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Vagueness, lecture 4: Supervaluationism.

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1. Vagueness as semantic indecision

- One way of looking at cases of vagueness is to regard them as instances of *semantic indecision*: there are a range of ways of making a vague expression precise, and we have no reason to choose one of them over the others.

2. Penumbral connections

- Fine [1975] emphasises the role of *penumbral connections* between vague predicates.
  - Penumbral connection is "the possibility that logical relations hold among indefinite sentences" and *penumbral truths* are those "that arise, wholly or in part, from penumbral connection".
- For example, according to Fine, even if the sentence 'The blob is red' is indefinite, the sentence 'If the blob is red then it's not pink' is not.
- Similarly, Fine claims, for disjunctions like 'Either the blob is red or the blob is pink' and conjunctions like 'The blob is red and the blob is pink'.
  - Is Fine right to think that such compound sentences have definite truth values?
- This gives rise to a critique of *truth-functionality* for vague sentences (as in e.g. Tye [1994]'s account), similar to that we saw in Williamson [1994].

3. Precisifications and supertruth

- Supervaluationism assesses the truth (or falsity) of sentences on the basis of what Fine calls *complete specifications*: ways of making all predicates, names, etc. denote precise properties, objects etc.
- We can think of these complete specifications as *precisifications*: ways of making vague predicates precise.
- A sentence is *super-true* (or just plain *true*) if it is true in all complete specifications.

- A sentence is *super-false* (or just plain *false*) if it is false in all complete specifications.
- A sentence is *neither true nor false* (or *indefinite*) if it is true in some complete specifications and false in others.
- Supervaluationism thus commits us to the failure of bivalence and the existence of truth-value gaps.

4. Fine's conditions

- *Fidelity* (F): a sentence is true (or false) for a complete specification iff it's classically true (or false); evaluations over complete (i.e. *precise*) specifications are classical.
- *Stability* (S): if a sentence has a definite truth-value under a specification t then it has the same definite truth-value under any specification u that extends t; definite truth-values are preserved under extension.
- *Completeability* (C): any specification can be extended to a complete (i.e. classical) specification.
- *Resolution* (R): an indefinite atomic sentence can be resolved either way (i.e. be made true or be made false) by an improvement in precision.

5. The logic of supervaluationism

- Supervaluationism is closely linked to classical logic.
- The law of the excluded middle (LEM) is always valid, because an instance of LEM (e.g. $P \vee \neg P$) is true on all complete specifications and hence super-true (or true simpliciter).
- This has the counter-intuitive consequence that in the supervaluationist framework an indefinite atomic sentence ("The blob is red") gives rise to an instance of LEM ("The blob is red or the blob is not red") that is super-true even though both disjuncts are indefinite.
- Fine considers, and rebuts, an argument that LEM can fail for a vague sentence (p. 284).
  - Is Fine right that the argument is a "fallacy of equivocation"?
  - Is his parallel with ambiguity persuasive? If not, does it matter?
  - Fine does seem to think that ontic vagueness would be a reason to dispute LEM. What ramifications would this have for supervaluationism?

6. Supervaluationism and higher-order vagueness

- Possibility of borderline borderline cases, borderline borderline borderline cases, etc.
- Not only predicates have borderline cases, but borderline cases also don't have sharp boundaries
- Fine introduces a 'definitely' operator D.
  - Dp is true of a sentence p iff p is true on all precisifications.
  - p is indefinite (a borderline case) iff $\neg\mathrm{D}p \wedge \neg\mathrm{D}\neg p$.
  - Higher-order vagueness can be expressed using the D operator: p is a borderline borderline case if $\neg\mathrm{DD}p \wedge \neg\mathrm{D}\neg\mathrm{D}p$, or if $\neg\mathrm{DD}\neg p \wedge \neg\mathrm{D}\neg\mathrm{D}\neg p$.
  - Of course we can iterate further.
- Supervaluationism looks like it rules out higher-order vagueness: there is a sharp borderline between the definite and the indefinite.
- Supervaluationists have responded to this in several ways (see Keefe [2008] for a survey).
- One is to invoke the notion of an *admissible specification*: the predicate 'admissible' in the metalanguage is taken to be vague, so we have vagueness all the way up, corresponding to the higher-order vagueness.
- The other is to relativise the notion of admissibility: what is admissible relative to one specification may not be admissible relative to all.
  - If Dp is true at a specification when p is true all all specifications that are admissible relative to that specification, then Dp is possibly true at some specifications within a specification space (and not others), i.e. Dp is *indefinite*.

References

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