The Multiplicity of Meaning
Lecture 3: Plural Signification and Semantic Paradox

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Argument Seven

> Pluralism follows from obvious truths, by Prior's theorem.

1 *Prior's theorem*[1]

[1] Prior 1961.

A thought experiment: Mr X, a normal English speaker, is in Room 7, but wrongly thinks he is in Room 6 and that a pathological liar is in Room 7. On this basis, Mr X utters

S: Someone in Room 7 is asserting something false.[2]

[2] Prior has universal quantification instead, which can be used to run a parallel argument: I prefer existential since I think even the most pathological liars often assert truths.

Argument that Mr X is saying more than one thing:[3]

[3] Valid in classical logic with quantification into sentence position:

1. $Q\exists Z(QZ \wedge \neg Z)$	Premise
2. $\neg\exists Z(QZ \wedge \neg Z) \rightarrow \exists Z(QZ \wedge \neg Z)$	1, EG
3. $\exists Z(QZ \wedge \neg Z)$	2, PC
4. $\exists Z(QZ \wedge Z)$	1, 3, EG
5. $\exists Z\exists Z'(QZ \wedge QZ' \wedge Z \neq Z')$	3, 4, LL

This formalisation treats 'proposition'-talk as just a way of pronouncing quantification into sentence position. If we instead wanted to embrace take propositions seriously as *objects* we would need to invoke the *propositional truth schema*,

> The proposition that *P* is true iff *P*

to get from (1) to (2) and from (1) and (3) to (4).

(1) Someone in Room 7 is saying that someone in Room 7 is saying something false. (Premise)

(2) If no-one in Room 7 is saying anything false, then someone in Room 7 is saying something false. (From 1)

(3) Someone in Room 7 is saying something false. (From 2)

(4) Someone in Room 7 is saying something true. (From 1 and 3)

(5) Someone in Room 7 is saying at least two things. (From 4 and 5)

- NB I am not *not* arguing for (1) from some premise like 'Any English speaker who utters *S* thereby asserts that someone in Room 7 is saying something untrue'. Merely knowing what words someone spoke is almost never sufficient to know that they said *p*, for any *p*.
- Still, we do often have such knowledge. (1) seems a straightforward case of it.[4]

[4] If you are inclined to deny this, consider variant arguments using 'Someone in Room 7 seems to be saying that…' or 'If one thought the person in Room 7 was in Room 6 one would take him to be saying that…', modifying *S* accordingly.

2 *Same sentence uttered, different propositions asserted*

At step (3), *I* uttered *S*; but unlike Mr X, *I* didn't say anything false by doing so. What makes the difference?[5]

[5] Prior 1961: p. 30: 'How, we all want to cry out, can what a man is thinking and even what a man can be thinking on a given occasion, depend on what number is written on the other side of a door?'

Add Ms Y in Room 8 and and Ms Z in Room 9, both uttering *S*. Ms Y, like Mr X, falsely believes that there is a pathological liar in Room 7. Ms Z knows what Mr X is uttering in Room 7 and why, and runs through the first three steps of the above proof.

- All three are saying that someone in Room 7 is saying something untrue
- Ms Z isn't saying anything false
- Ms Y is saying (roughly) the same things as Mr X, including something false.

3 *More than two propositions asserted*

A variant case: room 7 has a TV, that Mr X wrongly takes for a CCTV showing room 7. The TV has two channels. Channel 1 shows a clip of a pathological liar watching Fox News on channel 1 in room 7 and saying 'The US has the lowest Covid fatality rate in the world'. Channel 2 shows a clip of someone who thinks they are in room 6 watching that clip on channel 1, and uttering

S*: There is something false is asserted in room 7 and would be asserted in room 7 if the TV were on channel 1

Room 9 has a CCTV showing room 7.

- If the TV had been on channel 1, Mr X and Ms Z would both have asserted S*.
- In fact, the TV is on channel 2, and Mr X asserts S* for the same reason that Ms Z would have asserted it if the TV had been on channel 1.

P :=the proposition that there is something false that is asserted in room 7 and would be asserted in room 7 if the TV were on channel 1

(1) Mr X asserts *P* and would have asserted *P* if the TV had been on channel 1.

(2) If *P* is false, then *P* is true. (1)

(3) *P* is true. (2)

(4) There is something false that Mr X in fact asserts and would have asserted if the TV had been on channel 1. (3)

(5) If P would have been false if the TV had been on channel 1, then P would have been true if the TV had been on channel 1.[6] (1)

(6) P would have been true if the TV had been on channel 1. (5)[7]

(7) If the TV had been on channel 1, Mr X would have asserted something false. (6).

(8) There is a truth (namely, P), that would have been true and asserted by Mr X if the TV had been on channel 1. (1), (2), (6)

(9) Everything that Mr X in fact asserts would have been asserted by Ms Z if the TV had been ong channel 1. (Premise)

(10) Ms Z would have asserted nothing false if the TV had been on channel 1. (Premise)

(11) Everything that Mr X in fact asserts would have been true if the TV were on channel 1. (9), (10)

(12) There is something false that would have been true and asserted by Mr X if the TV had been on channel 1. (4), (11)

(13) If the TV had been on channel 1, Mr X would have asserted at least three things: something false; something that is in fact false but would have been true in that case; and something that is true and would have been true in that case. (7), (8), (12).

[6] Using the widely-accepted equivalence 'If A it would be that if A it would be that B' $\leftrightarrow$ 'If A it would be that B'. Using the controversial 'Conditional Excluded Middle' principle (Stalnaker 1981). But I think we can flesh out the example such that even those who reject this in general will be OK with it in this case.

4 *Linguistic meaning*

Another instance of Prior's theorem:

> If a sentence expresses the proposition that it expresses a false proposition, then it expresses at least two propositions.

L: L expresses a false proposition.

To avoid the conclusion that L expresses multiple propositions, we would have to deny that L expresses the proposition that it expresses a false proposition. That looks hard!

To avoid distractions about the semantics of temporary letter-names, we can instead consider predicates, and appeal to the following variant of Prior's theorem:

> If a predicate expresses *expressing some property that one lacks*,then it expresses at least two properties (viz. some property that it lacks, as well as at least one property that it has, namely, *expressing some property that one lacks*).[8]

[8] Derivation:

1.$Qx(\lambda y.\exists Z(QyZ \wedge \neg Zy))$	Premise
2.$\forall Z(QxZ \rightarrow Zx) \rightarrow \exists Z(QxZ \wedge \neg Zx)$	1, UI
3.$\exists Z(QxZ \wedge \neg Zx)$	2
4.$\exists Z(QxZ \wedge Zx)$	1, 3, EG
5.$\exists Z \exists Z'(QxZ \wedge QxZ' \wedge Z \neq Z')$	3, 4, LL

But surely, 'expresses a property it lacks' expresses *expressing a property one lacks*! So it expresses at least two properties.

5 *Sentential truth*

If we define 'true sentence' as 'sentence that expresses something and expresses only truths', the above claims about L carry over to:

Q: Q is not true.

So, Q is not true. If we define 'false sentence' as 'sentence that expresses something and expresses only falsehoods', then we also get that Q is not false.[9]

With these definitions our view counts as a 'classical gap theory'.[10] Standard challenge for classical gap theorists: why are you going around asserting sentences you think aren't true?[11]

Response: asserting *propositions* you think aren't true is bad, but on this definition of 'true', asserting *sentences* you think aren't true ('Tanks were invented during World War I').[12]

[9] Given that the negation of a sentence expresses $\neg p$ iff the sentence expresses p, this makes 'false sentence' equivalent to 'sentence whose negation is true'.

[10] Field 2008.

[11] See Maudlin 2006 for a response very different from mine.

[12] If we instead defined 'true sentence' as 'sentence expressing at least one truth' the view becomes a 'classical glut theory' where Q is both true and false. Classical glut theories face a dual challenge: what objection would you have if someone were to assert all these sentences that you say are true even though for some reason you hold back from asserting them? Our response is parallel: asserting sentences you think are "true" in this sense can be bad, if you're thereby asserting false propositions.

6 *Context-relativity*

Another instance of the property-variant of Prior's theorem:

> If, relative to some $\langle x, t, w\rangle$, a certain predicate expresses *being such that there is a property one lacks which one expresses relative to* $\langle x, t, w\rangle$, then it expresses at least two properties relative to $\langle x, t, w\rangle$.

HC: is such that there is a property it lacks and expresses relative to $\langle$me, the present time, the actual world$\rangle$.

(i) Relative to any $\langle x, t, w\rangle$, 'me' refers to x.

(ii) Relative to any $\langle x, t, w\rangle$, 'the present time' refers to t.

(iii) Relative to any $\langle x, t, w\rangle$, 'the actual world' refers to w.

(iv) Relative to some $\langle x, t, w\rangle$, 'express relative to' expresses *expressing relative to*.

(v) If, relative to $\langle x, t, w\rangle$, 'me' refers uniquely to x, 'the present time' refers uniquely to t, 'the actual world' refers uniquely to w, and 'express relative to' refers uniquely to R, then relative to $\langle x, t, w\rangle$, HC uniquely expresses *being an z such that there is a property Y such that z lacks Y and* $R(z, Y, \langle x, t, w\rangle)$.

(vi) So, monism about context-relative expressing is false.

7 *Infinitely many things expressed*

Predicate *a picks out* natural number $n :=$ *a* expresses some instantiated by n and nothing else.

B: is the least number not picked out by any predicate of fewer than 70 characters

Suppose for contradiction that there is a natural number not picked out by a predicate of fewer than 130 characters. Then there is a least such number n. Since n is the only number to instantiate *being the least number not picked out by a predicate of fewer than 70 characters*, and B expresses this property, B picks out n. But B has only 67 characters: contradiction.

Hence every natural number is picked out by a predicate of fewer than 70 characters, which implies that the finitely many predicates of fewer than 70 characters between them express infinitely many properties.

8 *The status of the disquotational meaning schema*

DM '*A*' expresses *A*.

The following all count as DM-instances:

(D1) 'Snow is white' means[13] that snow is white

(D2) 'is white' expresses *being white*.

(D3) '*L* expresses a falsehood' means that *L* expresses a falsehood

(D4) 'expresses a property it lacks' expresses *expressing a property one lacks*

[13] I'll use 'means' for the expressing relation between sentences and propositions.

They sound good! But some DM-instances, e.g. (D3) and (D4), must express some falsehoods, since they logically imply sentences (like '*L* expresses a falsehood') which express falsehoods.

- My view: not only (D3) and (D4), but even (D1) and (D2), express falsehoods as well as truths.

Puzzle: how is it that the negations of DM-instances get to *express* truths, when they sound so bad?

Observation: Any falsehood expressed by (D1) is of the form *M*('Snow is white', *q*), where 'means' expresses *M* and 'snow is white' means *q*. So for (D1) to mean something false, 'means' must express some *M*

that's narrower than *meaning*, in the sense that it fails to hold between 'snow is white' and some propositions that it means.

First consider a case of non-literal speech: 'Travolta is a comet', used to convey that Travolta is intermittently famous. Once we commit to the metaphor, we could go on to...

- say 'Travolta is not a comet' to convey that Travolta is not intermittently famous.
- say 'People think that Travolta is a comet' to convey that people think that Travolta is intermittently famous
- say '"Snow is white" doesn't mean that Travolta is a comet' to convey the truth that 'Snow is white' doesn't mean that Travolta is intermittently famous.
- say (14) to convey the truth that 'Travolta is a comet' doesn't mean that Travolta is intermittently famous.

  (14) 'Travolta is a comet' doesn't mean that Travolta is a comet

This elucidates how someone might end up using the negation of a DM-instance to *convey* a truth, though in this case the truth isn't *meant* since the use is non-literal.

But now reflect on the flexibility of 'literal' itself. Plausibly, 'literal' expresses both a property that applies to the Hollywood use of 'is a star' and a more demanding property that doesn't. Let's stipulate that in the following argument it's being used in the former way.

If we had gone for the more demanding standard for 'literal', we would also have said:

(15) 'Travolta is a star' doesn't mean that Travolta is a famous actor

And if we combined the demanding use of 'literal' and 'mean' with the Hollywood use of 'star' we could get the same truths across by saying:

(16) 'Travolta is a star' doesn't mean that Travolta is a star

Here as with (14) we are *conveying* a truth (the same one we convey with (15)). But our use of (16) to convey these truths would be *literal* one.[14] So we should accept 'There is a truth among the propositions meant by (16)'.

This gives us our hoped-for purchase on what the truths meant by the negations of DM-instances are like, and how they end up being expressed despite their somewhat odd-sounding character.

[14] It doesn't have the properties we would *then* refer to with 'literal', but that doesn't matter.

References

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