

Propositional Profusion and Semantic Plasticity

Cian Dorr

Arché Propositions Workshop, May 2011

1. Propositions: what I'm going to be assuming

- (1) The proposition that ϕ is necessarily (true iff ϕ).
- (2) The proposition that ϕ is necessarily (believed[/asserted/known] by all and only those who believe[/assert/know] that ϕ)
- (3) The proposition that ϕ is necessarily such that all and only those who ψ that ϕ bear the " ψ ing relation" to it. (For any attitude verb ψ .)

2. My claim

Propositional Profusion: Almost always, when an ordinary concrete entity bears an ordinary relation to a proposition, it bears it to many similar, non-equivalent, propositions.

Examples of 'ordinary relations': believing, asserting, knowing, being confident in, intending to communicate, entertaining, consciously believing, being a content of, semantically expressing, referring to. (Not: being the conjunction of everything believed by).

Examples of 'ordinary concrete entities': people, times, sentences, mental vehicles. (Not: events of asserting, if we don't mind positing huge numbers of these).

Why 'almost always'? (i) Maybe sometimes when doing mathematics and physics we manage to assert just one proposition at a time. (ii) Perhaps continuity considerations sometimes license the claim that in a continuum of cases ranging from one where nothing is asserted to one where many propositions are asserted, the first case where any propositions are asserted is one where only one proposition is asserted.

What is similarity among propositions? Paradigms: the proposition that I am at least 2 metres tall, the proposition that I am at least 2.000001 metres tall.

- It's not just differing in truth value at only a few worlds. The proposition that I am either at least 2 metres tall or exactly 1.7 metres tall isn't 'very similar' in the intended sense to the aforementioned propositions—'gerrymandering' matters too.

3. How I will not be arguing

'Since these propositions are so similar, how could we single one out from all the rest?'

I am happy to say that there is exactly one person sitting in this chair, even though there are many very similar, overlapping, non-people. (Although they are borderline cases of 'person'.) Similarly, I love my children without loving any their overlappers.

My arguments will *not* just recapitulate the Problem of the Many.

4. Some familiar precedents

Multiple propositions asserted at once: (i) 'I got plastered'. (ii) 'The man drinking a martini is a spy'. (iii) All kinds of non-homophonic indirect reports.

Multiple propositions semantically expressed: (i) the standard supervaluationist framework for vagueness; (ii) the non-Kaplanian, 'incompleteness'-based approach to words like 'ready', possessives, etc.

- My picture: when you speak literally, you assert *some* of the propositions semantically expressed by the sentence you utter. (And often some that are not semantically expressed—e.g. conjuncts of a conjunction...)

Multiple propositions in which one is very confident: classical behaviorist accounts of degrees of confidence, and many of their sophisticated successors.

5. Disquotational objections

'What propositions other than the proposition that snow is white could 'snow is white' possibly express? Name some!'

- Get used to the idea that even though only one proposition is identical to the proposition that snow is white, still 'the proposition that snow is white' refers to many propositions.

'Surely there is *some* theoretically very significant relation that "snow is white" bears only to the proposition that snow is white.' — Nope.

6. The argument from semantic plasticity

Everyday, acceptable counterfactuals with attitude reports in the consequent:

1. If we had taken Sally to Giorgio's, she would have said she was happy with any kind of salad.
2. If she had walked in, I would have told her to stop making fun of my baldness.
3. Even if I had been brought up a fundamentalist, I would still have ended up believing that most of Darwin's important claims were right.

In lots of cases—viz., when there are no 'joints in nature' in the vicinity—there is good reason to think that the facts about which propositions we are related to are *extremely* sensitive to differences in the underlying physical facts.

Worry: how can we be confident that under the given counterfactual circumstances, the relevant physical parameters would have taken on the exact right values to allow for the assertion of just *these* propositions, as opposed to closely similar ones?

7. Temporal, spatial analogues

8. Sharpening the worry

The assertion-eligibility of a proposition P relative to a finite-volume region R in phase space = the proportion of R occupied by points that evolve into worlds in which someone at some point asserts P .

An argument that all the propositions in some infinite set S (e.g. of propositions about the length of a certain stick) have zero assertion-eligibility relative to some (finite-volume, physically non-gerrymandered) region R :

Premise 1 (*Parity*): Either all the propositions in S have zero assertion-eligibility relative to R , or all of the propositions in S have nonzero assertion-eligibility relative to R .

Premise 2 (*Finitude*): At each world in R , only finitely many propositions in S are asserted.

Premise 3 (*Non-denumerability*): S contains uncountably many propositions.

Conclusion: All the propositions in S have zero assertion-eligibility relative to R .

On an attractive picture of counterfactuals under determinism, this conclusion would prevent (1–3) from being true.

- Lewis has a competing picture: if we had gone to Giorgio's, there would have been a 'miracle'— a counterexample to the actual laws of nature. Against this: imagine giving a talk whose central claim is that Newton's laws hold without exception. 'If I had come on an earlier train, my central claim would have been false'.
- Why not include a lot of hypersensitive semantic facts as part of what we hold fixed in evaluating the counterfactuals? This might generate outlandish results: 'If we had called Fred 'bald', that bus that actually missed us would probably have hit us, thereby preventing anyone in the community from hearing about this use of 'bald'.'

9. The jumpy view

First arbitrariness worry: given that the propositions in S seem on a par from the point of view of fundamental metaphysics and physics, how can they be so different as regards how easy it is to bear attitudes to them?

Second arbitrariness worry: where do the jumps happen?

Epistemic worry: how could we *know* that the difference between the actual world and the world as it would have been if we had done such-and-such isn't one of the ones that make a difference?

The "hybrid jumpy view": facts about what is expressed by ordinary non-semantic vocabulary supervene in a jumpy way. But facts about what is expressed by sentences containing words like 'assert', 'believe', 'semantic value', etc., supervene in a hypersensitive way. At every reasonably close world, 'you have to go some way from the actual

world before you reach a word where the semantic facts about non-semantic sentences are different' expresses a truth.

- This view vindicates (1–3), but not counterfactual embedded attitude reports: 'If we had gone to the other restaurant, I would still have told you that Felix said you were good-looking'.

10. Vagueness and the jumpy view

One could say 'definitely there are jumps, but it is indefinite where they occur'. But then the counterfactuals will only be indefinite.

11. Profusion to the rescue

If Profusion is true, then Finitude fails.

What Sally asserts in the actual world when she says 'It's best to end a meal with a salad' largely overlaps what she would have asserted using those words if we had gone to Giorgio's.

Almost certainly, there is *some* proposition that Sally in fact asserts and wouldn't have asserted we had gone to Giorgio's. And this proposition is among those semantically expressed by 'It's best to end a meal with a salad'. So (1) semantically expresses some falsehoods (and lots of truths). But when I assert (1), I don't assert those falsehoods, since I don't believe them.