Philosophy 408: The Language Revolution Spring 2009 Tuesdays and Thursdays, 2:30pm - 3:45pm Hamilton College Russell Marcus rmarcus1@hamilton.edu

Class 19 - Truth Theories as Meaning Theories

I. Compositionality and meaning

Generally, compositional semantics is thought to consist of two distinct parts.

CMT. A compositional meaning theory CTT. A compositional truth theory

We have already looked at two different, though related, kinds of worries about CMTs. First, there are worries about the ontology of propositions. The ontological worries were both simple denials of the existence of a third realm and more subtle arguments against their identity conditions. Second, there are worries about the viability of any intensional semantic theory. We saw criticisms of the positivists and of IBS.

Davidson agrees with the skeptics that there are problems with CMTs. His program consists of showing that CTTs can serve all the legitimate ends we might have for CMTs.

We have spent a lot of time on problems with Fregean CMTs.

Thus, I will not spend much time on Davidson's criticisms.

The idea of the Fregean CMT is that if we had a dictionary with the meanings of all atomic terms, and the rules for composing meanings (using sentential and propositional functions), then we could calculate the meanings of all sentences.

Davidson says that Frege's theory is explanatorily vacuous, a "pretended account."

"We wanted to know what the meaning of 'Theaetetus flies' is; it is no progress to be told that it is the meaning of 'Theaetetus flies'" (115).

I do not understand Davidson's complaint. It is true that 1 seems vacuous.

1. 'Theaetetus flies' means that Theaetetus flies

But 2 seems full of content.

2. 'Theaetetus vuele' means that Theaetetus flies

It looks as if Davidson is failing to distinguish object language from metalanguage.

Frege's analysis of the phrase 'Theaetetus flies' into a subject, 'Theaetetus', and a sentential function 'x flies' also seems pretty reasonable, though Davidson says that it only pushes the problem backwards. There may be problems with Fregean semantics, including problems of an over-extended ontology. But Davidson's claim that Frege's theory is bogus seems too strong.

Presumably, Davidson's concern is that the CMT fails to explain the meanings of the lexical items: why does 'Theaetetus' refer to Theaetetus?

But, we can just take them as given.

The CMT does not have to explain everything to account, in a plausible way, for compositionality of meaning.

Davidson claims that the real problem is that Fregean CMTs are explanatorily inert.

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 (116).

Davidson supports his objection to meanings by pointing out that problems remain with belief sentences even after we explain the meanings of all the words.

Frege's solution to the problems with belief sentences, that sentences which appear in opaque contexts have indirect senses, of their usual referents (truth values), seems awkward.

That awkwardness might be resolved with a better theory of intensions.

Meanings aren't the solutions to all problems.

But, Davidson seems to be taking too strong a lesson from that failure.

Every theory has difficulty explaining the semantics of belief sentences.

Everyone's problem is no one's problem!

I will leave it to you to discern the rest of Davidson's argument against meanings. Instead of focusing on Davidson's worry that Fregean CMTs are bogus, we can take Davidson's argument against propositions to be purely Okhamist. I proceed to develop Davidson's positive position.

II. Truth theories as meaning theories

Davidson's big idea is that a compositional truth theory (CTT) could do all the work of a compositional meaning theory (CMT).

Determining truth is our first task in radical translation.

If we know the conditions under which a statement is true, and we can show how these truth conditions can be built up through the language compositionally, then we have no need for a contentious CMT. If Davidson's program were to work, then we could have a semantic theory without reference to any meaning entities and thus stay neutral as to any ontological commitment to meanings or propositions.

A theory of meaning is supposed to account for the workings of a natural language, so the test for success is to see, empirically, if we can get all we want from a truth theory.

The criteria for evaluating the success of a theory have to do with matching truths to truths and falsehoods with falsehoods, and nothing more intensional than that.

Davidson's approach is thus extensionalist.

The naive extensionalist, giving up meanings, might try to construct a semantic theory out of the syntax of the language, relying, say, on Chomsky's work on generative grammar.

But a recursive syntax, even plus a dictionary, doesn't give you recursive semantics because of the problems with intentional contexts.

Also, as we have seen, 'creature with a heart' differs in intension from 'creature with a kidney', even if we assume that they are extensionally equivalent.

We need a fuller account of truth, one which is not merely syntactic.

Davidson takes Tarski's definition of truth as fundamental.

[Tarski's] definition works by giving necessary and sufficient conditions for the truth of every sentence, and to give truth conditions is a way of giving the meaning of a sentence. To know the semantic concept of truth for a language is to know what it is for a sentence - any sentence - to be true, and this amounts, in one good sense we can give to the phrase, to understanding the language (118).

Davidson takes a non-deflationary interpretation of Tarski's definition of truth, one which is consistent with Field's criticism of deflationary interpretations of Tarski.

I discussed the inflationary and deflationary interpretations of Tarski's theory of truth in the previous set of class notes.

Here is one further way to distinguish them. Consider:

4. It is true that snow is white.

We can remove 'it is true that', and leave a grammatical sentence with, arguably, the same meaning.

4'. Snow is white.

In contrast, consider:

5. Everything Obama says is true.

If we remove 'is true' from 5, we are left with an ungrammatical sentence.

5'. Everything Obama says

The deflationist says that all uses of truth are like, or are reducible to, the uses in 4, where truth acts as a connective, a (redundant) sentential operator.

But in 5, 'true' works like a predicate, not a connective.

The correspondence theorist takes truth to be a genuine predicate.

Elsewhere, Davidson presents a defense of correspondence theory which relies on the relation of language and the world and which relies heavily on Tarski's work.

See his article, 'True to the Facts'.

He wants a natural interpretation of correspondence, as correspondence to facts.

There are significant worries about the viability of correspondence theory, of course, but I will not worry about them here.

I mention the underlying correspondence theory in order to point out that Davidson's project is substantial.

His concept of truth is not merely deflationary.

III. But, I thought that Tarski's theory of truth was for formal languages, only!

Davidson acknowledges that no one, including Tarski, thinks that a formal semantic theory for natural language in Tarski's vein is likely to be established.

Davidson thinks the pessimism unwarranted.

It is true, says Davidson, that natural languages resist formal interpretation.

But, any formalized sub-version of English is closely related to it, and serves the purposes we need. The bigger the sub-language, as it approaches the natural language, the better it serves our purposes.

Tarski's worries were that the universal character of natural language leads to contradiction, and there is too much confusion and ambiguity in natural language.

Davidson sees the problems of semantic paradox as reductios on the idea that languages are universal. But, we can work up a truth predicate for a substantial portion of our language.

Further, problems of vagueness are not problems of language, and so the theory of meaning should not be burdened with the responsibility of solving them.

We can just carry the ambiguities into the metalanguage, and the theory of meaning (in the guise of a theory of truth) has done its work.

Davidson thinks that there is a connection between Tarski's rigid formalized language and real English that allows us to see the formalized definition of truth as applicable to an acceptable sub-language of English.

But Davidson seems committed to the holist's claim that sentences only get meaning in the context of a language.

Once we translate from natural English to a formal theory, the meanings of all the sentences will shift with the change.

Obviously, there has to be some room for languages to grow and shrink.

New words get added to the language.

We all have incomplete knowledge of the language.

Here is a good paper topic: try to flesh out what Davidson's holism amounts to and how it affects any theory which begins holistically instead of atomically!

Field, in his <u>paper on Tarski</u>, says that the problem with natural languages lacking the idealizations that Tarski assumed is that different tokens of the same sentence can differ in sense.

If Tarski's definition is thus no good for natural languages, then Davidson's project is doomed.

You have to redo the theory for tokens, rather than sentences.

Then you need a theory of primitive denotation to explain how the terms denote, in different circumstances.

We need theories of primitive reference to supplement Convention T if truth is going to be acceptable for a physicalist.

Davidson's discussion of demonstratives, at the end of his paper, is a response to Field. To accommodate varying senses, Davidson takes truth as a relation among sentences, times, and utterers.

IV. OK, but what about the problems with Tarksi's definition?

Tarski defined various truth predicates, but he failed to define a predicate of the form 's is true in L' for variable L.

So, from Tarski we get no general definition of the concept of truth.

There is nothing which relates Tarski's truth definitions: What do they have in common?

Field makes a similar point: Tarski's theory lacks instructions for how to apply 'truth' to a word newly added to a language.

There are two ways to go with Tarski's theory.

- T1. Tarski did not capture essential elements of our concept of truth.
- T2. Tarski did define truth, and it turns out that truth isn't that interesting.

Davidson denies T2.

He agrees with T1, but argues that we can both extend the definition and restrict our expectations for natural language.

Davidson suggests restricting the truth predicates of a language to relativized ones: true-in-L. So, the big question for Davidson is whether understanding the truth conditions for sentences, even correspondence-truth conditions, is sufficient for understanding a language.

V. Truth is not enough

And, the big answer is no.

A theory which pairs true sentences with other true sentences does not do what we want of a meaning theory.

Such a theory does not always match sentences with what we think of as their meanings.

We could say a lot of true and false things, knowing the a CTT, but that would not yield semantics. Consider:

6. '7+5=12' is true iff 9-5=4

6 is perfectly consistent with a Tarskian theory of truth.

In fact, the truth conditions for 7+5=12 are exactly as in 6.

The sentence on the left is true at all possible worlds, or at all worlds at which there are numbers. At all such worlds, 9-5=4.

But '7+5=12' does not mean that 9-5=4.

Similarly, consider:

- 7. 'Shanga Langa Lang' is true in Marinese iff Romeo loves Juliet
- 8. 'pjppqwoiehf-8q348' is true in L_x iff pigs can fly.

Neither 7 nor 8 tells us anything about the semantics of the sentences on the left sides. We can not infer the meanings of those sentences from even an infinite conjunction of statements like this.

Furthermore, there are perfectly meaningful sentences that lack truth conditions.

9. Do the logic puzzle!

10. Did you get the solution to the last logic puzzle?

Additionally, the given truth theory will not solve the Fregean problems of substitution in opaque contexts and identity.

Quine takes the problem of opaque contexts to be so intractable that he gives up on them, banishing them from any proper language.

But, Davidson uses the failures of Fregean propositions to account for belief sentences as a reason to reject them.

So, he had better give an account of them.

Davidson claims that his theory of demonstratives will do the job.

The fact that demonstratives are amenable to formal treatment ought greatly to improve hopes for a serious semantics of natural language, for it is likely that many outstanding puzzles, such as the analysis of quotations or sentences about propositional attitudes, can be solved if we recognize a concealed demonstrative construction (123).

I am skeptical; a good term paper would see how the Davidsonian project proceeded here. I don't know that literature well enough to give an informed opinion, beyond my dogmatic claim, here.

VI. Summary

Davidson wants to eliminate intensional theories both for the typical reasons of ontological austerity, and for the perceived explanatory vacuousness of propositions (belief sentences).

He agrees with the Fregean that we need a compositional theory to generate (recursively) the indefinite number of sentences of natural language that we can understand.

His claim is that if we can expand the Tarski approach, we can get pretty close to all of what we want out of a meaning theory.

I presented a few arguments that the CTT is not sufficient to explain compositionality of meaning. In response, Davidson could give up on compositionality of meaning, as the deflationist does.

Here is one more reason to worry about Davidson's proposal.

I thought I heard Stephen Schiffer make this objection, but when I asked him, he denied it. So, it might be an original objection.

For Davidson, the truth theory is supposed to serve instead of a meaning theory.

That means that I should be able to give you the truth conditions for all the sentences in a language, without reference to meaning at all.

And, once I do so, you will understand the language so well that you won't even want a meaning theory. The meaning theory will be rendered otiose.

But, among the sentences of the CTT will be sentences like:

"Grass is green' means that grass is green" is true iff 'grass is green' means that grass is green. "Snow is white' means that snow is white" is true iff 'snow is white means that snow is white.

In other words, the truth theory will include all the postulates of a meaning theory within it.

So, instead of replacing the meaning theory, Davidson's truth theory presumes it. Instead of eliminating meaning, Davidson relies on it.

Here is one last consideration for an extensionalist, like Davidson. Field, in his <u>paper on Tarski</u>, argues that there are two strategies for avoiding intensions.

- S1. Reduction: reduce the semantic theory to another theory
- S2. Elimination: get rid of semantic terms

It is unclear whether S1 or S2 is more profitable.

Semanticists in the 1930's were opting for S2.

Tarski wanted them to consider S1.

IBS tried to reduce semantic theory to physical theory, with an eye toward physicalism.

Quine urged S2, but semanticists do not agree which terms would be eliminable.

In order to get a physicalist theory of reference, we would need to explain, without reference to any semantic terms:

- P1. Why 'snow is white' is true; and
- P2. Why 'schnee ist weiss' is true, too; and
- P3. The connection between the P1 and P2.

Even if Davidson's project were to rid us of commitments to intensions, if we were left with un-reduced and un-eliminated terms of reference, the physicalist would not be satisfied. Getting rid of all semantic notions may be more difficult than we thought.

Perhaps we should think about embracing a non-Fregean semantic theory. Next up: Katz's new intensionalism.