Class 28 - Devitt's Nominalism

I. Devitt's challenge

Chomsky seeks an explanation of human competence with language.
He believes that language, being a natural part of human cognition, is essentially psychological.
We call his position conceptualism because it entails that to study competence, we have, at root, to study human psychology.
Of course, Chomsky takes psychology to be a natural science, which means that linguistics is really a sub-field of neuroscience.

In contrast, Devitt defends pursuit of a task, which he calls the contemplated task, which conflicts with Chomsky's program.
Where Chomsky locates both language and our competence with language in the brain, Devitt distinguishes the study of competence from the study of language.

> On my view, a language is composed of the *outputs* of a linguistic competence, symbols that are governed by a system of linguistic structure-rules. That is the reality of language. And the task we have been contemplating , and that I wish to promote, is the study of the nature of this reality. This is not Chomsky's task... (11, emphasis added).

Devitt's argument, in outline, is as follows.
He agrees with Chomsky's methodological criticisms of Bloomfieldian linguistics, defending generative grammars.
He also agrees with Katz that linguistic reality is independent from psychology.
But he recoils from Katz's platonism.
Given that our three options for linguistic ontology were nominalism, conceptualism, and platonism, and that Devitt rejects both conceptualism and platonism, there is only one option left.
Thus, Devitt returns to nominalism, while accepting Chomsky's methodology within linguistics.
Here is a chart representing the various positions on linguistic ontology and methodology.

	Linguistic Ontology	Linguistic Methodology
Bloomfield	Nominalist	Taxonomic
Chomsky	Conceptualist	Generative Grammar
Katz	Platonist	Rationalism: Linguistic Intuitions
Devitt	Nominalist	Generative Grammar

Devitt's program faces one central task: he must show that the nominalist has sufficient resources for linguistics, that nominalism is compatible with a generative grammar.
We saw, in both the Chomsky and Katz articles, some arguments against Bloomfieldian nominalism.
Devitt will have to avoid those arguments, while accommodating generative grammar.
That is, he will have to argue both for the ontology and his methodology of his proposed task.

II. The New Nominalism

The methodology of Bloomfield's linguistics was to catalog and classify the utterances of various speakers in order to produce translation manuals.
His ontology was nominalist, referring mainly to speakers' utterances.
Chomsky argued that Bloomfield's ontology, which admitted only sentence tokens, could not accommodate the indefinite number of sentence types that speakers could produce.
Also, the best account of our knowledge of language focuses on competence, rather than performance.
Speakers are competent with a much larger set of possible utterances than they actually produce or understand.
Katz extended Chomsky's argument, alleging that our language includes non-denumerably many sentences.
It is clear that a Bloomfield nominalist could not account for our competence with non-denumerably many sentences.

Katz and Devitt have different interpretations of Chomsky's argument against Bloomfield.
According to Katz, Chomsky concludes from the limitations of Bloomfield's austere ontology that linguistics must not be the study of utterances.
Instead, Chomsky takes linguistics to be a psychological study.
UG is native to the brain, which develops its competence.
According to Katz, the shift from utterances to brains is motivated mainly by ontological concerns.

Devitt thinks that Chomsky's worries about Bloomfield were methodological.

> [Katz] takes nominalism to have been refuted by Chomsky's criticisms of Bloomfieldian structuralism. Yet, so far as I can see, these criticisms are not of the *nominalism* of the structuralists but rather of their *taxonomic methodology*, a methodology in the spirit of positivism. According to Chomsky, this methodology imposed "arbitrary and unwarranted" limitations on linguistics... (11).

Devitt proceeds to cite methodological differences between Bloomfieldian linguistics and Chomskyan linguistics.

It is surely the case that Chomsky disagreed with the Bloomfieldians over methodology.
Further, we can naturally take Chomsky's argument, with its claim that Bloomfieldian linguistics imposes arbitrary and unwarranted limitations, as a criticism of a certain kind of nominalism, a nominalism that allows only tokens and their bare properties.
Devitt wants to save nominalism by showing that Chomsky's methodological criticisms need not entail the falsity of nominalism.
If Devitt can develop a nominalism which lacks the limitations of the earlier brand, he may be able to avoid Chomsky's original criticisms.

On the other hand, Katz's criticisms of Bloomfield went further than Chomsky's, and applied to Chomsky's ontology as well.
Katz argued that even psychological reality was insufficient for linguistics.
If Katz's criticisms of Chomsky's ontology are correct, then Devitt's task will be even more difficult.
Devitt will have to stretch nominalism to cover our ability to produce and understand transfinitely many, transfinitely long sentences.

Devitt claims that one can be a nominalist without restricting one's theory to sentence tokens.
He claims that we can take linguistics to be the study neither of tokens nor abstract objects, but of linguistic reality.

> I claim that there is something other than psychological reality for a grammar to be true of: it can be true of a *linguistic* reality (4).

Devitt's expansion of the Bloomfieldian nominalist's ontology to linguistic reality comes in two steps.
First, we admit possible tokens as elements of our ontology.
Then, we characterize those possible tokens as merely a manner of speaking.
We can also allow abstract objects, like sentence types, as long as we also consider those to be also just a manner of speaking.
When the chips are down, our theory will still be a theory of sentence tokens.
But, Devitt claims, we can construct and use a more profligate theory, including possible and abstract objects, as long as we are confident that an austere theory is available.

III. Linguistic reality

Devitt thus expands his working ontology, if not his austere actual ontology.
He argues for the existence of a linguistic reality on the basis of some core distinctions.

> DD1. Distinguish the theory of a competence from the theory of its outputs/products or inputs (5).
> DD2. Distinguish the structure-rules governing the outputs of a competence from the processing-rules governing the exercise of the competence (6).
> DD3. Distinguish the respecting of structure-rules by processing-rules from the inclusion of structure-rules among processing-rules (8).

Devitt illustrates these distinctions variously.
Consider the waggle dance of the bees.
DD1 distinguishes between the theory of the bees competence with the dance from the dance itself.
DD2 distinguishes between the rules that we can describe governing the dance (the structure rules) and the way in which the bees produce the dance (process rules).
The structure rules need not be represented by the bees, internally.
They are describable from the outside.
What happens inside the bees may proceed by very different process rules.

The process rules, in contrast, may not be representational at all.
It would be highly contentious to ascribe any kind of sophisticated language-processing to the bees.
Devitt distinguishes embodied rules from represented rules, p 3 and p 9; the process rules must be embodied, but need not be represented.

> We should not rush to the judgment that the structure-rule itself must govern this unknown process. It may be the *wrong sort* of rule to play this rule. Nature faced the design problem of adapting the pre-existing structures of an insect to produce (and respond to) the message of the bee's dance. We have no reason to suppose a priori that nature solved this problem by making the bee go through the structure-rule "calculation." Indeed, it is not at all clear that the bee could

plausibly be seen as performing this calculation: Can the bee even manage the necessary representations of the food source, of the spot on the horizon, and of the angles? (7)

We might compare the process rules to Millikan's proximal rules, and the structure rules to Millikan's distal rules.
The process rules must produce behavior which is described or governed by structure rules, just as the proximal rules cohered with the distal rules.
The theory of the structure rules must respect the theory of the process rules, and vice-versa; Devitt calls this requirement the Respect Constraint.
But, the theory that explains our process rules will be psychological, whereas the theory that explains the waggle dance need not be.
Analogously, the theory which governs our competence (process rules) will be psychological, while the theory which governs the language itself (structure rules) will be purely linguistic.
Linguistics is not psychology.

Devitt's last distinction, DD3 merely points out that the relationship between process rules and structure rules can be loose.
We do not have to claim that the organism actually holds the structure rules.
The process rules can be entirely distinct from the structure rules, as Millikan's distal and proximal rules were distinct.
Linguistic reality need not be located in the brain.

Note that none of the Devitt's three distinctions (DD1-DD3) make ontological claims.
Devitt's claim, given these distinctions, is that the best explanation of both our language and our competence with it involves positing a non-mental linguistic reality.
Once we make the above distinctions, we have to see linguistics as distinct from psychology.
Psychology will explain our competence with language, the process rules.
Linguistics is the science of that language, the structure rules.

IV. Abstracta, possibilia, and manners of speaking

Devitt's linguistic reality differs from Bloomfield's nominalism, in that he admits possible tokens or abstract objects, but explains them away as merely a manner of speaking.

> It is often convenient to talk of the objects posited by these theories as if they were *types* not tokens, abstract Platonic objects, but this need be nothing more than a manner of speaker (sic): when the chips are down the objects are parts of the spatio-temporal world (11; see also fns 15, 16 and 18).

The obvious worry about Devitt's reliance on manners of speaking is that it seems like cheating to use abstract objects and possibilia, and then to deny commitments to them.
This allegation of cheating is sometimes known as the double-talk criticism.
The double-talk criticism, found in the work of Quine, Putnam, and Field, among others, is popular in other ontological disputes.
For example, nominalism/platonism debates occur in the philosophy of mathematics, concerning numbers and geometric objects, and in metaphysics, concerning properties, or universals.

Many nominalists believe that they can avoid sincere commitments to mathematical objects, properties, and sentence types, while still using those objects in their theories.
There are two sub-classes of such nominalists.
The dispensabilist demonstrates precisely how to remove the contentious objects from the given theory, how to dispense with them.
The ostrich nominalist uses the entities and pretends that they do not exist.
The dispensabilist avoids the double-talk criticism.
The ostrich nominalist does not.
It is clearly preferable to be a dispensabilist than to be an ostrich nominalist.

Devitt's argument, relying on manners of speaking, seems liable to an ostrich nominalist/double-talk criticism.
Devitt defends Chomsky's generative grammar, and appeals to his linguistic reality, while professing nominalism.
He also wants to accommodate Katz's claims about the utility of linguistic intuitions.
He believes that he can help himself to the data arising from appeals to intuition, without committing to the existence of any non-empirical belief-forming processes.
That is, Devitt wants to accommodate the intuitions of competent speakers within a nominalist framework, even though the nominalist is generally opposed to reliance on intuition.
So, Devitt has to explain how both appeals to intuition and appeals to abstracta or possibilia are mere manners of speaking.

Devitt does not provide a dispensabilist construction, but we can imagine how one would look.
There are two typical types of dispensabilist constructions.
The first type shows how to construct contentious entities out of objects that are not in question.
Some dispensabilists trying to avoid mathematical entities in physics attempt to rewrite physical theories in terms of space-time points, or in terms of physical objects themselves, rather than in terms of mathematical objects.
In the linguistics case, the first kind of dispensabilist construction would demonstrate how to construct a theory of linguistic types in terms of linguistic tokens, or in terms of neurological states, perhaps.

The second type of dispensabilist construction appeals to modal concepts, like possible states of affairs, the way things could have been.
Devitt hints at preferring the second type of construction.

> Strictly speaking, the theories quantify only over actual entities but the theories are, in some sense, necessary. So the talk captures the modal fact that if something *were* a horseshoe, a chess move, a *wff*, a bee's dance, or whatever, then it *would have* the properties specified by the appropriate theory of outputs (fn 15).

Between the two types of dispensabilist constructions, though, the second type is easier to construct, but less convincing.
It is preferable to rewrite a theory in terms of objects to which the theory is already committed than to rewrite it by appealing to possibilia.
Possible states of affairs are just as ontologically contentious as abstract objects.
For example, one account of possible states of affairs, promoted by David Lewis, is called modal realism.
The modal realist claims that possible worlds are just as real, just as concrete, as actual states of affairs.
Modal realists thus have ontological commitments to a vast universe of possible objects.

Devitt recognizes that modal realism is unacceptable, but offers no alternative account of the existence of or our knowledge of possible worlds.

> How are we to explain modal facts? I don't know, but, *pace* David Lewis, surely not in terms of unactualized possibilia (ibid).

Without a serious attempt to provide either a nominalist account of modal facts or an instance of the first kind of dispensabilist construction, Devitt looks a lot like an ostrich nominalist.

Devitt provides one other hint about how to understand his appeals to possibilities in his footnote discussion of Katz's work.
Katz, recall, argued that the infinitary aspects of linguistics demanded abstract objects, that concrete objects, whether utterances or brain states, could not support a full linguistic theory.
Devitt defends the uses of tokens and possible tokens.

> The truth behind the talk of the nonactual can be simply that the grammar is lawlike. And the truth behind the talk of the infinite can be simply that there is no limit to the number of different sentence tokens that might be governed by the rules the grammar describes (fn 18).

I think that Devitt here is best interpreted as arguing that we do not need an infinite number of tokens if we have finite, but lawlike, rules of grammar and a finite lexicon.
If we do not really need abstracta or possibilia in our theories, then we would not need the dispensabilist construction in the first place.
The relevant questions, then, are how, precisely, linguistics commits to abstracta, and whether these commitments are sincere.
It looks to me as if we all have to go off to study some actual linguistics to answer these questions.

V. Is linguistic reality compatible with nominalism?

Devitt argues that whatever nominalizing strategy we need in linguistics will be no more difficult or contentious than other nominalizing strategies.
Other fields rely on mathematical objects, properties, or possibilities.
The nominalist is committed to removing all references to such non-concrete objects.

> My contemplated task for linguistics is likely to be as nominalistic as tasks in physics, biology, or economics (15).

Serious nominalizing strategies of the first type are difficult to develop.
The ones that work for the flat space-time of Newtonian gravitational theory do not work for the curved space-time of general relativity.
The ones required for quantum mechanics are elusive in a different way.
Devitt's claim places a burden on the nominalist.
It may be the case that Katz overstates the need for abstract objects in linguistics.
It may be the case that while linguistics needs abstract objects, we can avoid them by reference to possibilia.
And, we might be able to avoid possibilia nominalistically.
But, these cases must be established.