

Sider's *WTBOTW*, Ch 7 (+ miscellaneous stuff from past chapters)

Handout, Metaphysics Seminar 1/27/15

Preview: In Chapter 7, Sider covers an array of topics, and some major things happen. Sider introduces his theory of *metaphysical semantics*, which he uses to relate structural facts with the less structural, not-so-joint-carving facts. He also formulates and defends two controversial constraints on his theory of structure, *completeness* and *purity*. Then Sider raises some questions: can joint carving notions exhibit vagueness? (no) Is structure itself structural or joint carving? (yes) Must there be some perfectly joint carving notions? (yes) Can we appeal to the grounding relation to relate the less fundamental to the more fundamental? (maybe, but it's better to stick with metaphysical semantics) We'll try to discuss all of these issues today, but we will probably fail.

1 Taking it way, way back to Chapter 2

1.1 Possible Reduction of Structure to other Notions?

Can 'X is structural' be reduced to:

- X is featured in the laws of nature? (Sider raises an extensional objection and a systematic objection to this proposal)
- X is featured in our fundamental theory of causation? (Sider raises similar objections to this proposal as he does to the previous proposal)
- X belongs to a set of properties and relations Y, where Y is *minimally complete*, (i.e. Y is the supervenience base)? (p. 16-17) (Extensional Concern: is the set of seemingly-structural properties complete? Even if it is complete, is it minimally complete?)

2 6.1-6.3 Moving Beyond the Predicate

Sider wants to differentiate his approach from those of Lewis and Armstrong in two ways: 1. He thinks Lewis and Armstrong are both committed to abstracta, which is something he doesn't like (Question: what *exactly* does Sider dislike?), and 2. He thinks operators and quantifiers, in addition to predicates, can count as structural.

Also, if we want 2, we'll need to move away from Lewis and Armstrong's accounts, it looks like. To extend their strategy to expressions like quantifiers or sentential operators, we would need to identify corresponding entities. But there seem to be no good candidates for such entities.

Instead, Sider thinks that when we speak of quantifiers or operators as carving at the joints, we are not picking out any entities in the world. We are pinpointing some joint-carving ideology. Sider maintains that there is an operator 'S' that he thinks we can use to talk about predicates, quantifiers, etc. being structural. First he takes the operator to be able to attach to entities of any grammatical category (109). Then, he proposes that S is a sentential operator (110).

3 Sider, Chapter 7

3.1 Metaphysical Semantics

Sider thinks the non-fundamental (non-joint-carving/non-structural) must relate to the fundamental (joint-carving/structural) in some way; in some sense of 'in virtue of', sentences involving non-fundamental notions

hold in virtue of sentences involving only fundamental notions. Sider cashes out the ‘in virtue of’ locution by appealing to an account of “metaphysical semantics”. Each sentence involving non-fundamental notions has a metaphysical semantics involving only fundamental notions.

What is a *metaphysical semantics for a sentence*?

Metaphysical Semantics for a Sentence: “Either a truth-condition, an expression-condition, a proof-condition, or perhaps some other sort of semantic condition, that is assigned to that sentence by some metaphysical semantics for its language.” (138)

What is a *metaphysical semantics for a language*?

“A metaphysical semantics is a semantic theory with two distinctive features. First, meanings are to be given in purely joint-carving terms. For example, if the semantic theory takes the form of a truth-theory, then the truth-conditions must be stated in perfectly joint-carving terms.... Second, the explanatory goals differ from those of linguistic semantics. In one way they are more ambitious, and in another, more modest. Metaphysical semantics is more ambitious in that by giving meanings in fundamental terms, it seeks to achieve something not sought by linguistic semantics: to show how what we say fits into fundamental reality. Metaphysical semantics is more modest in that it tries to explain a narrower range of phenomena.” (133-134)

Example 1:

$Hx = \text{df } \exists y \exists z (Ey \text{ and } Pz \text{ and } Ryz \text{ and } xFyz)$:

x is a hydrogen atom iff x is a fusion of an electron and proton where the electron orbits the proton.

Example 2:¹

Normative sentence S of L , as uttered by speaker x , is expressively appropriate for x in L iff $\phi(x)$ where $\phi(x)$ is a condition on speaker x ’s attitudes.

Question: By employing metaphysical semantics, Sider avoids positing a fundamental ‘in virtue of’ relation. How strong is Sider’s case against positing a fundamental ‘in virtue of’ relation? (This may be better addressed once we discuss Purity).

3.2 Completeness

Completeness: Every sentence that contains expressions that do not carve at the joints has a metaphysical semantics. (138)

Question (due to Leo): Does completeness entail a supervenience thesis? If so, which one?

3.3 Purity

Purity: Fundamental truths involve only fundamental notions.

Purity is rather controversial. Willy has a concern with purity (in particular, with treating sentences like ‘ a has property P (where P is non-joint carving) in virtue of the fact that a has property Q (where Q is joint carving)’ as non-fundamental).

¹This is more of an example schema than an example proper, which sort of defeats the purpose of providing an example here, but shhh.

3.4 Comparison with Ground

Why deal with metaphysical semantics when we can have (non-fundamental) grounding? Grounding is another way of trying to make sense of this ‘in virtue of’ locution. Let’s explore two ways in which Sider thinks his account of metaphysical semantics can fare better than grounding:

Non-Factualist Discourse: Sider believes metaphysical semantics can accommodate nonfactualist discourse better than a theory of non-fundamental ground can. Let’s begin to discuss this and keep the issue in mind during future weeks.

Lump and Statue: Sider also thinks that metaphysical semantics can better accommodate certain Statue/Lump cases:

“Consider nonfundamental natural language quantification. Suppose that in the fundamental sense of ‘there is’, there are no such things as statues or lumps of clay, but that natural language is governed by a metaphysical semantics specifying that if some clay is appropriately shaped, then the following sentence is true in English: “There exists a lump made from that clay with modal properties mL , and there also exists a distinct statue made from that clay, which has modal properties mS .” If we do not semantically ascend, and ask simply after the grounds of facts construed disquotationally, we will be led to an awkward place, as follows. Since there exist a lump and statue as described, there must exist a pair of singular facts, the fact that L has mL and the fact that S has mS , where L and S are the lump and statue in question. Further, if these are distinct facts, there must surely be some fundamental ground of one that is not a ground of the othersomething fundamental that grounds their distinctness. But no such differential ground can be located. It’s not as if the friend of ground has no response. He might claim that although no ground differentiates the pair of facts, the complex fact that L and S are distinct and instantiate mL and mS respectively, does have a ground: namely, the fact that the clay exists and is appropriately shaped. But it remains awkward that the facts in question lack differential grounds. Intuitively, one wants to say, there really is no such fact as that L has mL , or that S has mS , because there really are no such things as L or S . A more satisfying picture of the situation is achieved by semantic ascent. The metaphysical semantics for English provides metaphysical truth-conditions for various statements about statues and lumps of clay, but it does not do so by associating referents to singular terms like ‘ S ’ and ‘ L ’. It rather does so by associating complex truth-conditions for whole sentences containing quantifiers over, or singular terms for, both statues and lumps. These truth-conditions render ‘Lump L has mL and the distinct statue S has mS ’ true, despite the absence of distinct metaphysical truth-conditions for the sentences ‘ L has mL ’ and ‘ S has mS .’” (150-151)

3.5 Sider and Infinite Descent: must there be a “rock bottom”?

Yes, sort of. We can have mereologically “gunky” worlds with “no rock bottom” of mereological atoms. We can even have worlds with no “rock bottom” of fundamental facts, but we need to have primitive (fundamental) ideology! There cannot be infinite *ideological* descent (with no rock bottom)!