, respectively, Davidson (1976) and Kolbel (2001).

[20] This still leaves the Davidsonian the option, discussed in the previous section, of endorsing the truth of proposition sentences while denying that these sentences entail claims like (2F).

Setting this aside, there are independent problems with the idea that a semantic theory could include a rule of inference like one which takes us from T-sentences to meaning theorems — at least when this is conjoined with the idea that a theory is a satisfactory semantics for a language iff knowledge of the theory would suffice to understand sentences of the language. The problem is that the sort of explanation of semantic competence that we get from a neo-Davidsonian semantic theory can also be given by a certain sort of translation manual; and giving a translation manual, which maps sentences from one language onto their translations in the other language, is not an adequate semantic theory for either. Hence the sort of explanation of semantic competence provided by a neo-Davidsonian theory of the sort sketched above is not sufficient to justify those theories.[21]

The point that providing a translation manual between two languages does not suffice for providing a semantic theory of either has been defended elsewhere, and I won't go through the arguments again here.[22] Given this, it is worth noting that a translation manual of this sort might provide an explanation of a kind of a speaker's competence with a language. After all, given my knowledge of English, if I am given, and sufficiently internalize, a translation manual which maps sentences of Urdu onto their English translations (and vice versa), this will give me an understanding of the relevant Urdu sentences. So a translation manual can explain semantic competence with a language — so long as we take for granted the speaker's understanding of another language. Let's call this a *derivative* explanation of semantic competence, since it explains competence with one language in terms of competence with another. Given that translation manuals are not semantic theories, if Davidsonian semantic theories are to be defended on the grounds that knowledge of them would suffice for competence, the sort of explanation they offer had better not be derivative one.

But this is just the sort of explanation of semantic competence which can be provided by a Davidsonian semantics supplemented by the sort of extra rule of inference mentioned above. To see this, consider how, precisely, the crucial extra rule of inference from canonically derived T-sentences to the theorems of the theory might be formulated. Where L is the target language, we could try to formulate it as:

> If ⌜S is T in L iff p⌝ is a theorem of the theory, then ⌜S means that p⌝ is a theorem of the theory.

But this will plainly not provide knowledge of the meaning of S. It will, perhaps, provide knowledge that a certain sentence about the meaning of S is a theorem of a true theory, and hence true; but knowledge that a sentence about the meaning of S is true doesn't tell one what the meaning of S is unless one understands the sentence about S. In this case, that sentence — a sentence of the form ⌜S means that p⌝ — is stated in the language of

[21] This argument is inspired by Harman (1975). I develop this line of argument in more detail in Speaks (2006).

[22] See, among other places, Lewis (1970), LePore and Loewer (1981), and Speaks (2006).

the theory. Hence explaining competence via a theory which depends crucially on this rule of inference relies upon the speakers prior competence with the language of the theory — and this is the same sort of derivative explanation of semantic competence as is provided by a translation manual.

We could try to avoid the problem by formulating the rule of inference in terms of what is said by the theorems of the theory, without mentioning expressions in the language of the theory, as follows:

> If it follows from the theory that S is T iff p, then S means that p.

But there is a problem with understanding this formula. 'S' can be understood as a universally quantified variable over sentences; but how is 'p' to be understood?

One idea is that 'p' is a sentence letter, and that the above is a schema; on this formulation, to master this rule of inference is to know that every instance of the schema is true. But an instance of a schema is a sentence; and if what this rule of inference gets us is that a certain sentence is true, then we are back in the problem we were trying to avoid. Knowledge that a certain meaning theorem is true yields knowledge of the meaning of the sentence mentioned in the theorem only if one understands the theorem; but, if we are making use of competence with the language in which the meaning theorems are stated, we can give no non-derivative explanation of semantic competence.

One might object that this argument attacks a straw man. Any theory has to be stated in some language or other; hence *any* explanation of semantic competence based on knowledge of a semantic theory will presuppose understanding of the language of the theory. To argue that knowledge of a neo-Davidsonian theory for L cannot give a non-derivative explanation of semantic competence with L is thus only to point out that this theory can't do the impossible.

If this were true, this would be a problem for Davidsonian semantics rather than for the present argument; for if no semantic theory can give a non-derivative explanation of semantic competence, then Davidson's principal argument in favor of his approach to semantics — namely, that it can give such an explanation — fails. But, more importantly, the objection is based on a mistake. Consider a semantic theory whose theorems pair sentences with the propositions which are their semantic contents. There's no reason why one can't know the theorems of such a theory without knowing the language of the theory, since in general there's no reason why one can't know a proposition without knowing the truth of some sentence which expresses that proposition.[23] The troubles into which neo-Davidsonian explanations of semantic competence fall are not the result of the fact that they are stated in a language. They are the result of the particular rules of inference on which those theories rely to solve the information problem.

And in fact we can show that there is something fishy about the inclusion of these extra rules of inference without even bringing in issues about the explanation of semantic competence. Suppose for *reductio* that a Davidsonian semantic theory, supplemented with

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[23] Though such explanations of competence might face other problems. See Soames (1992).

one of the sorts of rules of inference above, can serve as a satisfactory semantic theory for L. Then any theory which provides as much information about the meanings of expressions of L (and no extra, false information) must also be satisfactory semantics for L. But consider a translation manual of the sort mentioned above, which pairs synonymous sentences of two languages. All should agree that this sort of translation manual is a semantic theory of neither of the two languages; it says which expressions mean the same as which other expressions, but doesn't say what any of those expressions do mean. But, as Gilbert Harman suggested, we can imagine adding to this translation manual a rule of inference parallel to the rules of inference which are supposed to take us from T-sentences to meaning theorems, e.g.

> If $\ulcorner \ulcorner S \urcorner$ in L means the same as $\ulcorner S^* \urcorner$ in $L^* \urcorner$ is a theorem of the theory, then $\ulcorner \ulcorner S \urcorner$ in L means that $S^* \urcorner$ is a theorem of the theory.[24]

But if we add this sort of rule of inference to our translation manual, we are able to use it to derive as theorems all of the theorems of our neo-Davidsonian theory. Hence our modified translation manual must be a satisfactory semantic theory for L. But it isn't. So our original supposition, that a Davidsonian semantic theory supplemented with these sorts of extra rules of inference, might be a satisfactory semantic theory for a natural language, must be rejected.[25]

In "Truth and Meaning," Davidson remarked that, "paradoxically, one thing that meanings do not seem to do is oil the wheels of a theory of meaning — at least as long as we require of such a theory that it non-trivially give the meaning of every sentence in the language. My objection to meanings in the theory of meaning is not that they are abstract or that their identity conditions are obscure, but that they have no demonstrated use."[26] The foregoing provides some reason for thinking that Davidson was wrong about this — indeed radically wrong, if the preceding arguments show that meanings as entities are not just useful, but necessary, for the construction of a semantic theory. But, as Davidson's quote suggests, there is another powerful motivation for non-propositional semantics: this is the thought that, however useful propositions may be in semantic theory, there can be no adequate metaphysical account of what sorts of things these entities are. An adequate answer to this sort of skepticism requires an answer to the question: What are propositions? This is the question to which much of the following is addressed.

Balaguer, M. 1998. "Attitudes Without Propositions." *Philosophical and Phenomenological Research* 58: 805–826.

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[24] See Harman (1974). Here I am supposing, of course, that L^* is the language of the theory.

[25] For a less compressed exposition of this line of argument, see §II of Speaks (2006).

[26] Davidson (1967), 20-1.

Burgess, John. 1983. "Why I Am Not a Nominalist." *Notre Dame Journal of Formal Logic* 24: 93–105.

Church, Alonzo. 1950. "On Carnap's analysis of statements of assertion and belief." *Analysis*.

Crimmins, M. 1998. "Hesperus and Phosphorus: Sense, Pretense, and Reference." *The Philosophical Review*.

Davidson, Donald. 1967. "Truth and Meaning." *His Inquiries Into Truth and Interpretation*.

Davidson, Donald. 1968. "On Saying That." *Synthese* 19. Synthese: 130–146.

Davidson, Donald. 1976. "Reply to Foster." *Truth and Meaning: Essays in Semantics*.

Davidson, Donald. 1981. *Inquiries into Truth & Interpretation*.

Foster, John. 1976. "Meaning and Truth Theory." *Truth and Meaning: Essays in Semantics*.

Harman, Gilbert. 1974. "Meaning and Semantics." *His Reasoning, Meaning, and Mind*.

Harman, Gilbert. 1975. "Language, Thought, and Communication." *His Reasoning, Meaning, and Mind*.

Kölbel, Max. 2001. "Two Dogmas of Davidsonian Semantics." *Journal of Philosophy* 98:12: 613–635.

Kroon, F. 2004. "Descriptivism, Pretense, and the Frege-Russell Problems." *The Philosophical Review*.

Larson, Richard, and Gabriel Segal. 1995. *Knowledge of Meaning*. Cambridge, MA: MIT Press.

LePore, Ernest, and Barry Loewer. 1989. "You Can Say That Again." *Midwest Studies in Philosophy* 14 (June 14): 338–356. Reprinted in LePore & Loewer (2011).

LePore, Ernie, and Barry Loewer. 2011. *Meaning, Mind, and Matter: Philosophical Essays*. Oxford University Press.

Lewis, D. 1970. "General Semantics." *Synthese*.

Loewer, Barry, and Ernest LePore. 1981. "Translational Semantics." *Synthese*.

Richard, M. 2000. "Semantic Pretense." *Empty Names, Fiction, and the Puzzles of Non-Existence*: 205–232.

Schiffer, Stephen. 1987. *Remnants of Meaning*. Cambridge, MA: MIT Press.

Soames, Scott. 1992. "Truth, Meaning, and Understanding." *Philosophical Studies* 65. Philosophical Studies: 17–35.

Soames, Scott. 2002. *Beyond Rigidity: the Unfinished Semantic Agenda of Naming and Necessity*. Oxford: Oxford University Press.

Speaks, Jeff. 2006. "Truth Theories, Translation Manuals, and Theories of Meaning." *Linguistics and Philosophy* 29 (4) (September 21): 487–505.

Stalnaker, Robert. 1990. "Mental Content and Linguistic Form." *Philosophical Topics*.

Stanley, Jason. 2001. "Hermeneutic Fictionalism" (September 28): 1–36.

van Inwagen, Peter. 1990. *Material Beings*. Ithaca, NY: Cornell University Press.

Walton, Kendall. 1990. *Mimesis as Make-Believe*.

Yablo, S. 2000. "A Paradox of Existence." *Empty Names, Fiction and the Puzzles of Existence*: 275–312.