Class 24 - Truth Theories as Meaning Theories
Davidson, "Truth and Meaning"

I. Compositionality and Meaning

Compositional semantics is standardly thought to consist of two distinct parts.

CMT	A compositional meaning theory
CTT	A compositional truth theory

We have looked at two related 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 the possibility of providing appropriate identity conditions.
Second, there are worries about the viability of any particular intensional semantic theory.

The logical empiricists argued that the meaning of a proposition is its method of verification.
But they had difficulty determining and explaining how sentences are verified.
It's clear that they think that verification is tied to observation.
But it's not clear exactly how, and what observation is.
Further, holists argued that individual sentences aren't verified except as part of a larger theory.
According to IBS, propositions are explained in terms of speaker intentions.
But explanations of speaker intentions themselves invoke propositions.
So the IBS account appears to be circular.

Davidson agrees that there are insuperable 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, in the first portion of the article.
Still it is worth being clear about the general form of a CMT and sketching Davidson's central objections.
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' (91-2).

I am not sure that I understand Davidson's complaint.
It is true that TFE seems vacuous.

TFE	'Theaetetus flies' means that Theaetetus flies.

CMTs and their theorems, like TFE, are written in a metalanguage and include names of object-language sentences on the left.

In TFE, the sentence on the left is the name of a sentence in English.
Its meaning is given in the metalanguage, also English, by a proposition expressed on the right.
In contrast to TFE, TFS seems to have content, given that the object language and the metalanguage are different.

TFS 'Theaetetus vuele' means that Theaetetus flies.

It looks as if Davidson is failing to distinguish object language from metalanguage.
Perhaps he is misled into thinking that TFE is empty by the fact that he is using the same natural language both as object language and as metalanguage.

Frege's analysis of the phrase 'Theaetetus flies' into a subject, 'Theaetetus', and a sentential function 'x flies' also seems 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 the meanings of lexical items as given.
The job of the CMT is to show how to construct complex sentences on the basis of the meanings of the component parts.
The CMT does not have to explain everything to account, in a plausible way, for compositionality of meaning.

Davidson claims 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 (92).

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.
Let's see if we can avoid the posits of meanings.
I proceed to develop an account of Davidson's positive position.

II. Truth Theories as Meaning Theories

Davidson's big idea is that a compositional truth theory (CTT) can do all the work we want 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 deny 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 intensional contexts.
'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 (95).

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.
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.
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. Tarski's Theory of Truth and Natural Languages

Davidson claims that no one, including Tarski, thinks that a formal semantic theory for natural language modeled on Tarski's theory of truth is likely to be established.
Davidson believes that such pessimism is unwarranted.
It is true, says Davidson, that natural languages resist formal interpretation.
There are paradoxes and ambiguities.
Davidson sees the problems of semantic paradox as *reductios* on the idea that languages are universal.
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 work up a truth predicate for a substantial portion of our language.
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.
We carry the ambiguities into the metalanguage and the theory of meaning (in the guise of a theory of truth) has done its work.

Davidson believes 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.
It might be interesting to 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 paper on Tarski, 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, can be taken as a response to Field.
To accommodate varying senses, Davidson takes truth as a relation among sentences, times, and utterers.

IV. Tarksi's Hierarchy and Davidson's Project

Tarski defined various truth predicates, one for each level in a hierarchy of increasingly complex languages.
He failed to define a predicate of the form 's is true in L' for variable L.
There is nothing which relates Tarski's truth definitions: What do they have in common?
So, from Tarski we get no general definition of the concept of truth.

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 think about the ramifications of the hierarchy in 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.
Using Frege's logic, Tarski gives us a way to capture truth while avoiding the paradoxes.

> Frege's massive contribution was to show how 'all', 'some', 'every', 'each', 'none', and associated pronouns, in some of their uses, could be tamed; for the first time, it was possible to dream of a formal semantics for a significant part of a natural language. This dream came true in a sharp way with the work of Tarski. It would be a shame to miss the fact that as a result of these two magnificent achievements, Frege's and Tarski's, we have gained a deep insight into the structure of our mother tongues (100).

Davidson agrees with T1, but argues that we can both extend the definition and restrict our expectations for natural language.
He suggests restricting the truth predicates of a language to relativized ones: true-in-L.
In other words, Davidson would be happy just to construct an extensional semantic theory for one language.
The big question for Davidson's project is whether understanding the truth conditions for sentences, even correspondence-truth conditions, is sufficient for understanding a language.

V. Truth is Not Enough

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.
DT1 is an example of a theorem of a Tarskian theory of truth.

DT1	'7+5=12' is true iff 9-5=4

The truth conditions for '7+5=12' are exactly as in DT1.
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, DT2 and DT3 could plausibly be theorems of a Tarskian theory of truth.

DT2	'Shanga Langa Lang' is true in Marinese iff Romeo loves Juliet
DT3	'pjppqwoiehf-8q348' is true in L_x iff pigs can fly.

Neither DT2 nor DT3 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 DT2 and DT3.

Furthermore, there are perfectly meaningful sentences like NT1 and NT2 that lack truth conditions.

NT1	Do the logic puzzle!
NT2	Did you get the solution to the last logic puzzle?

A Tarskian truth theory will also 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.
Davidson uses the failures of Fregean propositions to account for belief sentences as a reason to reject them.
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 (104).

I am skeptical.
But it would be interesting to see how the Davidsonian project proceeded here.
I don't know that literature well enough to give an informed opinion beyond my dogmatic claim that it won't work very well.

VI. Summary

Davidson wants to eliminate intensional theories both for the typical reasons of ontological austerity, and for the perceived explanatory vacuousness of propositions, especially of 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 and adapt Tarski's theory, 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.

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 in place 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.
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 paper on Tarski, 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.