Propositions as Objects of the Attitudes [DRAFT: comments welcome]

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Introduction

Our propositional attitudes – our beliefs, desires, and so on – are so-called because they are standardly assumed to be relations between agents and propositions. Such mental states are, it is claimed, factorable into two components: an attitudinal relation and a proposition that is the "object" of that state. For example, Carla's belief that Oscar snores is factorable into an attitudinal relation, *believing*, and the proposition that Oscar snores; the proposition being, in some sense, what Carla believes. Although propositions have been asked to play many roles in philosophy – for example, the fundamental bearers of truth and falsity, the bearers of modal properties, the meanings of declarative (contextinsensitive, unambiguous) sentences - it is their role as objects of the attitudes that has found a place of prominence in much of the debate in the 20th century regarding their metaphysical status. For example, debates between Fregeans, Russellians, and those theorists who would identify propositions with sets of possible worlds typically boil down to the questions of whether their particular favored kind of propositional entity is, or is not, suitably "fine-grained" to capture various facets of our propositional attitudes. But despite these important metaphysical disagreements, all such theorists will agree a, if not the, central job for propositions is to be the objects of our attitudes.

Whatever else they might be, propositions are the things we believe, intend, desire, and so on, but discussions are often less precise than they could be and an important driver of this deficiency has been a focus on the *objects* but a neglect of the *attitudinal relations we bear to them.* In what follows, we will offer some thoughts on what it means for a proposition to be the object of an attitude and we will argue that an important part of the story lies with the attitude relations rather than the propositions. As we will see there are infinitely many relations we might bear to a proposition, but the propositional attitude relations are special amongst them. Accounting for what makes them special will be an important component in the discussion that follows. We will argue that once one appreciates certain facts about *propositional attitude relations*, various claims that metaphysicians often make regarding propositions themselves begin to look undermotivated. In fact, many views on the metaphysical nature of propositions come to look like plausible candidates for

being that to which our propositional attitudes relate us. As will emerge, we will see that the principle role of propositions in the theory of mind is simply to keep track of how our attitudinal states represent things as being. But, we argue, in order to do this work, very few constraints must be placed on the nature of propositions themselves. In particular, contra much of the recent work on the metaphysics of propositions, they need not represent nor must they be structured. In light of these observations, we conclude by sketching our own favored minimalist view of propositions.

What Does Is Mean To Say That Propositions Are the "Objects" of the Attitudes?

Many, if not all, of our mental states are *intentional* in the sense that they that are *about* or *directed upon* things. Consider, for example, the attitude expressed by 'loves' in (1):

(1) Mary loves Bill.

In (1), 'loves' expresses a relation between Mary and Bill, as is witnessed by the intuitively valid inferences to (2) and to (3):

(2) Mary loves someone.(3) Bill is who Mary loves.

Unlike a relation such as being-4-feet-to-the-left-of, *loving* is an intentional relation; in (1) Bill isn't just the object of Mary's love in the sense of being a relata of the relation expressed by 'loves', rather, her loving is *directed at*, or *about*, him. Bill is the *intentional object* of Mary's love.

It is oftentimes claimed that propositions are the "objects" of our propositional attitudes, as well. The analogies between (1)-(3) above and the following are suggestive on this score:

- (1') Mary imagines that snow is white.
- (2') Mary imagines something.
- (3') That snow is white is what Mary imagines.

From (1'), both (2') and (3') look to follow. And in just the way that 'Bill' in (3) contributes a relatum of the relation expressed by 'loves', the 'that'-clause in (1') seems to contribute a relatum of the relation expressed by 'imagines'. And plausibly, the relatum specified by the 'that'-clause is a proposition, namely the proposition that snow is white. So, there is good (and indeed familiar) reason for thinking that propositional attitudes are indeed relations between agents and propositions. But crucially there is more to the story. As with *loving*, propositional attitude relations are intentional – they have aboutness or directedness. By our lights, however, this is where the analogies between (1) and (1') start to break down. Propositions are not themselves the "objects" of our propositional attitudes in anything like the way that Bill is the intentional object of Mary's loving. Though philosophers do sometimes talk as though our propositional attitudes are "directed at", or are "towards", or even "about" the propositions they have as their contents, this are a number reasons for thinking that this is, at the very best, a misleading way of speaking.¹

First, it is misleading to treat propositional attitudes as if they are those relations literally directed at, or about, propositions. It is the exception, rather than the norm, that our propositional attitudes are themselves about propositions. Consider, for example, (4):

(4) Mary believes that the proposition that there is no largest prime number is exceedingly plausible.

In this case, Mary has a propositional attitude about a proposition, *the proposition that there is no largest prime number*. She has a belief to the effect that *it* is exceedingly plausible. Notice, however, that this proposition is not, in any sense, what Mary believes. Rather, what she believes is that this particular proposition is plausible – a more complex belief that predicates being plausible of a proposition. While propositional attitudes are indeed relations to propositions in all cases, it is only in special cases that they are *about* propositions in the way that Mary's love is about Bill or her belief that snow is white is about snow. We can mark this distinction in a familiar way by saying that the *content* of

¹ Nathan Salmon and Scott Soames write, "We…bear cognitive attitudes **toward** [propositions]. Propositions are what we believe, disbelieve, or suspend judgment about. When you fear that you will fail, or hope that you will succeed…the object of your attitude is a proposition" (1988, p. 1). John Perry writes, "The phenomenon of intentionality suggests that attitudes are essentially relational in nature: they involve relations to the propositions **at which they are directed**" (1994, p. 387-8). And in the Stanford Encyclopedia entry on Belief, Schwitzgebel says it that "a *propositional attitude*, then, is the mental state of having some attitude, stance, take, or opinion **about** a proposition or about the potential state of affairs in which that proposition is true—a mental state of the sort canonically expressible in the form "*S A* that *P*", where *S* picks out the individual possessing the mental state, *A* picks out the attitude, and *P* is a sentence expressing a proposition [emphasis ours].

her belief is *that the proposition that there is no largest prime number is exceedingly plausible*, and her belief is *about* the proposition that there is no largest prime number (perhaps amongst other things such as the property of being plausible). In short, the propositional content of her belief is one thing, but the thing (or things) her belief is about is another. This distinction needs to be kept in mind across the board, not just in cases such as (4); in general the content of an attitude comes apart from what the attitude is about even if the latter is determined by the former.

The second closely related reason for resisting the idea that propositional attitude relations are those relations directed at, or about, propositions is that one might have an attitude about a proposition and yet not be in a propositional attitude state. Carla might (irrationally) fear a proposition the way some people fear a person or a growling dog.² We might call this an 'objectual' fear.³ And Carla might like some particular proposition the way some people have a favorite number they like the most. We might call this 'objectual' liking. It's hard to deny that when one fears the growling dog, her fear is about the dog. And we can allow that one who very oddly fears the proposition that Oscar snores has a fear *about a proposition*. And yet, by being about a proposition, the fear seems not to be of the same sort as fearing propositionally. When one fears, for example, that the exams will be hard to read, one does not thereby fear any proposition. If we understand propositional attitudes as being those cognitive relations that are literally about propositions, it is hard to see how we will keep these differences straight. What we seem to need, again, is a distinction between the content of an attitude and what the attitude is about.

But the foregoing considerations raise a natural question: what is it for a proposition to be a content? Or in other words, what's special about propositional attitude relations that differentiate them for the myriad other relations we might bear to propositions? For example, suppose that Rosa-Linda is standing two feet away from a notebook that contains a French sentence that expresses the proposition that pugs snore. In such a case, Rosa-Linda indeed stands in some relation to the proposition that pugs snore, but no one is so much as tempted to think that this is a way of her having a propositional attitude with that proposition as its content. Not just any relation an agent might bear to a proposition makes for a propositional attitude relations. For instance, as the objectual cases (e.g., Rosa-Linda

 $^{^{2}}$ See Merricks (2009) for further discussion of such cases and their bearing on whether fearing is a propositional attitude.

³ See Forbes (2000) and Grzankowski (2016) for additional discussion of such attitudes.

fears the proposition that pugs snore) above suggest, it isn't enough to claim that the relevant relation between agents and propositions must be a cognitive one either. There must be some other special relationship that holds between the propositional attitudes and their propositional contents.

As a first step towards seeing what this special relationship might be, notice that one important feature of propositional attitude relations is that when one stands in one of them to a proposition, one must represent things as being a certain way. For example, if you stand in the belief-relation to the proposition that snow is white, then you must be in a state that, among other things, represents snow and whiteness. But notice that no such representational demand is placed on Rosa-Linda in cases such as having a piece of paper in her pocket with a sentence on it that expresses the proposition or in the case of fearing a proposition. In order to be in a propositional attitude relation to a proposition, one must meet certain representational demands.

We think that this representational demand underwrites the distinction between genuine propositional attitudinal relations and other relations we might bear to propositions. Moreover, we suspect that when theorists talk about the "objects" of the attitudes, they very likely have in mind entities that, when we are appropriately related to them, guarantee that we represent in the ways typical of propositional attitudes such as belief, desire, and judgement. By our lights, much of the literature on whether this, or that, particular kind of abstract entity could be an "object of a propositional attitude" ultimately boils down the question of whether it is the kind of thing suitable to determine (or at least keep track of) the representational features of the states that might have it as content.

Moving forward, we'll assume that talk of propositions as "objects of the propositional attitudes" is to be understood as saying that the proposition to which one is related is the *content of* the attitude and hence places a representational demand on the subject who is so-related.⁴

Attitudes, Propositions, and Representation

⁴ See discussions by Stalnaker (1984) and Speaks (2015) on these issues, discussions that have had a significant influence on our own thinking.

As we have just seen, there is a requirement placed on anyone who stands in a propositional attitude relation to a proposition: one must represent things as being a certain way. In a recent book, Soames (2015) keys into this idea and raises a helpful question that we think can guide us in saying a bit more about the nature of our propositional attitudes. In the course of offering his own favored account of propositions, Soames asks:

What kind of entity P and what relation R can play the role of propositions and entertaining, by virtue of the fact that for an agent to bear R to an entity of kind P *guarantees* that the agent represents things as being a certain way? (16)

Though Soames focuses on *entertaining* (for reasons peculiar to his own favored view), we could just as well ask the same question of any propositional attitude. For example, what kind of entity could the proposition that Oscar snores be, and what could the belief-relation Carla bears to it be such that, when she is so related, she must represent Oscar's snoring?

Here is, we think, an attractive first-pass answer to the generalized version of Soames's question: Let's provisionally assume that propositions themselves represent (we here make no assumptions about how, or why, they do though a bit more on this assumption later). So, we are assuming that, for example, the proposition that grass is green itself represents grass as being green. Given this assumption, it is pretty clear how an agent must represent in order to bear a propositional attitude relation to that proposition: one must represent that grass is green. More generally, the thought is that whenever an agent stands in a propositional attitude relation to a proposition she must represent *just as the proposition does*. Call this the *representing-the-same-as* view of propositional attitude relations.

First, notice that this view easily allows us to differentiate imagining/fearing/wanting the proposition that p from imagining/fearing/wanting that p. When Rosa-Linda (perhaps irrationally) fears the proposition that pugs snore, she need only represent it but she need not represent the same as it. Similarly for other attitudes that look puzzling when we substitute 'the proposition that p' for 'that p'. The reason those substitutions don't look acceptable is that we shift from talking about attitudes about propositions to attitudes that have propositional contents.

We think many theorists will find this idea agreeable, though there are different ways that the idea is implemented. For example, on a traditional approach to propositions and the attitudes, one might hold that propositions are themselves the *fundamental representational units* and that by entering into a propositional attitude relation with one of them, one comes to represent as it, the proposition, does. So, on this traditional view, if the proposition that snow is white represents snow as being white, in virtue of being propositional-attitude-related to it, a subject represents that snow is white. On such a view, there is representational coordination between cognizer and proposition owing to the fact that the mental state "inherits" its represent the same as propositions.

One might balk at the foregoing traditional version of the represents-the-same-as line for any number of reasons. For one thing, anyone with sympathies to physicalism about the mental should balk at the inheritance component of that picture. Physicalists about the mind ought to find mysterious how a relation to an abstract object (even one that represents) could be that *in virtue of which* a physical state itself represents. Naturalizers about content have attempted to offer a story according to which our mental states represent in virtue of their causal relationships to the world; not *in virtue of* standing in relation to an abstract entity that itself represents. That is, even if any two mental states that represent the same as each other must have the same propositional content, it is dubious that they represent as they do *in virtue of being so-related* to a proposition (more on this point below).

But notice that even if one rejects the inheritance thesis of the traditional view, one might still hold the represents-the-same-as line on propositional attitude relations if one can give a naturalistic account of how propositions themselves come to represent. A number of theorists have recently sought to do just this. For example, Peter Hanks, Jeff King, and Scott Soames have forcefully argued that if propositions represent, there must be an explanation of this.⁵ Hanks and Soames, for instance, argue that propositions should be identified with types of mental activities which represent because the tokens that fall under them represent. A thinker represents that Carla skis by predicating (in language or in

⁵ Roughly, according to King (2007 and 2013), proposition are complex, structured *facts* composed of objects, properties, and relations; facts (i) whose structure mirrors, and is derivative from, the syntax of the natural language sentences that express them and (ii) which get their representational properties from speakers interpreting those sentences in the way they do.

mind) the property of skiing of Carla. On this view, the proposition that Carla skis just is the *act type* of predicating skiing of Carla. Propositions, on this view, might be claimed to represent in virtue of being types, all tokens of which represent. But notice that despite its differences from a more classical, inheritance-oriented conception, we again find the required coordination between propositions and cognizers. When one entertains the proposition that Carla skis, one performs a token representational action which falls under a type – the very type that the representational proposition *is*. The proposition and the cognizer again represent the same as each other. If this view were correct, we could make sense of the representational demands placed on Carla in virtue of her bearing a propositional attitude to that particular proposition.

Backing up, the crucial point to notice for now is that as long as it is plausible that propositions themselves represent (primitively or derivatively), one can help herself to the represents-the-same-as story of propositional attitude relations. And with such a story in hand, you can also make sense of why propositions aren't *mere* objects of the attitudes. Rather, they are entities that one is related to in the propositional-attitude-way only when appropriate representational demands are met and representing-the-same-as secures this. What relation is it that one stands in to the proposition that, say, snow is white when it is true that one imagines that snow is white? It isn't imagining a proposition. Rather, one must be in a state of imagination (rather than one of desiring or believing) that represents the same as the proposition. Schematically, one Vs that *p* iff one is in a V-state that has the proposition that *p* as its content iff one is in a V-state that represents the same as the proposition that *p*. All of the views sketched above can agree to this much.

Perhaps one could be content at this juncture. We have a story about what it is for a proposition to be the content of a propositional attitude (rather than a mere object and rather than that which the attitude is about) and we have a very general answer to Soames's question: the entities are representational things and the relation is representing-the-same-as.

In short, the representing-the-same-as picture has much to recommend it as an answer to the question by Soames at the beginning of this section. But for now, notice that this picture is only as strong as the working assumption with which we started; namely, that propositions themselves represent. Like many others, we find primitivism⁶ on this front deeply dissatisfying, and despite the commendable efforts of Hanks, Soames, and others to make naturalistic sense of how it could be that propositions come to represent, we are very far from convinced that they have succeeded (in fact, we are skeptical of the possibility of providing such an account, but we won't pursue that here).⁷ Even more importantly, however, we think that once one comes to appreciate the represents-the-same-as suggestion and comes to see how it works, we can recapture all that is desirable about it without committing to the assumption that propositions themselves must represent, and, hence, without incurring the problem of explaining how they could so represent. As we will see, a simpler, more minimal, account can be given, one that drops the requirement that propositions themselves represent. We take that line of thought up in the next section.

Propositions in a Theory of Mind

The suggestion just offered entails that propositions represent, for they *represent the same as* the attitudes that have them as their contents. Some theorists might be happy enough with this, but certainly not all. There are candidates for being propositions such as sets and tuples that do not themselves represent, and plenty of philosophers have found a lot to like in these views. Perhaps the right conclusion to draw is that those entities cannot be propositions, but another reaction is that our understanding of the attitude relations has been overly restrictive. And more pressing still, recent literature on propositions has taken up the question of how it is that propositions could represent and to our mind the attempted answers have been inadequate. With Hanks, King, and Soames we agree that it is puzzling how our mental states, or linguistic acts, could literally inherit any of their representational features from the propositions they have as contents; the traditional "trickle down" picture of intentionality they are attacking is indeed dubious. By our lights, however, it is just as puzzling how any of the representational features of us or our language use could literally "trickle up" to a proposition. A theorist who denies that propositions represent could sidestep these issues.

The good news that is that for all of its virtues, representing-the-same-as looks optional. Recall Soames's question (now modified to be more general than about entertaining):

⁶ See Bealer (1998), Pautz (2016), and Merricks (2015) for developments of primitivism.

⁷ We are especially sympathetic to Speaks's critical discussion of the views of King and Soames in Chapter 6 of King, et. al. (2014), as well as that of Caplan, et. al. (2013). Though see Tillman (2016) for further discussion pertaining to Speaks's worry for King and Soames.

What kind of entity P and what relation R can play the role of propositions and propositional attitude relations, by virtue of the fact that for an agent to bear R to an entity of kind P *guarantees* that the agent represents things as being a certain way?

Notice that there are two moving parts – propositions and our relations to them.⁸ Above we supposed that the candidates for P represent. For those who hold that representation begins with the propositions and that other representational things such as thinkers and sentences represent in virtue of being appropriately related to them, this looks non-negotiable. But for those (and we count ourselves amongst them) who think that there might be a story about how it is that mental states represent independently of the abstract realm, things look very different.

Suppose one were attracted to a view according to which propositions are sequences of objects, properties, and relations. As noted above, one of the key features of propositional attitudes is that they represent things as being a certain way and by making reference to a proposition to which one is related, we put ourselves in a position to make claims about the mental states themselves. But it isn't obvious why propositions themselves must represent to give us everything we want here. If Carla imagines that snow is red, there is some relation holding between Carla and the proposition that snow is red such that she is guaranteed to be representing snow as being red. Let P in Soames's question be the sequence <snow, REDNESS>. What relation R could one bear to it that would secure the guarantee that one represents snow as being red? One attractive candidate is the following: X represents the first item as instantiating the second item in Y (where X is placeholder for a subject and Y for a proposition, here conceived of as a sequence).

Sets of worlds can similarly be made to fit into this framework of representational demands. If the proposition that snow is red is the set of all worlds in which snow is red, then standing in a propositional attitude relation to such a proposition is to represent the world as being the way that is common to all members of the set: X represents things as being the way that is common to all the worlds in Y.

 $^{^{8}}$ See Felappi (2016) and Brigham (2017) for further debate about the relation we bear to propositions in order to have them as contents.

There are well trodden problems for conceiving of propositions as sets of worlds or sequences of objects, properties, and relations. For example, they are typically taken to be too coarse to draw the full range of distinctions needed to make sense of our mental lives. But setting worries of that sort aside, can the proponent of propositions as sets of worlds make sense of the fact that when we believe that snow is white, we must be in a state that itself represents snow and whiteness? That is, can they make sense of the idea that those entities might be contents of the propositional attitudes? Yes, so long as they provide a story along the foregoing lines about the relations we bear to such entities. And notice that on these suggestions, propositions don't represent (since sets and sequences don't represent), and, as far as we can tell, they don't need to. At least not to be the contents of our attitudes.

It's worth taking just a moment to consider Soames's own answer to his question. According to him propositions are act types such as the act of predicating redness of snow. In order to be propositional attitude related to it, one must token it. And to token it, one must predicate redness of snow and hence represent snow as being red. By carefully selecting an entity and relation pair, Soames achieves the same thing as our imagined setof-world theorist or tuples theorist. What's striking to us is that Soames then bothers to argue that this account also helps explain how it is that propositions represent. At least as far as the objects of the attitudes goes, it's not clear to us why one needs such a story.

This might strike one as a bold claim, so it is worth stepping back for a moment. First, we should caution that we have not offered reasons for thinking that there are no *other reasons* for holding that propositions represent. Perhaps there are such reasons coming from the role propositions are supposed to play in logic or language for example. If so, we will leave it to other to provide those reasons and to say why those entities must be the same entities that feature in our theory of the attitudes. Our own view is that once we have a story about the attitudes and their contents worked out, we can dispense altogether with the demand that propositions must themselves represent, but that isn't something for which we will be arguing here. Our point is more modest. In so far as propositions are the contents of the propositional attitudes, we don't see why it is important that they represent. We make reference to propositions in the context of a theory of mind because we are interested in the representational features of certain mental states. And that's because in the case of propositional attitudes, these features are absolutely central to their nature and to how they function. The belief that coffee is in the pot is the very belief that it

is because it represents that coffee is in the pot. And it is because it represents that coffee is in the pot that that belief will interact with desires to have coffee, to serve coffee, and so on. A theory of mind should offer generalizations of such features and help us then go onto explain in terms of them how and why people think and act as they do. By making reference to and quantifying over propositions, we put ourselves in a position to make sense of when various mental states represent the same or differently as each other and put ourselves in a position to make perspicuous when it is that pairs or groups of attitudes will relate to each other in interesting ways. But all that one needs to achieve this is a connection between entities and mental states that allows us to read back into the mental states what they represent. It may be that without enough structure or without something more fine grained than properties, objects, or relations in our story, we won't have enough entities to go around, but to hold that the entities in question must themselves represent is a further commitment that we don't yet see the need to take on board.

Minimalism

Many non-equivalent entities could *play the role* of contents of the attitudes. As long as we keep our relations straight (the 'R' position in Soames's question), won't one do as well as the other? Purely for the purposes of keeping track of our mental states in terms of what they represent, we think the answer is at least in principle 'yes'. But we don't think this is a satisfactory stopping point and in this section we will sketch our own preferred viewed of what propositions are that draws on the observations above.

Soames's question guided us towards an array of options for the relation/entity pair that guarantees that a representational demand is placed on a subject in a propositional attitude state. An initial thought might be that a proposition is simply *any* entity that can play the relevant role (i.e. the role of keeping track of how mental states represent). But as Soames has argued in some of his earlier work on propositions, this plenitudinous, pluralistic suggestion faces a serious difficulty.⁹ Reconsider our example above (repeated here):

(4) Mary believes that the proposition that there is no largest prime number is exceedingly plausible.

⁹ See Soames (2010), chapter 5.

Mary is able to bring to mind the proposition that there is no largest prime number and to think of it that it is plausible. If there is no story about which unique entity it is that Mary brings to mind, how might we make sense of this fact? On the suggestion at hand, there simply is no such thing as *the* proposition that there is no largest prime number; rather, there are indefinitely many distinct entities that might answer to the call. Which one of these, if any, is it that Mary takes to be exceedingly plausible? Like Soames, we can't see any basis for a principled answer to this question. Perhaps the pluralist could argue that this is merely a surprising case of referential indeterminacy and that expressions such as 'the proposition that p' *partially denote* each of the indefinitely would-be candidates.¹⁰ We are, as will emerge, in some ways sympathetic to this suggestion. But suffice it to say for now, that the resulting metaphysical and semantic commitments of this partial denotation-line come with a cost, and we should only accept it if we are convinced that there is no principled, non-arbitrary answer that can be given to the question of what, exactly, are propositions *qua* objects of the attitudes.

So if we can't simply identify a proposition with *any* entity that might help us keep track of representational sameness or difference, where does this leave us? We have many entities to choose from but we would like a non-arbitrary way of saying which of the would-be candidates really are propositions. Once we set ourselves this task, we might hope to choose from amongst the role-players suggested above. But what could be the basis for such a choice? One might, for example, proffer that <grass, GREENESS> is *the* proposition that grass is green. But, then again, why not choose <GREENESS, grass> instead (so long as we make sure to make the appropriate adjustment in the relevant attitudinal relation). There seems to be no good reason to choose the former over the latter or vice versa. Without good reason, we shouldn't choose either. A Benacerraf-worry looms large.¹¹

¹⁰ See Field (1973) on partial denotation. See Balaguer (2009) for related issues arising for Platonism in the philosophy of mathematics.

¹¹ And we think that such Benacerraf-like reasoning has wide application. As best we can see, similar worries even affect Soames's own favored suggestion that the proposition that Fido is a dog is the cognitive act type of predicating doghood of Fido, where entertaining that proposition is to perform a token-act of that very type. But why, exactly, should we think it is just that propositional object and just that relation to it? Why, for example, can't our subject (who is token representing Fido as being a dog) instead be related to the abstract act type/Soamesian proposition *predicating being a non-dog of Fido*? How could that be the right entity, one might reasonably wonder? But it could be the "right" entity if the *relation* one bears *systematically cancels* the negation: let us introduce a new relation, 'entertains*'. One entertains* that Fido is a non-dog just in case one is representing Fido as being a dog (e.g. by token predicating being a dog of Fido). At the level of the thinker, she is token representing that Fido is a dog, but when it comes to making use of propositions, because the relation is that of predicating the complement-property (i.e. entertaining*) the proposition to which she is related is the act type of predicating being non-doghood of Fido. Such a view will be difficult to work with, but relations to propositions will still place representational demands on thinkers and as long as one keeps all the moving pieces straight, one will be able to offer a theory that makes reference to

Our own favored reply to the Benacerraf-worry of arbitrariness looks to a commonality shared by the candidates. Notice that all of the options above were guided by a desire to coordinate attitudes in terms of what they represent with entities. We want, for example, to match beliefs that represent the same as each other with the same entity, since, necessarily *any two mental states that represent the same as each other must be coordinated with the same proposition*. This observations suggests the following principle:

PC: The propositional content of M1 = the propositional content of M2 iff M1 and M2 represent exactly the same objects, properties, and relations in exactly the same way (where M1 and M2 range over possible mental state tokens).¹²

We don't think anyone should take issue with the *truth* of this bi-conditional.¹³ Indeed, the principle seems obviously true, if not straightforwardly analytic. But platitudinous, or not, we think that **PC** gives us some initial purchase on responding to the arbitrariness worry.

In order to see how **PC** might be of help with the arbitrariness worry, we need to say a bit about its status. First off, when we are thinking about **PC** it is important to notice that, plausibly, one side of the bi-conditional expresses a more fundamental fact than the other. In particular, we think that the right-hand side expresses a more fundamental truth than the left and anyone sympathetic to a naturalism (or physicalism) about the mental should agree. It is, in our view, *because* token mental states represent the same as each other that they have the same content, not vice versa. The metaphysical story regarding how possible mental state tokens represent will presumably be grounded in contingent relations between it – be it a brain state, or what have you – and the environment in which it is

propositions that tells us what thinkers themselves are representing. (A similar worry can be leveled again recent work by Peter Hanks as well.)

¹² We will have a bit more to say about this below, but for now it is important to notice that representing things 'in exactly the same way' is intended to introduce neutrality on issues about the fineness of grain of the representational features of our mental states.

¹³ In fact, **PC** is *entailed* by the each of positions we've considered so far regarding propositions and the relations we bear to them. The entailment is obvious in the case of the "represents-the-same" line, but perhaps less so on those views on which propositions are not themselves representational, so let's consider such a case. Assume, for example, that the proposition that grass is green is the ordered pair <grass, GREENESS> and that to bear a propositional attitude relation to it is to be in a state that represents the first item as instantiating the second. For reductio, let's take this to be true but take **PC** to be false. Notice that if there are two mental state tokens which represent the same things as being the same way but which fail to have the same propositional content – suppose one has <grass, GREENESS> and the other <snow, WHITENESS> – then we can't maintain that to be related to the content is to be representing the first item as instantiating the second, which contradicts our assumption. We'll leave it to the reader to continue the proof and to extend it to the other non-representational options.

embedded. Perhaps the story will be cast in terms of causal covariation or teleological function or (wide-armed) functional role of such state tokens,¹⁴ but whatever it is, it is doubtful that such a story must make essential appeal to propositions, or any relation between the state token and an abstract object.¹⁵ How could it? We cannot see how, by bearing a yet to be explicated relation to an abstract entity, physical creatures like ourselves might come to be endowed with representational properties of our own. Rather, the mental facts come first. We won't pretend that it will be easy to tell when two states represent the same as each other, but we think there are such facts of the matter out there in the world and that they obtain independently of anything having to do with the abstract realm.

Moreover, notice that the foregoing point (that the mental comes first) should immediately assuage any worry that **PC** is obvious because it is implicitly circular. Given the points just above, we see no good reason to suppose that the right-hand side of **PC** must be making implicit reference to propositions.¹⁶ And if one were worried at this juncture that **PC** is bound to traffic in 'that'-clauses, we think such a worry would be ill-founded. As Rumfitt (2016) points out, we simply don't need 'that'-clauses to speak about how an agent is representing. We might, for example, specify how Carla's belief represents by saying 'Oscar, Carla believes, snores,' or 'Oscar snores, Carla so believes'. Furthermore, we are (to varying degrees) skeptical of the standard view that 'that'-clauses must themselves specify, or refer to, propositions in true attitude reports, but we won't pursue that here.¹⁷

Next, **PC** is not, we claim, simply one obvious truth among others. When assessing the status of **PC**, notice that it is plausibly a *necessary* truth. We arrived at **PC** by thinking about what it is for an attitude to have a proposition as its content and we saw that when one bears a propositional attitude relation to a proposition, certain representational demands are necessarily incurred. But if bearing such a relation to a content incurs a certain representational demand, it's very hard to see how states that represent the same

¹⁴ In this, we are in full agreement with Fodor (1987, 1990), Dretske (1986, 1995), Millikan (1984) and the other would-be naturalizers of mental representation, as well as recent theorists such as Hanks (2015), King (2007), Speaks (2015), and Soames (2010, 2015) working on the metaphysics of propositions.

¹⁵ A multiple-relations-like theory that appeals to non-propositional thoughts on the right-hand side could perhaps also be developed (and in fact Soames's view comes quite close to this).

¹⁶ Peacocke (1992, Chapter 4) briefly considers and then rejects a view based on **PC** much like the one we will suggest below on the grounds that **PC** is either (i) itself circular if the schematic variables on the right-hand side are taken to range over all possible mental state tokens (as we are suggesting) or (ii) that PC will fail to deliver enough propositions if we limit ourselves to actual mental state tokens. For the reasons just given in the text, we are skeptical of (i).

¹⁷ See Bach (1997), Buchanan (2012), Graff-Fara (2013), Loar (1988), and Shier (1996) and others.

as each other could fail to have the same content. We can't find conceptual space, let alone metaphysical space, for the possible falsity of **PC**.

But, something even stronger can be said. We suspect that **PC** is not merely one, among many, necessary truths about propositions, we think PC provides the resources to give an (implicit) real definition of propositions. Notice that PC shares a form with other much discussed abstraction principles such as 'The direction of line A = the direction of line B iff A and B are parallel' or 'The number of Fs = the number of Gs iff there is a one-to-one correspondence between the Fs and the Gs'.18 Though there has been significant debate among those broadly sympathetic to the Neo-Fregean understanding of such abstraction principles, in the present paper, we'll simply offer our own favored story due to Rosen and Yablo (manuscript). First off, it is crucial to emphasize that such abstraction principles not be understood as providing a merely stipulative, verbal definition of the relevant functions appealed to in their left-hand sides. Rather we think that such definitions can teach us everything there is to know about *what it is for a thing to be* a number, a direction, or, in our case, a proposition. If there are entities answering to the left hand side of PC (and we think there are) "then there is no question of what their natures are, since their natures flow from their definitions and their definitions are settled" (Rosen and Yablo, 11). One way to understand the approach is epistemic: if one understands PC and knows what it is for two things to represent exactly the same, then one is in a position to know everything that there is to know about propositional content. But at bottom the point is intended to be metaphysical: propositions, we claim, just are abstractions from equivalence classes of mental states that represent exactly the same as each other. This allows us to avoid the Benacerraf-like arbitrariness worry leveled above.

PC provides the entities, but we still need to say what it is for a subject to stand in a propositional attitude relation to one of our propositions. But with one point now fixed, we are in a position to say what that relation is. As we said above, when one bears a propositional attitude relation to a proposition, one must be in a state of a certain sort that represents in a certain way. Furthermore, anyone else who represents that way will also be related to the same proposition. By **PC**, there must be an abstract entity in common to

¹⁸ There is a large literature on what it takes for such biconditionals to be successful in introducing entities into our ontology. See, for example, Hale and Wright (2001). For present purposes, note that **PC** is seemingly *consistent* and *conservative* with respect to the underlying facts regarding the mental states over which we are abstracting. Very roughly put, to say that an abstraction principle is conservative is to say that it doesn't entail anything ontologically new save for the abstract objects that are the referents of the terms on left-hand side. On this front, **PC** looks no more suspect that (a) and (b).

such co-representers. So, if a subject has, say, a belief that grass is green, the subject will be in a state of belief which represents the same way as all the other states from which the proposition that grass is green is abstracted. The relation is as follows: X is in a token mental state which represents the same way as all other states from which Y is an abstract. When X stands in such a relation to Y, X is in a propositional attitude relation to Y.

Call the foregoing sketch of propositions and our relations to them *Minimalism*. We think that Minimalism tells us all that is of interest regarding the metaphysics of propositions, especially when it comes to a theory of mind.¹⁹

One noteworthy feature of Minimalism is that, as its name suggests, it demands very little of the nature of propositions. For example, it does not follow from PC that propositions represent (notice that PC only requires that the (possible) mental state tokens on the righthand side represent). This is, by our lights, a wonderful thing as it allows us to avoid the thankless task of trying to provide an explanation of how it could that a proposition itself represents. All we are we are given on the Minimalist story is that propositions are, by their very nature, *correlated* with any many mental state that itself represents in a particular way. Any two token mental states that both represent Oscar's snoring will necessarily be such as to be correlated with the exactly the same proposition (a fact that flows from the nature of that proposition, not the essence of those mental states). So, propositions themselves do not need to be representational in order to keep track of how our mental states represent.²⁰ And, if this is correct, there is equally no good motivation to think that propositions themselves must be structured in order to keep track of the relevant representational commonalities (even if the relevant mental states themselves are structured). Happily this avoids any temptation to think that a story of unity, or propositional structure, is required.

There is a connected point that is relevant to debates between Stalnakerians, Russellians, and Fregeans about propositions. At the outset of the paper we noted that many debates

¹⁹ Our favored minimalist view is inspired by, and closely related, to the work of Schiffer (2003) and (even more so) Field (2001, 2017). Comparing our own favored account to the deflationary stories offered by these theorists will have to wait for another occasion, however.

²⁰ One could introduce a derivative sense of representing if one so desired though such a move strikes us as a not especially interesting understanding of propositions representing. Soames (2015, p. 16), for example, speaks of a "secondary sense" of representation that applies to propositions, where the "primary sense" applies to acts of thinkers on his view. Given Soames's overall interest in **explaining** how it could be that propositions represent, we find it surprising that he is happy to retreat to a "secondary sense". As we are thinking of things, one can talk in these terms though we think little is to be gained and doing so is optional. Talk of propositions themselves representing is harmless, if understood in an appropriately deflationary way.

about the nature of propositions center on the propositional attitudes and whether this, or that stripe, of propositional content is sufficiently fine-grained.

The debate comes to be one about the nature of propositions – which things propositions are. But on our way of thinking about the issue, these debates should be thought of as debates about how our mental states represent. For example, does Lois represent the same when she thinks that Superman flies and thinks that Clark Kent flies? Or do we, who are aware of the identity, represent Superman/Clark the same as her? Theorists who incline towards an affirmative answer to these questions about how these states represent will get propositions from **PC** that mirror the grain of Fregean propositions. Crucially, the fundamental question is how we ought to think about sameness and difference of mental representational, as the answer to that question will determine the deliverances of **PC**. But notice that from a certain vantage it does not make a difference to what propositions *are* – on Minimalism they just are that which **PC** delivers. Compare: it might be a difficult to come to know how, or whether, two particular lines are parallel but that doesn't prevent us from understanding the direction of a line in terms of being parallel. Though subtle, we think this marks an important advance in the debate. First, it allows neutrality on some of the hardest questions. Second, it shows where the real debate is to be had.²¹

Given our minimalist inclinations, we take propositions to simply be that which is delivered by **PC**. But even if one disagrees, we would suggest that everyone should adopt, as a methodological policy, the deliverances of **PC** as a starting point; everyone should, we claim, at least subscribe to *methodological minimalism*. If one wishes to add to the minimal story, one is provided with a baseline from which to argue, but we would caution that there is an onus to make very compelling why one should go beyond the minimal story unless it is absolutely essential. For example, must propositions themselves represent? Or must they have parts or structure? Notice that, for example, the propositions delivered by **PC** do not themselves represent even if they are, by their very essence, correlated with our mental states that do. In a derivative sense we might speak of a proposition itself representing Oscar's snoring insofar as it is an abstraction from an equivalence class of states that represent Oscars snoring. But why isn't this enough? What, exactly, would be

²¹ We think Stalnaker (1984) was on exactly the right track on this point: "Just as the empirical relations that fix the reference of physical magnitude terms determines which features of numbers are physically significant and which are not, so the empirical relations which a functional theory uses to explain propositional attitude concepts will determine which features of abstract propositions are significant, and so what conception of proposition is appropriate" (p. 11).

the point of insisting that the proposition itself must do some representing in anything more than the foregoing derivative sense? Similar points go for structure and propositional constituency, as well.²² With **PC** on offer, these questions become pressing, but even if one ultimately wants to ultimately reject Minimalism, we hope there is still much to be gained from taking it as a starting point in one's theorizing about the metaphysics of propositions.

 $^{^{22}}$ For independent concerns about propositional constituency, see Keller (2013).

Bibliography

- Bach, Kent (1997). Do Belief Reports Report Beliefs? *Pacific Philosophical Quarterly* 78 (3):215-241.
- Balaguer, Mark (2009). Fictionalism, theft, and the story of mathematics. *Philosophia Mathematica* 17 (2):131-162.

Bealer, George (1998). Propositions. *Mind* 107 (425):1-32.

Brigham, Daniel (2017). Analysing attitudes: How cognitive realists meet Felappi's challenge to propositionalism. *Analysis* 77 (3):498-501.

Buchanan, Ray (2012). Is Belief a Propositional Attitude? Philosophers' Imprint 12.

Caplan, Ben; Tillman, Chris; McLean, Brian & Murray, Adam (2013). Not the Optimistic Type. *Canadian Journal of Philosophy* 43 (5-6):575-589.

Collins, John (forthcoming). The Redundancy of the Act. Synthese.

DOI 10.1007/s11229-017-1382-3

Crane, Tim (1990). An alleged analogy between numbers and propositions. *Analysis* 50 (4):224-230.

David, M. (2002). Content essentialism. Acta Analytica 17 (28):103-114.

Dretske, Fred (1986). "Misrepresentation", in Radu Bogdan (ed) *Belief: Form, content and function*, New York: Oxford: 17–36.

Dretske, Fred (1995). Naturalizing the Mind, Cambridge, MA: MIT Press.

Fara, Delia Graff (2013). Specifying Desires. Noûs 47 (2):250-272.

- Felappi, Giulia (2016). Objects of Thought? On the Usual Way Out of Prior's Objection to the Relational Theory of Propositional Attitude Sentences. *Analysis* 76 (4):438-444.
- Field, Hartry, (1973). Theory Change and the Indeterminacy of Reference. *Journal of Philosophy*, 70, 14: 462-481.
- Field, Hartry (2001). Attributions of Meaning and Content. In *Truth and the Absence of Fact*. Oxford University Press.
- Field, Hartry (2017). Egocentric Content. Noûs: 51 (3):521-546.

- Fodor, Jerry (1987). *Psychosemantics: The Problem of Meaning in the Philosophy of Mind*. MIT Press.
- Fodor, Jerry (1990), "A Theory of Content", in *A Theory of Content and Other Essays*, Cambridge, MA: MIT Press, Bradford Book.

Forbes, Graeme. (2000). 'Objectual Attitudes'. Linguistics and Philosophy 23 (2): 141-183.

 Frege, Gottlob (1884/1950). The Foundations of Arithmetic: A Logico-Mathematical Enquiry into the Concept of Number. Northwestern University Press, translated by J.L. Austin, Oxford: Blackwell.

Grzankowski, Alex (2016). Attitudes Towards Objects. Noûs 50 (2):314-328.

Hanks, Peter (2015). Propositional Content. Oxford University Press.

Keller, Lorraine (2013). The metaphysics of propositional constituency. Canadian Journal of Philosophy 43 (5-6):655-678.

King, Jeffrey C. (2007). The Nature and Structure of Content. Oxford University Press.

- King, Jeffrey C., Scott Soames, and Jeff Speaks. (2014). *New Thinking about Propositions*. Oxford: Oxford University Press.
- Loar, Brian (1988). Social content and psychological content. In Robert H. Grimm & D. D. Merrill (eds.), *Contents of Thought*. University of Arizona Press.
- Matthews, Robert J. (2007). *The Measure of Mind: Propositional Attitudes and Their Attribution*. Oxford University Press.
- Merricks, Trenton (2009). Propositional Attitudes? *Proceedings of the Aristotelian Society* 109:207 - 232.

Merricks, Trenton (2015). Propositions. Oxford University Press.

Millikan, Ruth G. (1984) *Language, Thought, and Other Biological Categories*. MIT Press.

Moltmann, Friederike (2003). Propositional Attitudes Without Propositions. *Synthese* 135 (1):77 - 118.

Pautz, Adam (2016). Propositions and Properties. *Philosophy and Phenomenological Research* 93 (2):478-486.

Peacocke, Christopher. (1992). A Study of Concepts. MIT Press.

- Perry, John. (1994) Intentionality. In S. Guttenplan (ed.), *A Companion to the Philosophy* of Mind (Oxford: Blackwell). 386-394
- Richard, Mark (2014). What Are Propositions? *Canadian Journal of Philosophy* 43 (5-6):702-719.
- Rosen, Gideon and Yablo, Stephen. (manuscript). 'Solving the Caesar Problem With Metaphysics'. http://www.mit.edu/~yablo/home/Papers_files/solvingcaesar.6-07.pdf
- Rumfitt, Ian (2016). Objects of thought. *In Meaning and Other Things* (ed. Ostertag, G.). Oxford University Press
- Salmon, Nathan U. & Soames, Scott (eds.) (1988). *Propositions and Attitudes*. Oxford University Press.

Schiffer, Stephen. (2003). The Things We Mean. Oxford University Press.

- Schiffer, Stephen. (2016) Response to Rumfitt. *In Meaning and Other Things* (ed. Ostertag, G.). Oxford University Press
- Schwitzgebel, Eric, Belief. *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL

<https://plato.stanford.edu/archives/sum2015/entries/belief/>

- Shier, David (1996). Direct reference for the narrow minded. *Pacific Philosophical Quarterly* 77 (3):225-248.
- Soames, Scott. (2010). *What is Meaning?* Soochow University Lectures in Philosophy. Princeton, NJ: Princeton University Press.
- Soames, Scott (2015). *Rethinking Language, Mind, and Meaning*. Princeton University Press.

Speaks, Jeff (2015). *The Phenomenal and the Representational*. Oxford University Press. Stalnaker, Robert (1984). *Inquiry*. Cambridge University Press.

Tillman, Chris (2016). Essence Facts and Explanation. *Thought: A Journal of Philosophy* 5 (3):190-195.

Wrigley, Anthony (2006). Abstracting Propositions. Synthese 151 (2):157-176.