Propositions as Cambridge properties

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July 25, 2018

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In recent years, theorists friendly to propositions have grown increasingly dissatisfied with views which take propositions to be sui generis elements of our ontology. A familiar alternative to this sort of view identifies propositions with sets of worlds; more recent alternatives include the view that propositions are facts of a certain sort and the view that they are kinds of cognitive acts. The purpose of this essay is to explore the view the propositions are a kind of monadic property.

I begin in §1 by distinguishing a few different versions of the view that propositions are monadic properties, and lay out my own view of propositions as Cambridge properties. In §2 I make the positive case for this view. In §3 I compare my view of propositions as monadic properties to the related view that propositions are 0-place relations. In §4 I turn to a topic which has been at the center of much recent discussion of propositions: the question of whether we can explain the representational properties of propositions.

1 PROPOSITIONS AS CAMBRIDGE PROPERTIES

The view that propositions are monadic properties comes in a few different flavors.

One prominent version is a consequence of two well-known views. A familiar view of propositions takes them to be sets of possible worlds. A familiar view of properties takes them to be sets of things which have the property. If one puts these two views together, one gets the view that propositions are properties of possible worlds.¹ While this view may be presented as a consequence of a settheoretic understanding of properties and of propositions, it need not be tied to these views. One might keep the view that propositions are properties of worlds while adopting a more fine-grained view of properties.²

My view is related to the view that propositions are properties of worlds. On my view, propositions are properties of a kind which are instantiated by everything or by nothing.³ For example, the proposition expressed by the sentence 'Violet reads' is the property of being such that Violet reads. If Violet does in fact read, then everything is such that Violet reads. If she does not, then this is a property that nothing has. So the monadic properties with which I identify propositions are true iff they are instantiated.⁴

So the property of being such that Violet reads is a proposition. But this is just one example. A step in the direction of a more general characterization of the view is to say that substituting any sentence S into the schema

the property of being such that S

delivers an expression which denotes a proposition. Slightly regimenting the usage of Geach and others, I'll call monadic properties designated by expressions like these *Cambridge properties*.⁵

Cambridge properties are properties of being such that some object has some property, or of being such that some series of things stand in some relation. Whether this description of the category is fully general depends on whether every proposition is a predication of some property or relation of some entity or series of entities. And that depends on, among other things, the right treatment of quantifiers, sentence operators, and sentence connectives. While questions about these are of fundamental importance to the metaphysics of propositions, I set them aside here.

¹As in, for example, Lewis (1986), 53-4.

²One version of this kind of view is held by Mark Richard, who holds that propositions are 'properties ... of there being a sequence O of objects and a sequence P of properties and relations such that the O's instantiate the Ps in way I' (Richard (2014), 702). Richard describes his view of propositions as one according to which propositions are states of affairs, but it is clear that states of affairs as he conceives of them are monadic properties instantiated by (perhaps among other things) worlds and situations.

Another familiar 'monadic property' view of contents identifies propositions with properties of individuals. While this can be presented as a general theory of propositions, as in 'centered worlds' approaches to content, it can also be presented, as in Lewis (1979), as a more limited theory of the objects of the attitudes which is designed to account for de se and other indexical beliefs.

 $^{^{3}}$ I lay out the view in Speaks (2014a). See King et al. (2014) for criticisms of the view by Jeffrey King and Scott Soames, as well as replies to these objections.

⁴A very similar view is defended in Chisholm (1996). My view also has many similarities to the view of Richard (2014), mentioned above. A difference is that Richard's states of affairs are properties exclusively of situations (including maximal situations, i.e. possible worlds). Propositions on that view are true at a world iff they are instantiated; so actually false but possibly true propositions will on that view, unlike mine, be instantiated.

 $^{^{5}}$ The term is due to Geach (1969). I should emphasizes that my usage of this phrase is narrower than that of some others who use it, e.g. Bealer (1982), Ch. 8.

Cambridge properties like these are ones to which, arguably, a standard approach to natural language semantics, interpreted within a Russellian framework, already commits us. A textbook approach to relative clauses like 'which Amelia ate' or 'such that Amelia ate it' treats these expressions as having the same types of semantic values as one-place predicates.⁶ So a Russellian, who supplies monadic properties as the semantic contents of one-place predicates, will (if she adopts the textbook analysis) treat these relative clauses as expressing monadic properties. The relative clauses just mentioned contain (the equivalent of) free variables. The phrases that I used to introduce the monadic properties with which I identify propositions — e.g., 'such that Violet reads' are just like these, but with no free variables. But it is plausible both that phrases like 'such that Violet reads' have a semantic content, and that their semantic content should be of the same type as more familiar phrases like 'such that Sam ate it.' But then it follows that, just as the latter expresses a monadic property, the former does as well. So the textbook analysis, along with some reasonable assumptions, seems to commit us to the existence of our Cambridge properties.

The view that propositions are Cambridge properties is plausible only if one accepts the following assumptions about properties: (a) there are uninstantiated (and indeed necessarily uninstantiated) properties; (b) an abundant rather than a sparse view of properties is correct;⁷ (c) properties are fine-grained, in the sense that properties can be distinct despite being exemplified by just the same things. If (a) were false, then there would be no false (and necessarily false) propositions; if (b) were false, then presumably there would be no Cambridge properties at all; if (c) were false, then we would be unable to distinguish between equivalent propositions.

These are all substantial assumptions about properties. But they are also all arguably presupposed by a broadly Russellian approach to semantics. If (a) were false, the Russellian would have no properties to supply as the semantic contents of predicates under which nothing falls; if (b) were false, predicates which do not express a natural property would lack semantic content; if (c) were false, we would be unable to distinguish between the contents of necessarily co-extensive but non-synonymous predicates.

Because the key metaphysical assumptions of the view that propositions are Cambridge properties are also assumptions of a broadly Russellian approach to semantic content, the view that propositions are Cambridge properties is probably most likely to be appealing to someone who already finds Russellianism attractive. But of course even the Russellian can agree that there are properties of this sort without thinking that they are propositions. So why think that propositions are Cambridge properties? My answer is a boring one: they play all of the roles for which propositions were introduced, and do so more naturally than any other candidates which have been proposed. I make the case for this

⁶See, e.g., Heim and Kratzer (1998), Ch. 5.

⁷Some theorists distinguish between abundant and sparse 'conceptions' of properties, in effect singling out a subset of the properties to play certain explanatory roles (e.g., Bealer (1982)). This counts as adopting an abundant view of properties for present purposes.

in the next section.

2 How well do properties fit the theoretical role of propositions?

My argument for the view that propositions are Cambridge properties is based on three premises. Let's distinguish between *reductive* theories of propositions, which assimilate propositions to entities of some sort in which we have independent reason to believe, and *primitivist* theories of propositions, which take propositions to be sui generis elements of our ontology. Then the three premises can be stated as follows:

- (1) If one or more reductive theories succeeds in identifying entities suitable to play the theoretical roles of propositions, then we should reject the primitivist view.
- (2) If some reductive theory of propositions is true, then we should believe the one whose candidates to be propositions best play the theoretical roles of propositions.
- (3) Cambridge properties play the theoretical roles of propositions better than the candidates identified by other reductive theories.

Premises (1) and (2), while not uncontroversial, are widely held, and I will not argue for them here. (3), by contrast, is not especially widely held. The point of this section is to defend it.

It is often said that propositions play the following three central, and related, roles in our theorizing:⁸

- (i) They are the primary bearers of truth-values.
- (ii) They are the semantic contents of sentences relative to contexts.
- (iii) They are the objects of propositional attitudes, like belief.

Let's examine these theoretical roles one by one, and ask how well Cambridge properties might play each of them.

⁸This oversimplifies things a bit. There are powerful arguments for the conclusion, for example, that the entities which are the semantic contents of sentences relative to contexts can't quite be the entities which are the objects of the propositional attitudes. See, for discussion, Lewis (1980); King (2003); Yli-Vakkuri (2013). While arguments of this sort are not entirely irrelevant to the issues under discussion, I set them aside here for reasons of space, and make the simplifying assumption that exactly the same entities play each of these roles.

2.1 The primary bearer of truth-values

The account of propositions just sketched provides a simple account of truth for propositions. Propositions are true iff they are instantiated.

While this is a virtue of the theory, its importance should not be exaggerated, for two reasons. First, other versions of the 'monadic property' theory have basically the same virtue. The proponent of the view that propositions are properties of worlds, for example, will say that propositions are true iff they are instantiated by the actual world.⁹

Second, and more importantly, the simple claim that the proposition that Violet reads is true iff the property of being such that Violet reads is instantiated does not give us a very deep explanation of the nature of truth. This is because the fact that the property of being such that Violet reads is instantiated hardly seems like a fundamental feature of the world. Rather, it seems clear that some explanation is owed of what it takes for this property to be instantiated. And it seems very plausible that this explanation will be give in terms of other properties being instantiated by other objects — in this case, in terms of Violet's instantiating the property of reading. But this means that the account of propositional truth offered by the present theory will bottom out in just the same place as the account of truth offered by rival accounts of propositions. So while the account of propositional truth offered by the view that propositions are Cambridge properties can be presented in simple slogan form, it is not clear that the view of truth we get from the theory is in any deep sense simpler than the view we get from rival theories.

2.2 The semantic contents of sentences relative to contexts

On any view, Cambridge properties of the sort I have identified are closely connected to Russellian propositions. Just as the Russellian propositions that Hesperus is bright and that Phosphorus are bright are identical, so, plausibly, are the properties of being such that Hesperus is bright and being such that Phosphorus is bright. (On my view, of course, this is unsurprising, since I think that these properties are Russellian propositions.) Given the tight connection here, it seems plausible that any of the approaches to semantic theory which have been developed by proponents of Russellian propositions could be adopted by the proponent of the view that propositions are monadic properties.¹⁰

With respect to this theoretical role for propositions, then, there's a sense in which my view is conservative. It aims to identify entities which, being very closely related to Russellian propositions, can be slotted in to a Russellian semantic theory without forcing any changes in the way that we think about the right semantic treatment of this or that expression type. It is not alone in this respect. Another good example of a theory which is conservative in this sense is a view from which my own borrows: the theory of King (2007, 2014)

⁹See, e.g., Richard (2014), 704.

¹⁰For a promising recent approach, see Pickel (forthcoming).

that propositions are a kind of fact.¹¹ There too we get entities which can on any view be paired with Russellian propositions, and which can serve as the semantic values of sentences relative to contents without revising in any serious way the way we do semantics.

In that sense, both my theory and King's are less ambitious than some other recent theories of propositions, which attempt to not just identify entities which can be slotted in to a familiar approach to semantics, but also to solve outstanding problems in semantics. Examples of theorists with that explanatory ambition include Peter Hanks and Scott Soames, both of whom defend the view that propositions are kinds of cognitive acts. Both take their conception of content to be capable of solving problems — including Frege's puzzle and the problem of first person propositions — which otherwise look intractable on a Russellian view of semantic content.¹² While I am skeptical that these views are capable of resolving the kinds of semantic puzzles they aim to address, it is worth flagging that, while Cambridge properties are suited to be the semantic contents of sentences relative to contents, the explanatory ambitions of the present theory of propositions are, on this topic at least, more limited than those of some of its competitors.

2.3 The objects of the attitudes

While the properties I've identified are suited to play the two theoretical roles just mentioned, candidates proposed by other reductive theories are as well. Matters, I think, are different when it comes to the role of being the object of propositional attitudes. This is because, in my view, a candidate to be the object of the attitudes should satisfy two desiderata, and only the view that propositions are Cambridge properties can satisfy both.

The first of these might be called the *easy transitions* desideratum. It is an obvious fact about our mental lives that we make transitions between propositional attitude states of one kind and propositional attitude states of another kind. It certainly seems, for example, that I can effortlessly and rationally transition from seeing that the circle is red, to judging that the circle is red, to asserting that the circle is red. Any theory of the objects of the attitudes should be able to explain these easy transitions.

There are, broadly, two different sorts of explanations one might give. The first, and simplest, is the 'common content' explanation. According to this explanation of easy transitions, the reason why I can effortlessly and rationally transition from seeing that the circle is red, to judging that the circle is red, to asserting that the circle is red, is that this is just a matter of me bearing different propositional attitude relations — sensing, judging, and asserting — to the very same content.¹³

 $^{^{11}\}mathrm{For}$ the connections between my view and King's view, see Speaks (2014a).

 $^{^{12}}$ See especially Hanks (2013, 2015); Soames (2015).

 $^{^{13}\}mathrm{Common}$ content explanations would also enable us to give a simple treatment of ordinary language sentences like

The second sort of explanation we might call, for lack of a better term, a 'connected content' explanation. On this sort of explanation, sensing, judging, and asserting may not all be relations to just the same kinds of entities. But, on this view, while the contents to which I stand in the sensing relation are distinct from the contents which I stand in the judging relation, those contents are nonetheless related in a way which makes the existence of easy transitions non-mysterious.¹⁴

My worry is that reductive theories of propositions other than the property theory have served up candidates for propositions which rule out common content explanations of easy transitions, and make it hard to see how we could give a connected content explanation of them either. I'll illustrate the worry by looking at King's theory of propositions as facts and Soames' version of the cognitive act theory of propositions.

On King's view, the proposition that Violet reads is the fact that Violet and reading stand in the propositional relation corresponding to the following open sentence:

there is a context c such that x is the semantic value (relative to c and assignment g) of a lexical item e of some language L and y is the semantic value (relative to c and assignment g) of a lexical item e' of L such that e occurs at the left terminal node of the sentential relation R that in L encodes ascription and e' occurs at R's right terminal node.¹⁵

So it would seem that, on King's view, any subject standing in a propositional attitude relation to the proposition must have some cognitive access to this complex propositional relation. This is perhaps not an implausible assumption for ordinary language users; but it seems implausible that, for example, simple perceptual representation should require cognitive access to anything like this relation.

King is quite aware of this sort of objection, and agrees that it may well be a consequence of his view that there is no overlap between the kinds of propositions which are the contents of sentences of our language and the kinds of contents which are the contents of the perceptual experiences of non-linguistic creatures.¹⁶ But, presuming that at least simple experiences of ours can have the same contents as those of non-linguistic creatures, this rules out common content explanations of at least some of our easy transitions. And note that the problem can't be limited to transitions between experience and judgement. For presumably non-linguistic creatures also make judgements and have beliefs, and

Amelia doubts what Violet believes.

which seem to entail that subjects can bear different attitudes toward the same content.

¹⁴A good example of what I am calling a 'connected content' explanation is easy transitions is the theory of scenario content, protopropositional content, and conceptual content developed in Peacocke (1992).

¹⁵See, e.g., King (2014) and King (this volume).

¹⁶See King (2014), 192-195.

at least some of their perceptual judgements and beliefs should be able to have the same contents as our judgements and beliefs.

So it looks as though King should go for a 'connected contents' explanation of easy transitions. The problem is that it is hard to see how this explanation could go. Suppose that the contents of perceptual experiences are, like the contents of sentences in contexts, facts of the constituents of the proposition standing in some propositional relation — just not the propositional relation corresponding to the open sentence above. Then, to pick up on the example above, consider the transition between a perceptual experience of a red circle and the judgement that the circle is red. On the kind of view we are considering, this will be a transition between a state whose content is the fact that the circle and redness stand in one propositional relation to a state whose content is the fact that this pair stand in some other propositional relation. It seems that the only thing which could justify this transition is some assumption about the relation between the propositional relations in question.¹⁷ But relatively unsophisticated creatures who are capable of moving from experience to judgement are surely have no cognitive access to the relations between distinct propositional relations. So it is at least not obvious how King's approach to propositions could generate plausible explanations of easy transitions.

Consider next Soames' version of the theory that propositions are cognitive acts.¹⁸ On this view, the proposition that o is F is the act of predicating F of o. This act will be, in a sense to be explained, a component of every occurrent attitude. Whether one is judging, denying, or entertaining this proposition, one is carrying out this act of predication. But since one can carry out the predication without judging, denying, or entertaining the proposition, each of these attitudes will involve something beyond performing the act of predication.

What is this something extra in the case of judgement? One option would be for it to involve attributing some property to the act of predication itself. But this, as Soames agrees, would be a mistake; subjects can stand in propositional attitude relations to contents without being cognitively sophisticated enough to have thoughts about their own cognitive acts. Instead, Soames says,

'To judge that B is red is to perform the predication in an affirmative manner, which involves accepting it as a basis for possible action. To affirm or accept that B is red is not to predicate any property of the act, or to make it an object of cognition, but for one's performance of it to involve forming, or activating already formed, dispositions to act, both cognitively and behaviorally, toward B in ways conditioned

 $^{^{17}}$ Note that it is not true that, for arbitrary propositional relations, the fact that o and F stand in one relation will have the same truth conditions as the fact that o and F stand in the other propositional relation. See the examples of English and Nenglish in King (2007), 35-8.

¹⁸This view is closely related to the view of Hanks (2011, 2015). While I suspect that a problem closely related to the one that follows would arise for Hanks' view, that would take more argument than I provide here. It should be noted that the central point on which Hanks and Soames differ — on whether predication involves some sort of commitment or judgement — suggest that their theories of the attitudes will be importantly different.

by one's attitudes toward red things.¹⁹

So judging that o is F, on Soames' view, involves satisfying the following two conditions:

- (1) predicating F of o
- (2) forming or activating dispositions to act toward o in ways conditioned by the subject's attitudes toward things which are F

But, as Soames recognizes, individually satisfying these two conditions is not sufficient for judgement. To see this, consider first a subject who satisfies (2) but not (1). Such a subject will be, intuitively, acting as though he believes that o is F without judging that o is F. But now add to our description of this subject that he is wondering to himself whether o is F. Such a subject will now satisfy (1) as well as (2) but still will not count as having judged that o is F.

So what do we have to add to (1) and (2) to get an account of judgement? Soames says that we must require that the subject's satisfying (1) must 'involve' his satisfying (2). The question is what the relevant sort of involvement requires. It is natural to try to spell this out in broadly causal terms. But adding in a requirement of a causal connection is in one way too weak, and in another too strong. It is too weak because it is easy to come up with 'deviant causal' cases in which (1) causes (2) but in which the subject does not judge that o is F. It is too strong because having already activated one's dispositions to act in a certain way toward o does not make it impossible to judge that o is F.

While this requires more argument than I can provide here,²⁰ a good case can be made that there is no satisfactory way of filling this gap in Soames' analysis without appealing to representational or intentional connections between (1) and (2). But it is hard to see how to do that without requiring the judging subject to have just the meta-cognitive thoughts which we were trying to avoid. If that is correct, then Soames' theory faces a very similar problem to King's. It will only be able to provide an account of the contents of the attitudes of subjects sophisticated enough to cognize their own cognitive acts. This will, by the same line of reasoning sketched above, rule out common content explanations of easy transitions. And it is again hard to see how to construct a connected content explanation, since the present problems makes it hard to see how an act theory can give an account of the attitudes without bringing in some sort of meta-cognition.

The core problem here is that both King and Soames include, so to speak, 'extra material' in their propositions, which go beyond the entities which those propositions are intuitively about. For King it is the propositional relation; for Soames it is the act of predicating. By contrast, Cambridge properties contain no such extra material. For this reason, there seems to be nothing especially implausible about thinking of even quite primitive creatures as taking their

 $^{^{19}}$ Soames (2015), 18.

 $^{^{20}\}mathrm{See}$ Speaks (for thcoming) for a more in-depth discussion.

environment to instantiate these properties. So the theory of propositions as Cambridge properties has, as far as I can see, no problems giving common content explanations of easy transitions.

The second desideratum on an adequate account of the objects of the attitudes is that, ideally, we'd like a candidate for being the object of the attitudes to shed some light on the attitudes themselves. We want, that is, our view of propositions to help us to understand what it is to stand in a propositional attitude relation to one of those entities.

A good example of a view which fails to meet this desideratum is the primitivist view mentioned above. Unlike King and Soames, the primitivist is not open to the argument that his view rules out common content explanations of easy transitions. But skeptics might reasonably point out that this is because the view says so little about what propositions are, and hence so little about what it takes to bear a relation of the relevant sort to one of them. It's much easier to make trouble for King's and Soames' views, because they are so much more informative. Is it any surprise that it is hard to argue against the view that propositional attitudes are sui generis relations to sui generis entities?²¹

The view of propositions as Cambridge properties, by contrast, promises to make sense of propositional attitudes. It does this by making them a special case of something with which we are already familiar. We are already familiar with believing a property to be instantiated, hoping a property to be instantiated, and fearing a property to be instantiated. Indeed, for every propositional attitude relation, we are familiar with a corresponding relation to non-propositional monadic properties. According to the view that propositions are Cambridge properties, there is an important sense in which propositional attitudes are just more of the same. The propositional attitude of belief is a special case of believing a property to be instantiated. It's just that in that case the object is a property which (unlike, say, the property of being red) is not just true or false of certain things, but true or false simpliciter.

Why prefer the view that propositions are Cambridge properties to other versions of the monadic property view, like the view that propositions are properties of worlds, or situations, or individuals? Each, after all, seems to share the advantages of the Cambridge property theory which we've discussed so far.

While these views are obviously closely related, I think that the view that propositions are Cambridge properties has a modest advantage over them when it comes to its treatment of propositional attitudes. That is because each of the other sorts of theories seems to give a natural treatment of some, but not all, attitudes. Consider first the case of ordinary perceptual representation. It is natural to treat this as a subject ascribing a property to that subject's environment, or even to the subject herself. But it seems very odd to take perceptual

 $^{^{21}}$ Some reductive theories can be criticized on similar grounds. King, for instance, tells us exactly what propositions are. But what is it to bear, for example, the belief relation to a fact of the sort he describes? So far as I can see, this is not a question which his theory helps us to answer. Note that this is different than the question of how we have cognitive access to propositions — that is a question which his theory *is* designed to help us to answer. See, e.g., King (2014), 53-5.

experiences to attribute properties to possible worlds. Consider by contrast a mathematician considering some conjecture. It is perhaps not unnatural to take the mathematician to be predicating properties of the actual world; but it is surely very unnatural to take the mathematician to be predicating properties of herself or her immediate environment.

Different sorts of mental activity seem to involve predicating properties of different sort of things. So it seems that the property theorist should identify propositions with monadic properties which are not just properties of one sort of thing. That is just what Cambridge properties — which are properties of everything or nothing — are.

3 CAMBRIDGE PROPERTIES VS. 0-PLACE RELATIONS

It is commonplace to distinguish between monadic properties, dyadic relations, triadic relations, etc. On one view, in addition to these familiar categories, there are also 0-place relations. Propositions are then identified with the 0-place relations.

This is the view of, among others, Peter van Inwagen and Cody Gilmore (this volume).²² The view that propositions are 0-place relations is closely related to the view of propositions as Cambridge properties, and the former shares many of the virtues of the latter.

In this section, I explain two significant advantages that the 0-place relation view has over my own. I then explain why, despite these advantages, I prefer the view of propositions as Cambridge properties.

A first advantage of the 0-place relation theory may be brought out by presenting a limitation of my view. I think that propositions are monadic properties. But of course I don't think that every monadic property is a proposition. So I owe an answer to the question: just which monadic properties are the propositions? This question turns out to be difficult to answer in a fully general way.²³ But the 0-place relation theorist would appear to face no corresponding challenge, there being no 0-place relations which (on her view) are not propositions.

A second (not entirely unrelated) advantage of the 0-place relation theory can again be presented via a problem for the monadic property theory. The problem stems from the fact that on the monadic property theory the very same entities are the semantic contents both of that-clauses and of certain one-place predicates (e.g., 'that Violet reads,' 'is such that Violet reads'). But substitution

 $^{^{22}}$ See van Inwagen (2004). It is not completely clear how widely held this view is. It is not unusual for logical purposes to, following Kripke (1963), treat sentences as 0-place predicates. This is some sense seems to involve treating propositions as analogous to 0-place relations. But it is not always entirely clear how metaphysically seriously theorists who employ this apparatus intend it to be taken.

 $^{^{23}}$ See Speaks (2014a) for some of the challenges. Other views face related challenges; for example, it is not easy for the act theorist to draw the line between acts which are propositions and acts which are not. See, for discussion, see §3 of Speaks (forthcoming).

of these expressions does not always preserve grammaticality, let alone truthvalue. This puzzle does not arise for the 0-place relation theory, since 0-place relations are never the semantic contents of one-place predicates.²⁴

Given these advantages, why not go for the 0-place relation theory? I have two reasons.

The first, and less important, is related to the above discussion of propositions as the objects of the attitudes. While the view of propositions as Cambridge properties can understand propositional attitudes as a special case of mental states which predicate a monadic property of something, the proponent of the view that propositions are 0-place relations cannot. So in this respect the 0-place relation theory might seem to be on par with the view that propositions are sui generis; propositional attitude relations just have to be taken as their own class of relations between subjects and a special class of entities.

In reply, the 0-place relation theorist can say that, while on her view propositional attitudes are not a subclass of monadic predications, she can nonetheless say something informative about attitude relations. After all, we have a grip not only on the idea of mental acts of predicating monadic properties, but also on the idea of mental acts of predicating dyadic relations, triadic relations, etc. One might then try to understand propositional attitude relations by generalizing from these cases.

The second reason why I prefer the view of propositions as Cambridge properties is just that I have trouble understanding what a 0-place relation could be. Let me say from the start that I am uncomfortable levying this sort of objection. In general, I have little sympathy for the practice of objecting to philosophical views based on one's own lack of comprehension of those views. So let me try to say why I find the notion of a 0-place relation puzzling. If it turns out that my puzzlement is due to my limitations rather than those of the view, then I think that there would be no decisive reason to prefer the view that propositions are Cambridge properties to the view that they are 0-place relations, and some reason to prefer the latter to the former.

A first point is that one can't simply say that because we understand what a 3-place relation, a 2-place relation, and a monadic property is, we must therefore, simply by generalizing, understand what a 0-place relation is. We don't, after all, have any grip on what a -1-place property could be. And there is no obvious absurdity in the idea that the generalization stops making sense when we reach the 0-place case. Division is defined for every natural number, but not for 0; just so, it might be that for every natural number n, the notion of a n-place relation makes sense, but the notion of a 0-place one does not. The key

 $^{^{24}}$ The problem affects other versions of the view that propositions are monadic properties as well. So, for Lewis, the semantic content of 'that 2+2=4' will be the same entity as that of the predicate 'is a possible world' (namely, the set of all the possible worlds).

The 0-place relation theory does — like other theories of propositions — face a closely related problem. This is the problem that that-clauses and the corresponding proposition description (here, 'the 0-place relation that Violet reads') also can't in general be substituted without loss of grammaticality or change in truth-value. It is perhaps not unreasonable to hope that the resources needed to solve this problem could also solve the problem for the property theorist described above.

question is whether our background conception of properties is one on which the generalization to 0-place relations makes sense.

I get my grip on the notion of a property by thinking of properties and relations as attributes — as ways things can be.²⁵ This follows the way in which, for example, Russell introduces talk of universals in *The Problems of Philosophy*:

'Let us consider, say, such a notion as *justice*. If we ask ourselves what justice is, it is natural to proceed by considering this, that, and the other just act, with a view to discovering what they have in common. They must all, in some sense, partake of a common nature, which will be found in whatever is just and in nothing else. This common nature, in virtue of which they are all just, will be justice itself ... Similarly with any other word which may be applicable to common facts, such as 'whiteness' for example. ... Not being particular, it cannot itself exist in the world of sense. ... a universal will be anything which may be shared by many particulars, and has those characteristics which, as we saw, distinguish justice and whiteness from just acts and white things.'²⁶

Russell introduces the term 'universal' by considering what various particulars have in common; two things have a universal in common just in case there is some way the first thing is which is also a way that the second thing is.

On this understanding of properties, it is reasonably easy to understand the distinction between monadic properties and dyadic relations; monadic properties are ways that one thing can be, and dyadic relations are ways that two things can be. But it is not at all obvious that, using this conception of what properties and relations are, we any longer have the resources to understand the notion of a 0-place relation. Would it be a way for *nothing* to be? It is hard to understand what this could mean.²⁷

So if our starting point for thinking about properties is thinking of them as attributes or ways things can be, it's not clear that the idea of a 0-place relation makes sense. But of course this is not the only starting point for thinking about properties. Van Inwagen provides another, which is considerably friendlier to the idea of 0-place relations.

Van Inwagen introduces properties via the notion of an *assertible*: something that can be said, or said of something. He then explains the notion of a property as follows:

 $^{^{25}}$ There are obvious complications here if one thinks, as I do, that there are properties that nothing could have had. There are parallel complications, as van Inwagen notes, with the notion of an assertible, if there are properties too complex for anyone to assert. One might try to get around this by saying that properties are things of the same type as ways things can be.

²⁶Russell (1912), 52

 $^{^{27}}$ Here it is somewhat tempting to say that propositions are ways that the whole world, rather than just some particular thing, could be; but that would be to give up the view of propositions as 0-place relations and adopt the view that they are a certain type of monadic property.

'I propose, therefore, that properties be identified with unsaturated assertibles, with things that can be said of things. It seems unproblematical that unsaturated assertibles can successfully play the property role. And I would ask this: what is the property whiteness but something we, in speaking of things, occasionally predicate of some of them? And what is predicating something of something but saying the former of the latter?'²⁸

Monadic properties are things than can be said of individual things; dyadic relations are things that can be said of pairs of things; and so on.

With this background conception of properties as assertibles, it is very natural to think that, in addition to monadic properties and relations of various adicities, there are also 0-place relations. For just as there are things that can be said of individuals (e.g., redness) and things that can be said of two things (e.g., being taller than), there are also things that can be said, full stop. Because these are things which can be said without being said of anything, it is natural — again, against the background of the view that properties are assertibles to take these to be 0-place relations.

It might seem, then, that the question of whether we can make sense of 0-place relations depends on whether we ought to understand property talk in Russell's way or in van Inwagen's way. But this would be a weird ending place, for surely we *could* understand property talk in either way. If there is a dispute between the proponent of the Russellian conception and van Inwagen's, it would seem to be a verbal one.

As is often the case with verbal disputes, we can make some headway by disambiguating. So let's use 'property_R' to express the notion of a property as explained by Russell, and 'property_{vI}' to express the notion of a property as explained by van Inwagen. We can then express the conclusion of the preceding line of thought by saying that it is very hard (for me at least) to see how there could be such things as 0-place relation_R's, but very plausible that there are 0-place relation_{vI}'s.

Can the proponent of the view under discussion rest content with the claim that propositions are 0-place relation_{vI}'s? This would not be a very informative theory of propositions; it amounts to the claim that propositions are things that can be said (full stop). But we all already agreed to that; what we wanted to know is what these things which can be said (full stop) are. And the thesis that propositions are 0-place relation_{vI}'s does not answer that question.

So I do not deny that propositions are 0-place relations_{vI}. That is just the claim that propositions are things which can be said, and I agree with that.²⁹ I just think that that theory leaves unanswered the question to which we wanted an answer: the question of what the things which can be said (full stop) are.

So it seems to me that in order for the theory that propositions are 0-place relations to answer the question about propositions in which we are interested,

 $^{^{28}\}mathrm{van}$ Inwagen (2004), 134.

²⁹An annoyingly paradoxical, but not false, way of presenting my theory would be to say that I think that 0-place relations v_I are identical to 1-place properties R.

it must be understood as the claim that propositions are 0-place relation_R's. That would assimilate propositions to a category of entity — attributes, or ways things can be — on which we have some independent grasp. But the problem, as I've already said, is that I find it hard to see how there could be 0-place relation_R's. That is why I prefer the view that propositions are 1-place property_R's.³⁰

4 What about the representational properties of propositions?

Here's a widely believed claim, which I have so far ignored:

[P] Propositions have representational properties.

Much recent work on propositions has focused on the question of what attitude we should take to [P]. There seem to be three different views one might have:

- [P] is true, and a primitive fact, in the sense that it can't be explained in more basic terms. It is just part of the nature of propositions that they represent. This is the position which many primitivists take, so let's call this *primitivist representationalism*.
- [P] is true, but in need of explanation in terms of something else (e.g., the representational properties of subjects). This is the view that King, Hanks, Soames and many other reductive theorists take. Call this *reductive representationalism*.
- [P] is false. Call this *anti-representationalism*.

My view used to be the last of these. And this is a natural view for a property theorist to take. Properties in general are not about things; so, if propositions are properties, why think that propositions have to be about things? Moreover, as I've argued elsewhere, the arguments for ascribing representational properties to propositions are more thin on the ground than one might think; so why not, in the name of parsimony, opt for the simple anti-representationalist position?

I am not going to defend anti-representationalism here. This is in part because I now think that the anti-representationalist position has to be qualified in ways which require more space than I have here.³¹ Instead I will argue for a weaker claim. The reason why so much attention in debates about the nature of propositions has focused on the representational properties of propositions is that many have thought, not just that propositions represent, but that theories of propositions can be judged by how well they explain the representational properties of propositions. My aim here will be to argue that this is false,

 $^{^{30}}$ See Gilmore (this volume) for a promising way of presenting the 0-place relation view of propositions which is quite different than van Inwagen's.

 $^{^{31}}$ I explain the ways in which I now think that anti-representationalism has to be qualified in ?.

and hence that the recent focus on how we might explain the representational properties of propositions is, to that extent, a mistake.

Let's begin by considering the sorts of explanations of the representational properties of propositions that we get from reductive representationalists like King, Hanks, and Soames. In each case, the explanans is some fact about a representation-involving act carried out by agents.

In King's case, it is a matter of speakers composing the semantic values of simple expressions in a way which results in their assigning truth conditions to sentences of their language. Propositions are then (very roughly) facts about sentences, and these facts get their representational properties from the interpretive acts of speakers of the language.

In Hanks' and Soames' cases, it is a matter of speakers performing representational acts of predication. These acts then turn out to be identical to (or tokens of) propositions; the representational properties of propositions are explained in terms of the representational properties of the subjects carrying out these acts of predication.

There is obviously a common thread here. On all of these views, certain representational acts of subjects are intimately involved with propositions. Propositions then get their representational properties from the representational acts of subjects.

But notice that on any reasonable view propositions will be the objects of propositional attitudes. And on any reasonable view for a subject to have a certain propositional attitude is for her to represent the world as being some way. So, on any view, the subjects' representing the world will involve their standing in an intimate relation to a proposition. But then it follows that if it is a desideratum on theories of propositions that they explain the representational properties of propositions by placing those propositions in some intimate relation to the representational acts of subjects, this is a desideratum that any any reasonable theory of propositions should be able to meet.

In this sense, the requirement that we explain the representational properties of propositions is not a new requirement which is something over and above the requirement that we provide candidates for propositions which are suitable to play all of the theoretical roles of propositions. Any view of propositions which can explain how the relevant entities could be the objects of the attitudes has, in virtue of that fact, an explanation of how those entities could have representational properties.

Let's apply this schematic thought to the view that propositions are Cambridge properties. Here's one among many ways to do it. On my view, propositional attitudes are relation to properties. So, on my view, whenever a subject stands in the relation expressed by 'judges' to a property, that subject represents the world as being a certain way. Then we might say that that fact about that property – the fact that any possible subject who judges it represents the world as being that way – confers on the relevant Cambridge property the derivative representational property of representing the world as being that way.

This sort of explanatory strategy – of trying to, starting with the intrinsically representational activities of subjects, explain the derivative representational

properties of certain abstract objects – obviously has a lot in common with the strategies pursued in different ways by King, Hanks, and Soames. (Though the way that I've put it here has most in common with Soames' approach.) So, if you are attached to the idea that propositions have representational properties, but also like the idea that propositions are Cambridge properties, I recommend some version of this view.

One might then think that we face a choice as to whether we should opt for the version of the view that propositions are Cambridge properties without representational properties, or the version of the view according to which they have derivative representational properties. But it seems likely that the question of which of these versions of the view is to be preferred is merely a verbal one. On either version of the view, the property of being such that Violet reads has the following property: necessarily, anyone who judges it represents the world as being such that Violet reads. Is this property a derivatively representational one, or not? This question seems to call for stipulation rather than serious deliberation.³²

In this sense, the attempt to endow Cambridge properties with derivative representational properties ends up casting doubt, from another angle, on the current research program of trying to explain how propositions could have derivative representational properties. All of the entities with which different philosophers have identified propositions are claimed to stand in some very close relation to the representational activities of subjects. We could choose to use the phrase 'representational property' in such a way that standing in this close relation to those representational activities is sufficient for the possession of representational properties. But then I wonder whether having representational properties in this weak sense is a feature worth worrying about.

 $^{^{32}}$ Here my view is close to that of Richard (2014).

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