

The Case for Probabilistic Assertion

Thesis: We can assert probabilistic contents

I. Familiar arguments against propositional contents of assertion

- **Main Claim:** Assertions using epistemic modals do not assert propositional contents.
- **Argument for Main Claim:**
 - 1. All accounts (or at least the best accounts) of epistemic modals which argue that they do express propositional content are contextualist. 2. Contextualist theories of epistemic modals are false. 3. So, assertions using epistemic modals do not assert propositional contents. 4. So, we can assert non-propositional content.
- Premise 1 is more or less unargued for. She only says that contextualist semantics is the “Starting point for contemporary truth-conditional theories of epistemic modals”. (I don’t know much about epistemic modals, so I don’t know if there are other propositional content theories on the market or if there is some general argument in the literature that they all have to be contextualist).
- In arguing for Premise 2 she argues against the contextualist theory that says that epistemic modals assert propositions about contextually determined bodies of evidence.
 - E.g. “Jones might smoke” is true at a context iff it is consistent with the contextually relevant evidence that Jones smokes. “Jones probably smokes” iff it is probable on the contextually relevant evidence that Jones smokes.
 - Some problem cases:
 - Some criminals say “It is unlikely that James Bond is in London”. Later, they find out James Bond probably is in London, then they would retract their initial claim. But, their initial claim was true if the evidence was restricted to what they had at the time, and if the evidence is much more broad they weren’t justified in making their initial assertion.
 - Suppose “It is probably raining” means “Given our evidence, it is probably raining”. But, “Suppose it is not raining and that [given our evidence, it is probably raining]” sounds fine, but “Suppose it is not raining and that [it is probably raining]” sounds bad.

- Intuitively, “It is likely that Jones smokes” is purely about Jones, whereas contextualist translations like “Given my evidence, ___” or “Given our current evidence, ___”, or “Given everything we know or could easily find out ___” is partly about our mental states.
- Probabilistic content avoids these problem cases:
 - Suppose that the content of “It is unlikely that Bond is in London” is the set of probability spaces that assign less than .5 probability to Bond being in London.
 - The criminals may retract the content because later they believe in incompatible probabilistic contents.
 - “Suppose it is not raining and that it is probably raining” sounds bad because the content of “it is probably raining” and the content of “it is not raining” may be disjoint probability spaces.
 - The content of “It is likely that Jones smokes” doesn’t directly involve anyone’s mental states.

II. General Foundational Arguments

- Argument 1: Probabilistic contents unify communication of full and probabilistic beliefs
 - On the propositional view, I can only communicate full beliefs directly. Probabilistic beliefs can only be communicated indirectly (to communicate my high credence in something I have to communicate, say, that my evidence supports it very well.) On the probabilistic view, I can directly communicate it.
- Argument 2: Probabilistic content unifies relation between belief and assertion.
 - Staffel argues that we can reason with probabilistic beliefs, and we can verify this by introspection and empirical studies. If we can judge probabilistic beliefs, we can assert them. There is no restriction between inner and outer speech. If you can believe a content, you can judge it. If you can judge it, you can assert it.
 - Some authors even go so far as to define belief in terms of assertion. According to the Assertion View of Belief defended by Kaplan, you believe that P just in case you would prefer to assert that P under certain circumstances. Similar connections between believing P and having a

disposition or commitment to assert that P are defended by De Sousa, Van Fraassen, Maher, and others.

- Argument 3: The default view is that beliefs can be shared. (Wittgenstein famously argues that we can't have private thoughts that we can't share with others). Since we can have probabilistic beliefs, we can share those. Also, in just the same way that probabilistic beliefs can figure in your personal reasoning and guide your actions, they can figure in our joint reasoning and guide our collective actions.

III. Modeling Communication

- Standard Story: The contents we assert are added to the *common ground* of the conversation. The contents of assertion are sets of worlds, and the state of our conversation is represented by the *context set*, which is the intersection of all the contents in the common ground. Sets of possible worlds play four roles. 1. Contents of individual beliefs 2. They represent your total belief state (intersection of all the contents you believe) 3. Sets of worlds are contents of assertions. 4. They represent the total state of conversation.
- New story: Add probabilistic structure to conversational common ground. Two options:
 1. *Sharp context probabilism*: state of conversation is represented by a single probability space.
 2. *Blunt context probabilism*: state of conversation is represented by set of probability spaces.
 - Both let sets of probability play the first and third roles (contents of individual beliefs and contents of assertions.) However, according to both, only one probability space fulfills the second role representing your total belief state. They differ on what plays the fourth role: sets of probability spaces vs a single probability space.
 - *Sharp* implausibly adds too much structure to the conversation. If no one has said anything about how likely Jones smokes, then it's not part of the common ground. So, *Blunt* is the way to go.

IV. Epistemic modals and indicative conditionals

- So far, we've only talked about beliefs that supervene on your credences (like believing that it is unlikely that James bond is in London). But, it applies more broadly.
 - For example, you are throwing a dart at a bulls-eye, and you think you're equally likely to hit every point on the dart board. So, you have credence 0 you'll hit the bullseye. You also have credence 0 you'll hit the Eiffel tower. Two people can have these credences but one might believe "I might hit the Eiffel tower" and the other "It's not the case that I might hit the Eiffel tower" in virtue of which possibilities are in their probability space.
 - Lastly, triviality results about indicative conditionals and other epistemic expressions challenge propositional content views (Sarah says she explores this more in the fourth chapter).