

CHAPTER 1: THE CASE FOR PROBABILISTIC BELIEFS

General project. To present and defend a novel account of how theories of assertion and knowledge should incorporate *credences*, consisting of following theses:

- (1) We can believe probabilistic contents.
- (2) We can assert probabilistic contents.
- (3) We can know probabilistic contents.

In short, a defense of *probabilistic assertion* and *probabilistic knowledge*.

Particular project. To defend (1), that we can believe probabilistic contents, by substantiating the following claims: (a) belief-contents just are whatever objects play certain theoretical roles; (b) probabilistic contents play said theoretical roles.

Starting assumption. We have *probabilistic beliefs*. Neutral construal: probabilistic beliefs are beliefs that are best represented using *probability spaces*, where probability spaces are pairs of worlds and probability functions. Examples:

- It is .6 likely that Jack smokes.
- It is .3 likely that Branden smokes.
- Jack is more likely to smoke than Branden.

There are two main competing models of probabilistic belief: the *complex attitude account* and the *complex content account* of probabilistic belief.¹ Honing in on the probabilistic belief:

- It is .6 likely that Jack smokes.

Complex attitude account. The complex attitude account says that a probabilistic belief is a complex attitude with a simple content. The complex attitude is *believing to degree .6*, while the simple content is *the proposition that Jack smokes*.

Complex content account. The complex content account says that a probabilistic belief is a simple attitude with a complex content. The simple attitude is simply that of *believing*, while the complex content is the content *it is .6 likely that Jack smokes*, otherwise known as a *probabilistic content*.

¹ **Warning.** It is important to stress what probabilistic beliefs are *not*: they are *not* full, outright beliefs about probabilities. They are *not* full, outright beliefs about objective chance facts. Rather, probabilistic beliefs include partial beliefs, degrees of belief, degrees of confidence, or subjective probabilities (2).

Temptation to prefer complex attitude account. We may be tempted to prefer the complex attitude account in the name of *theoretical simplicity*. The *prima facie* simplicity of the complex attitude account, however, is *merely prima facie*. The complex attitude account and complex content account are on *equal footing* as far as theoretical simplicity goes.

How to recommend the complex content account. Observe that (a) belief-contents just are whatever objects can play certain theoretical roles, and, that (b) probabilistic contents play said roles.

Theoretical job description of belief-contents. Belief-contents have been called upon to fill a number of theoretical roles. In particular, they have figured importantly in models of *rational action*, *(dis)agreement* (both inter- or intra-personal), as well as the rational constraints of *consistency* and *closure*:

Rational Action. The fact that agents have beliefs with the *same* content can help explain why those agents act in the same way. The fact that an agent has beliefs with the *same* content at different times can help explain why that agent acts the same way on those different occasions.

Inter-personal (Dis)agreement. Whether individuals agree or disagree is a function of whether they have beliefs with the *same* content or with *incompatible* contents.

Intra-personal (Dis)agreement (over time). The phenomenon of changing one's mind may be understood as involving believing some content at one time and later believing some incompatible content. In this way, changing one's mind may be understood as *disagreeing with one's earlier self*.

Ideal Rationality. Whether an individual's beliefs satisfy the *consistency* constraint on rational belief has to do with whether or not her beliefs have compatible or incompatible contents. Whether an individual's beliefs satisfy the *closure* constraint depends on entailment relations between the contents of her beliefs.

Probabilistic contents fit the bill. The theoretical job descriptions of belief contents can be filled, not just propositions, but also by sets of probability spaces over propositions, which is just to say that *probabilistic contents can serve as belief contents*.

Further points of recommendation. Complex content account is preferable because it (1) better explains how probabilistic contents stand in the same logical relations as propositions; (2) provides unified explanation of (in)consistency relations across various belief-like attitudes; and, (3) better accommodates ordinary language.

Non-cognitivism about probabilistic-thought and -talk. If Moss's complex content account of probabilistic beliefs is correct, then probabilistic-thought and -talk is not truth-evaluable. The content and meaning of said -thought and -talk is not propositional, but structurally probabilistic: sets of probability functions over propositions. And these sets cannot, strictly speaking, be true or false—they are not properly evaluated along the metric of truth-falsity. The content of probabilistic beliefs, is, then, tantamount to a cognitive thumbs-up and thumbs-down (and everything in between).

Salient question. By what metric can we evaluate probabilistic beliefs? What does it mean for a probabilistic belief to be defective, on Moss's account? Perhaps a metric of propriety or fittingness.

A couple of ways to push-back.

Supposing Moss is right about (a) and (b), is this enough to recommend the complex content account to us over the complex attitude account? Why not just think she shows that her system is a coherent candidate position? Might we want to say that it takes more for an account of belief-contents to be right? In short, a *methodological step-back*: what sorts of considerations should recommend one model or representation of (probabilistic) belief over the other? Also: how does the distinction between saying “these *are* the mental states we in fact have” and “this is a legitimate way to *represent* the mental states we in fact have” bear on this methodological point? Should we read Moss as making the first or second claim?

Moss doesn't seem to be (entirely) right about (a) or (b). *First*, Moss's multi-faceted presentation of the theoretical job description of belief-contents omits an important feature traditionally attributed to belief-contents, namely that of truth-aptness or aiming at truth, over and above being representational (beliefs, unlike supposings or imaginings, aspire to knowledge!).

Second, it's unclear credal states are the sorts of things that can be in (dis)agreement with each other. It seems possible for folks to agree about some subject matter while having different credal states vis-à-vis said subject matter. Alternatively, if it's right to say folks can disagree by virtue of having different credences, it's unclear why attitudinal difference toward some proposition isn't enough for disagreement.