

PHIL 6710: Epistemic Modality
Week 6: Relativism

The basic idea¹

1. The truth of an (epistemic) utterance of ‘Possibly S’ or ‘Necessarily S’ depends upon the knowledge of the person who is *assessing* its truth value, not upon the knowledge of the *utterer*.
2. In particular: An utterance of ‘{Possibly, Necessarily} S’ by i_1 at t_1 is true as assessed by i_2 at t_2 iff the prejacent p {is compatible with, follows from} what i_2 knows at t_2 .
3. How this is supposed to help with eavesdropper cases:
 - a. When John at t_1 utters ‘Mary might be at the store’, his utterance is true as assessed by John at t_1 , because it is compatible with John’s knowledge at t_1 that Mary is at the store at t_1 . John at t_1 correctly judges the utterance to be true.
 - b. As assessed by an eavesdropper at t_1 who knows that Mary is not at the store at t_1 John’s utterance is false, because it is not compatible with what the eavesdropper knows at t_1 that Mary is at the store at t_1 . The eavesdropper at t_1 correctly judges the utterance to be false.
 - c. When John at t_2 comes to learn that Mary is not at the store, he becomes an assessor relative to which his utterance is false, because it is not compatible with what John knows at t_2 that Mary is at the store at t_1 . John at t_2 correctly judges the utterance to be false.
4. Relativists deal with the Hacking salvage crew case and the three cup case in the same kind of way.
5. This is the basic idea. But can it be fleshed out in a principled and general way?²

The details

6. We can put the central relativist claim in terms of sentences, utterances, or propositions:
 - a. In terms of *sentences*:
The truth of ‘Possibly S’ and ‘Necessarily S’ is relative to a context of utterance, a circumstance of evaluation, and (the new bit) a point of assessment.³

¹ On relativism in general see MacFarlane (2005) and Zimmerman (2007, pp. 313-24). On relativism applied to epistemic modality see Egan et. al. (2005, pp. 29-42), Egan (2007, pp. 7-39), and MacFarlane (2008, pp. 26-56). Also see the brief overviews in Wright (2007, pp. 1-5), Hawthorne (2007, pp. 93-4), and von Fintel and Gillies (2008, pp. 78-81).

² On relativism applied to *future contingents*, see MacFarlane (2003); against him see Heck (2006). On relativism applied to *taste*, see Lasersohn (2005) and Stephenson (2007); against them see Glanzberg (2007). For relativism applied to knowledge attributions, see MacFarlane: ‘The Assessment Sensitivity of Knowledge Attributions’.

- b. In terms of *utterances*:
The truth of an utterance of ‘Possibly S’ or ‘Necessarily S’ is relative to a circumstance of evaluation and (the new bit) a point of assessment.
- c. In terms of *propositions*:
The truth of the proposition expressed by an utterance of ‘Possibly S’ or ‘Necessarily S’ is relative to a circumstance of evaluation and (the new bit) a point of assessment.
7. Circumstances of evaluation are typically taken to be worlds. So we can call them *worlds of evaluation*. They are sometimes taken to be pairs of worlds and times (more later).
 8. Points of assessment determine an individual and a time (that’s what relativists need to get things to work out). Since individuals are located in worlds, we need points of assessment to determine a world as well. We could take points of assessment to be *centered worlds*: triples (w, t, i) , where w is a world, t is a time, and i is an individual in w .
 9. We could allow that the world of evaluation and the world of assessment are distinct. So that the truth of a proposition is relative to a world of evaluation w , and a point of assessment (w', t, i) . This seems to be what MacFarlane does.
 10. Or we could require the world of evaluation and the world of assessment to be identical. So that the truth of a proposition is relative to a world of evaluation w , and a point of assessment (w, t, i) . Then we could more simply say that the truth of a proposition is relative to a centered world (w, t, i) . This seems to be what Egan does.
 11. On a more standard view of propositions, they are true relative to worlds but nothing else. On this view we can think of a proposition as being a function from worlds to truth values, or as being a set of worlds, or as *determining* such things.
 12. But if propositions are true relative to worlds and points of assessment, then we ought to think of them as being functions from *pairs* (w, a) to truth values (where w is a world and a is a point of assessment), or as being sets of such pairs, or as determining such things. If these pairs are of the form $(w, (w, t, i))$ (as on the Egan approach), then we can take propositions to be functions from triples (w, t, i) (i.e. centered worlds) to truth values, or as being sets of such triples, or as determining such functions and sets.
 13. But wait: ‘proposition’ is a technical term, *stipulated* to refer to things whose truth is relative to a world and only a world – anyone who suggests that their truth is relative to something else as well does not understand the word ‘proposition’.

But that’s not right. ‘Proposition’ is stipulated to refer to whatever things they are that: are the objects of propositional attitudes (e.g. beliefs), are the semantic values of declarative sentences, are the ultimate bearers of truth, and so on. It is a bit of theory about propositions that they are true relative to and only to worlds.

³ Terminology may vary. von Fintel and Gillies (2008), for example, talk about *indices* of evaluation.

14. We can draw a distinction between the truth of a proposition being *relative* to points of assessment, and its being *sensitive* to points of assessment: the truth of p is *sensitive* to points of assessment iff there is a world w and points of assessment a, a' such that p is true at w relative to a but false at w relative to a' .

Relativists claim that the truth of propositions is *relative* to points of assessment. At least some propositions (they need not say all). That by itself is perhaps not interesting, because it might be argued that the truth of propositions is relative to *colors*. Relativists also claim that the truth of at least some propositions (e.g. some of those expressed by ‘Possibly S’ and ‘Necessarily S’) is *sensitive* to points of assessment.

15. Here is a fairly general relativist variation of the standard account:
- a. ‘Possibly S’ relative to a context of utterance C expresses, for some conversational background f determined by C, a proposition that is true at a pair (w, a) iff the prejacent p is compatible with the propositions in $f(w, a)$.
 - b. ‘Necessarily S’ relative to a context of utterance C expresses, for some conversational background f determined by C, a proposition that is true at a pair (w, a) iff the prejacent p follows from the propositions in $f(w, a)$.
16. Relativists typically say that when ‘Possibly S’ and ‘Necessarily S’ are used epistemically, f is such that $f(w, a)$ is what the center of a knows in the world of a at the time of a .
17. But they need not. They *could* allow that sometimes f is such that $f(w, a)$ is what the speaker in C knows in w at the time of C (more like the standard account). This would help them avoid certain objections (more about this next time).
18. Conversational backgrounds. On the standard account they are functions from worlds to sets of propositions. It thus seems natural for the relativist to take them to be functions from *pairs* (w, a) to sets of propositions. This allows that sometimes the propositions picked out depend on the assessor, and sometimes they do not. This flexibility could be needed to handle various cases.

Perhaps for some kinds of modality $f(w, a)$ is insensitive to a . Are there cases of non-epistemic modality in which $f(w, a)$ is sensitive to a ?

19. Compatibility. On the standard account of compatibility, propositions p and q are compatible iff there is a world in which they are both true; that is, iff their extensions overlap. But what if they are assessment relative? Probably natural to maintain that they are compatible iff their extensions overlap: there is some pair (w, a) such that p and q are both true at w relative to a . If p and q are not assessment sensitive, then maybe we can think in terms of standard compatibility.

20. If we plug in this account of compatibility we get:

- a. ‘Possibly S’ relative to a context of utterance C expresses, for some conversational background f determined by C, a proposition that is true at a pair (w, a) iff there is some pair (w', a') such that the prejacent p and the propositions in $f(w, a)$ are all true at w' relative to a' .

Assertion and belief

21. An issue that relativists need to address: is it plausible that the things we believe and assert (for example) are assessment-relative? Egan (2007) addresses this issue.
22. Let PANTS be a centered-worlds proposition that is true of (w, t, i) iff i 's pants are on fire at t in w .
23. What is it to *believe* PANTS? He suggests: i believes PANTS at t in w iff i believes that PANTS is true of (w, t, i) (i.e. that i 's pants are on fire at t in w). (Compare with might we might standardly say: i believes p iff i believes that p is true at her world.)
24. Question: does this suggest that it is not really PANTS that is believed? Is PANTS the kind of thing that we *can* believe?
25. Related question: setting aside relativism, are world-relative propositions the kinds of things that we believe?:
- A: I believe that grass is black
 B: In which world – the actual world?
 A: No, no world. I just believe that grass is black
- Perhaps there are things whose truth is relative to a world, but perhaps they are not the objects of our beliefs, and so perhaps they are not propositions. More about this next time.
26. What is it to *assert* PANTS? Egan suggests: to try to transmit belief in PANTS (roughly).
27. But then PANTS is not the sort of thing that we ought to assert: if I believe PANTS it would be wrong of me to try to get you to believe PANTS.
28. *Unless* we are relevantly similar: in circumstances such that either both or neither of us has burning pants.
29. He suggests a centered-worlds propositions for which it is more likely that you and I are relevantly similar: SYDNEY, a proposition that is true of (w, t, i) iff i is within one mile of Sydney at t in w (he uses ‘nearby’).
30. His point is not that we ever *do* use natural language sentences to express PANTS or SYDNEY, just that there is a market for them.
31. But is there such a market, given that we have the word ‘we’?