

What are Propositions?

1. When I think there is snow in the street, I represent the world as being a certain way, the way things would be were there snow in the street. It is natural to speak of what is represented as: snow's being in the street; the state of affairs of snow's being in the street; the possible fact or possibility that snow is in the street. What are these things – ways for things to be, states of affairs, possible facts?

Well, ways for things to be are just that – properties that a situation may or may not have. The way the world is when Tibbles is on the mat is the property of being a situation (be it a maximal one like the universe as a whole, or a more minimal one like the one that currently obtains in downtown Lille) which contains Tibbles and the mat and in which the first is related to the second by the relation *resting upon*.

In general, the properties that are states of affairs are ones 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, I one or another pattern of objects having properties and relations.¹ Ignoring niceties (having to do with permutations of objects and properties within sequences and corresponding permutation of the instantiation relation), two such properties are identical iff they involve exactly the same sequences of objects and properties and pattern of instantiation.

The states of affairs I have in mind are considerably more finely individuated than ways that things might be when they are thought of as sets of possible worlds. The

¹ Henceforth, I often use 'property' as a blanket term for properties and relations.

set of worlds in which Hesperus is Phosphorus is the set of worlds in which Twain is Clemens. But the property of being a situation in which <Venus, Venus> and identity are such that the terms in the sequence bear the relation to each other is not the property of being a situation in which <Twain, Twain> and identity are such that the terms in the sequence bear the relation to each other. So what is represented, when one represents that Hesperus is Phosphorus is not what is represented, when one represents that Clemens is Twain.² Since there are properties that are not possibly instantiated³, we don't need to invoke metalinguistic beliefs –as some advocates of possible worlds semantics do –in order to explain how two representational states can represent different things when each represents something impossible. Note that there is no problem, on this way of understanding what a state of affairs is, with the idea that there are many states of affairs that don't obtain. There is such a thing as the way things would be were I six feet tall, even though (alas) I am not.

²One might think of the matter as follows. For a state of affairs to obtain is for various objects to instantiate various properties. (Better: for various objects (and properties) to instantiate various properties (higher order ones, in the case of properties). The properties that are states of affairs will thus be individuated as finely as the configurations of objects and properties that realize those properties: A state of affairs is the property of **this** configuration of objects and properties obtaining. In general, then, necessarily equivalent states of affairs are distinct.

Of course the state of affairs that Twain is Twain **is** the state of affairs that Twain is Clemens, just as the Russellian proposition that Twain is Twain is the Russellian proposition that Twain is Clemens. If one –as I am about to –identifies propositions with states of affairs, one will have to explain how the propositional attitude ascriptions 'Mary believes that Twain is Twain' and 'Mary believes that Twain is Clemens' can differ in truth value. I have discussed this issue in considerable detail elsewhere. (Reference removed for review). Though those discussions don't identify propositions with states of affairs, what is said there about the semantics of attitude ascriptions transfers straightforwardly to the view of propositions taken here.

³ The modality here is metaphysical.

Suppose we are studying a well regimented language, so that what looks like a term is indeed a term, what looks like a predicate is indeed a predicate. Then it will be easy enough to get from a sentence of the language to the state of affairs that someone who utters the sentence represents as obtaining.⁴ In general, a sentence is used to represent a state of affairs which is the property of being a situation such that in it the members of some sequence O of objects instantiate some sequence P of properties in some way I . What objects and properties are constituents of the state of affairs represented by S is determined by what objects and properties are the semantic values of the terms and predicative constituents of the sentence and what pattern of instantiation is systematically determined by S 's syntax.

There are, of course, several ways one might spell out this idea, thereby giving a definition of *Sentence S is used (in language L) to represent state of affairs P* . A simple way would be to read the way of instantiating properties and relations associated with a sentence off it more or less directly, using lambda abstraction to form names of ways of instantiating. For example, the sentence

$Fa \ \& \ Gb$

represents the referents of a and b as instantiating the properties expressed by F and G in this way:

$\lambda x \lambda y \lambda P \lambda Q. [Px \ \& \ Qy]$.

⁴ I ignore context sensitivity throughout.

Here, the abstract names the way x , y , P , and Q are when x has P and y has Q . A sequence $\langle X, Y \rangle$ instantiates a sequence $\langle p, q \rangle$ in this way just in case $\lambda y \lambda x \lambda Q \lambda P [P x \ \& \ Q y] (p)(q)(X)(Y)$. The sentence as a whole represents the state of affairs of a situation's being one in which \langle what 'a' names, what 'b' names \rangle instantiates \langle being F , being G \rangle in way $\lambda y \lambda x \lambda Q \lambda P [P x \ \& \ Q y]$.⁵

Suppose that the language we are studying contains sentential complements, verbs like 'believes', predicates like 'is true' and 'is necessary', and quantifiers like that of 'Mary denied everything I said'. Then we will eventually face the question, How are we to understand the propositional idioms? I say we already have what we need in hand. We should identify the proposition expressed by a sentence S –and thus the semantic value of the complement *that S* --with the state of affairs represented by a use of S . To believe that there is snow in the street is to represent the state of affairs that there is snow in the street, with the representation playing a certain role in one's cognitive economy. A proposition is true in a situation s provided s instantiates it –provided, that is, that it's a way situation s is. Such a proposition is true *simpliciter* provided that the world, the maximal way things are, instantiates it. For the proposition to be necessary is for every maximal possible situation to instantiate it.

Summarizing: Propositions –what are picked out by complement clauses such as 'that there is snow in the street' in 'I think that there is snow in the street' –are states of affairs. States of affairs are certain properties, ones picked out by terms of the form *the*

⁵ Alternatively, one might associate ways of instantiating with connectives and such, and give an inductive definition of the state of affairs represented by a sentence. Assuming that we have already have a definition of truth for the language we're studying, there's no advantage I can see in doing this.

property of being a situation in which the objects o_1, \dots, o_n instantiate the properties p_1, \dots, p_j in way I . These properties are individuated in terms of the objects, properties, and mode of instantiation named in this last sort of expression.

This last suggestion may give pause. Individuating properties in the way just suggested is tantamount to saying that they have a constituent structure. Why should we think that properties have parts or constituents? I say in response: why shouldn't we think of properties in this way? Not only is there a relation of admiring, there is the property of admiring Carrie Brownstein. The property presumably depends on Brownstein (and the relation) for its existence. Such dependence is a mark of (though of course does not entail) mereological relations. Not only are there properties, being a male and being a sibling, there is a property of being a male sibling. It seems quite natural to think of this last property as being "made up" of the first two, in so far as "what it is" for an object to have the last property is for the object to have both of those properties. We thus recognize that some properties have other properties (and individuals) as parts. And things with parts are often individuated in terms of such. While I cannot deduce the existence of complex, structured properties from first principles, I don't see any bar to admitting them once we admit the existence of properties to begin with. And they certainly seem a useful addition to our ontology.

My proposal is a proposal about the objects of the propositional attitudes, and not a proposal about the nature of those relations or about their ascription. So I want to sidestep debates about these latter issues. But a comment about the attitudes themselves is in order.

To believe, doubt, imagine, or have some other propositional attitude towards a proposition involves representing it. We distinguish among such attitudes in terms of their typical cognitive roles (it is to this that we appeal to differentiate belief from desire) as well as other non-functional properties of the representation. For example, it is in terms of something like the reliability of the mechanism that generated it that we differentiate knowledge from mere belief.

You probably want to know what it is, for someone or something to represent a proposition *cum* state of affairs. I don't envision a one-size-fits-all account of what it is to represent a state of affairs. If something –you or I or a dog –believes that John threw a ball, it is in a cognitive state that represents John's throwing a ball. Myself, I think it's as close to analytic as it gets, that if one represents John's throwing a ball, one has a representation of John's throwing a ball. So if you or I or the dog believe that John threw a ball, we have a representation of the state of affairs, John's throwing a ball. This representation will typically be tied to behavior in a way that co-ordinates with desire to produce behavior that tends to satisfy the desire when the belief is true.⁶ But the ways in

⁶ Why do I say 'typically tied to its behavior'? Isn't it *definitional* that beliefs tend to interact with desire to produce the relevant sort of behavior?

I don't think that this is true, much less definitional. There are various pathologies of belief. (Davies and Coltheart 2000 gives a nice discussion of some of them.) What is striking about such pathologies is that in them, states we are inclined to call beliefs and desires do not interact in normal ways. In particular, when someone suffers from such a pathology, their belief (-like) state often does not interact with standing desires to produce behavior. The patient suffering from Cotard syndrome who thinks she is dead and wants the dead to be cremated does not report to a crematorium. (Note that this does not seem to be due to 'lack of integration' of the attitudes in any normal sense of integration.)

I think the idiom of belief is the right one to use in such cases, though I grant that for some such cases it may be indeterminate whether they are cases of belief. But if these cases are cases of belief (or even if it is simply indeterminate whether they are), their existence shows that the attitudes are not to be given crisp definitions on which the claim

which we represent the state of affairs may be very different. You and I are cognitively sophisticated, and we may represent the state of affairs *by* (more or less consciously) ascribing the property of throwing a ball to John. That is one way to represent the state of affairs. The dog is less sophisticated, cognitively. It may be in a perceptual state that is correlated with dispositions to respond in particular ways to throwing activity, a state that also has a component that is associated with something in the dog that is tracking John over time. That is, what represents the state of affairs of John's throwing the ball in the dog is a complex state involving various behavioral dispositions and perceptual states that relate the dog to the objects and properties that are constituents of the state of affairs represented.

Does the dog represent the state of affairs of John's throwing the ball *by* ascribing the property to John? Well, the *upshot* of the dog's being in the belief state is that it could be described as ascribing the property. But while you and I come to have the belief *by* classifying John, one worries that it gets things backwards to describe the dog as having the belief *by* making the classification. I will come back to this below.

2. Propositions, if they are states of affairs, are what is represented. They are representational in the minimal sense that they are true or false: given that propositions are states of affairs, and states of affairs are the sort of properties I pointed to above, propositional truth is instantiation by the maximal situation, the situation that is all the

that something is a belief entails that it realizes a stereotypical *belief + desire* → *action* functional organization.

I'm indebted here to discussions with Bob Matthews.

objects there are instantiating the properties there are in the way that those objects in fact do.

Propositions are states of affairs; states of affairs are properties. Now properties do not, in and of themselves, represent anything. There is nothing about the property of being a situation in which snow is in the street *considered independently of our representational activity* that makes it represent snow's being in the street --or anything else, for that matter. One might think that this is a problem for the suggestion I've made. After all, if the proposition that snow is in the street is representational only in virtue of our cognitive activity, then it is only true or false in virtue of that activity. So the proposition isn't "inherently" or "essentially" representational. But then, one might ask, how can it have the sorts of properties that propositions have to have? Propositions, after all, must be plentiful, and have their truth conditions necessarily, and thus independently of us. So all of the following have to be true:

1. For any molecule *m*, there is a true proposition that *m* is a molecule.
2. For any molecule *m*, the proposition that *m* is a molecule is, of necessity, true iff *m* is a molecule.
3. Even if we hadn't existed, so long as *m* was a molecule, it would be true that *m* was a molecule.

It's hard to see how these things could be so unless propositions exist independently of us and themselves determine what they represent. There are lots of molecules no one will ever think about; let *m* be one of them. If the representational powers of states of affairs depend on our cognitive activity, how could the state of affairs of *m* being a molecule represent anything, given that no one has used it representationally or had any other cognitive contact with it? It can't. But if it doesn't represent anything, it's not true or false. So (1) and (2) must be rejected, if propositions are states of affairs. Likewise, if we hadn't existed, the state of affairs that *m* is a molecule would have had no representational powers at all. So, if propositions are states of affairs, then if we hadn't existed, the proposition that *m* is a molecule would not have represented anything, and so would not have been true. So (3) isn't true.

The argument that (1) is false if propositions are states of affairs depends on the claim that the only way something can come to be representational –given that it is not 'intrinsically representational' –is by someone's using it to represent something. But why would we want to say *that*? Consider sentences of English. There are –I repeat: *there are* –infinitely many sentences of English. Sentences of English, I take it, are types –they are something like properties of utterances and inscriptions. The sentences of English are determined by the linguistic activity of English speakers. But only finitely many sentences of English will ever be realized. Whatever makes all the unrealized sentences sentences is **not** their actually being used by someone. What makes them sentences is the fact that our behavior and mental states make a certain grammar the grammar of English. Behavior and psychology can invest an infinity of items with linguistic properties without going through them one by one.

Brain and behavior can implicitly invest an infinity of things with syntactic properties. Ditto for semantic properties. Take the sentences of natural language. We make assertions by using sentences to represent states of affairs; such assertions are true (false) as the represented state of affairs obtains (does not). The association of sentences and states of affairs represented is systematic. It is determined *prior* to the use of a sentence what state of affairs its (literal) use represents, and thus under what conditions its use is true or false. This is so even if the sentence was not previously used or entertained.

We consistently and projectibly use our language in a particular way; that use and its consistency and projectibility invests an infinity of sentences with representational properties. Our usage *also* confers an infinity of semantic properties on the states of affairs that are the (potential) *representans* of our sentences.

How so? Well, the primary bearers of truth –that is, the things that are true in the primary sense of 'true' –are representations of states of affairs, things like natural language sentence tokens and (certain) token mental states. Representations are true / false as what they represent obtains / does not obtain. For example, for any state of affairs *p*, a representation of *p* –say, a belief in *p* –is true just if *p* obtains. It is natural and perfectly harmless to give 'true' a secondary sense that encapsulates this relation. In this secondary sense, it is states of affairs that are true (or false), a state of affairs *p* being true (false) just in case a representation of this state of affairs –a belief in it, a sentence expressing it –would be true (false) in the primary sense. And this is what our linguistic practices have in fact done. When we speak of representational states, we use complement clauses –things of the form *that S, whether T*, and so on –to pick out the

states of affairs represented, and apply 'true' to them in such a way that, on this (secondary) sense of 'true', something is, of necessity, true iff it obtains iff it is something, the representation of which would be true in the primary sense.⁷ One might say that, *relative to our linguistic practices*, states of affairs are "auto-representational" –that is, they have the watered down property expressed by 'true' in the secondary sense just isolated. And a state of affairs has this property, whether or not anyone has ever used it for representational purposes.

The upshot is this. There is, for any molecule *m*, such a thing as the state of affairs that *m* is a molecule. For any state of affairs *s*, *s* is (relative to our practices) autorepresentational, and thus is true (in the secondary sense) iff it obtains. So when I use (1), using 'true' in this way, what I say is non-problematically correct.

Suppose some uncognized molecule *m* to be assigned to 'x' in 'that x is a molecule'. Then relative to our linguistic practices, the clause represents the state of affairs that *m* is a molecule. Our practice is to represent this state of affairs by referring to it with such a clause; we ascribe it the property of propositional truth (i.e., obtaining) by saying that it is true. Since, relative to our practice, states of affairs autorepresent,

O. (It is true that x is a molecule) iff x is a molecule,

⁷ The counterfactual here is not to be understood in terms of a possible worlds semantics, with the whole true if the consequent is true at the "closest" antecedent worlds. I don't see this as a problem, at least not one for the proposal I am making about truth. Possible worlds semantic accounts of conditionals are useful heuristics. That doesn't mean they are literally correct.

relative to the assignment, is true in any situation. So what (O) says is necessary. (2) is true.

What of (3)? The argument that it's false depends on the claim that if the representational powers of a proposition arise from our use of it to represent, it will lack representational powers if we aren't around to endow it with them. But why should we think this? When I use the sentence *It's true that two is a number*, my utterance correctly characterizes a circumstance w just in case the proposition that I actually express with the sentence (that two is a number) is true at w . The proposition that two is a number is true at w just in case the state of affairs, being a situation in which two instantiates being a number, is itself instantiated at w . That state of affairs is instantiated at every w . Even if we hadn't existed, it would be so instantiated. Likewise, relative to our actual representational practices, the proposition (i.e., state of affairs) that m is a molecule, for any molecule m , is true at world w iff m is a molecule, whether we exist at w or not.

The truth or falsity of (3) turns on the representational properties of things relative to our practices, not on the representational properties those things would have had under circumstances other than the actual one. Even if no thinker had ever existed, the state of affairs that m is a molecule would have represented *relative to our actual practices* m 's being a molecule. Representation is *always* representation relative to the practices and behavior (really, behavior within a particular environment) of an individual or a group. When we evaluate a representation like sentences (1) through (3), we must take it relative to one or another practice P of representation. If the sentence makes a modal claim, we hold constant its representational properties as fixed by P . So understood, relative to our practices, (3) is true.

Nothing about (1) through (3) gives us any reason to suppose that propositions are 'inherently' or 'essentially' representational. Neither does the truth of (1) through (3) give us any reason to deny that 'proposition' is just another word for state of affairs.

3. Scott Soames tells us that the objects of the attitudes are representational. This means, he says, that whatever propositions are, they can't be properties. Of the idea that propositions might be properties of cognitive activities –something like the type of thing one does when one ascribes a property to an object –Soames says it involves an 'absurdity':

Act types...are either themselves a certain kind of property, or something closely akin to properties. As such, they are not the kinds of things that have truth conditions.⁸

What, then, are propositions, and how are they representational?

On Soames' view, what is representational in the first instance are events like judging, in which a thinker ascribes a property to an object. Propositions –the objects of belief and the other propositional attitudes –inherit their representational properties from the acts of predication that occur in such events. According to Soames, propositions are types of cognitive events in which objects and properties are related via predication and other mental acts: "... the proposition that snow is white is the minimal event type in

⁸ Soames 2010, p. 102. Subsequent references to Soames 2010 are indicated parenthetically in the text.

which an agent predicates whiteness of snow..." (104-5) The representational properties of a proposition are derived from its instances:

...the proposition *that o is red* is the minimal event-type in which one predicates *being red* of o. This event-type is representational *because* every instance of it is one in which *an agent* represents o as red. Just as torturing someone is said to be a violent act because events in which one performs it are violent episodes, so a propositional event-type may be said to represent ... what is common to its instances. From this we derive its truth conditions. It is true at w iff *at w* o is as it is represented to be by one who entertains it⁹

This view teeters on the brink of incoherence. Aren't event types themselves certain kinds of properties, or something closely akin to properties? How, then, can they have truth conditions, if properties aren't the sort of thing that have truth conditions?¹⁰

⁹ Soames, ms. A.

¹⁰ Why, you may be wondering, does Soames think it absurd to say that a property can have truth conditions? According to Soames

ascriptions to propositions of *what can be said of act types*, as well as ascriptions to act types of *what can be said of propositions*, strike us as bizarre or incoherent. ...it would be incoherent to say "**the proposition that John is brilliant is what I just did*" or "**What I plan to do* (when I plan to predicate brilliance of John) *is false*". ...it would be absurd to say "*What I believe, and what Gödel proved, is something I just did.*" (101-2, italics in original)

But surely it is exactly as "absurd" to say 'the proposition that John is brilliant just happened / occurred' or 'What happened in the bathroom at 2 pm was false'; likewise for 'What I believe, and what Gödel proved, is something that happened in the bathroom.' This sort of linguistic evidence doesn't allow us to decide that event types, instead of act types, are propositions.

The last citation suggests a way to retreat from the view that no property can have truth conditions: If a property is such that every instance of it has truth conditions / is representational, then the property itself is, too. Thus, Soames' predicational event types are representational. But states of affairs *cum* properties are not like this –an instance of a state of affairs is just objects having properties and standing in relations. While *some* such configurations are representational, most of course are not.

The proposal is that a property P has truth conditions provided P itself has a certain property Q (being necessarily such that all its instances that have truth conditions). The proposal isn't implausible. But one wonders why we should think it's the only plausible account of what it is for a property to have truth conditions. I suggested above that to say that a state of affairs s is a bearer of truth or falsity is to say that a belief whose object was s would be true or false. To have a true belief is to represent a state of affairs that obtains. The state of affairs is in a straightforward sense the object of the belief. And a state of affairs can thus be said to be true or false, depending on whether a belief representing it would be true or false –that is, depending on whether it does or does not obtain.¹¹ It's hard to see why this is any worse of an

Soames himself says, of the idea that propositions are events

Since this is a new way of thinking of propositions...it may be a bit surprising to be told that they are things that occur. However, I don't see this consequence as incoherent.... the theoretical advantages of thinking of propositions in this way are substantial, and justify this modest extension of our view of them. (103-4)

Fair enough. But exactly the same thing might be said about the idea that propositions are act types. And exactly the same sort of thing ought be said of the idea that propositions are states of affairs.

¹¹ As I observed in note 7, the interpretation of the modal here is somewhat delicate. What's meant, of course, is that a state of affairs P is true iff (were one to have a belief

account, of how propositional objects "derive" their representational properties, than the account Soames offers.

Soames and I agree that what is representational in the first instance are the cognitive acts of (or events involving) agents that represent. We agree that when we talk about agents' representational acts, we describe them using devices –complement clauses like 'that snow is white' –which we use, in part, to characterize the truth conditions of their representations. And we agree that complement clauses so used are well regimented as singular terms; we call what they name when so regimented propositions. Does all this require that representational states like belief are best understood as relations to objects -- propositions --that are in some interesting sense representational?

Of course not. What is true or false in an interesting sense are actual and possible acts or events of representation. Propositions are representational only in the shallow sense that it is easy and useful to project talk of potential beliefs and assertion as true or false onto the propositions –i.e., states of affairs --themselves. These latter are both what is represented in states like belief and what determines the truth conditions of the representation. Once we have projected our talk of true and false belief and assertion onto the things we potentially represent in belief and assertion, we have given ourselves a powerful tool for characterizing beliefs and assertions as correct or otherwise, even in the absence of knowledge of what a belief or assertion says.¹²

whose content was P, the object of one's belief would actually obtain). More generally, to say that P is true at w is to say that were one to believe P, the content of one's belief would obtain at w.

¹² Do not interpret me as here endorsing a minimalist notion of truth, but rather as agreeing with the minimalist's observation that the (propositional) notion of truth has enormous descriptive utility.

What are true or false in the primary sense of 'true' and 'false' are acts of representation. It is useful and harmless to extend truth talk beyond this primary sense. We do extend truth talk in this way. So there is a lame, watered down sense in which the objects of the attitudes are true or false and hence representational. It is hard –well, it is hard for me, at least –to see what the point of insisting that propositions need to be representational in some stronger sense might be.

4. Soames disagrees. He writes

It is a truism that a belief...represents the world as being a certain way, and so is capable of being true or false. Ordinarily, what we mean by this is that *what is believed*...represents the world, and so is true or false. Using the familiar name 'proposition' for these things, we may ask "*In virtue of what are propositions representational, and hence bearers of truth conditions?*" This was the key question that Frege and the early Russell weren't able to answer. Nevertheless, the problem is genuine. Surely, beliefs...*are* representational. (63-4)

According to Soames, there *is* something about a proposition in virtue of which it is representational. That something is "what the agent's cognitive attitude adds to the [objects and properties he is thinking about] to bring it about that the world is represented as being one way rather than another." (64) What is added, Soames says, is not idiosyncratic: what I "add" to Desdemona, Casio, and loving to "produce" the belief that

Desdemona loves Casio has to be the same thing as what you add to them to produce the belief. That "addition" is a particular kind of cognitive activity:

What unites the elements of a proposition, and gives it representational import, is something that agents do when they bear cognitive relations to it –namely, *predicate* one propositional constituent of the others. (65)

Thus does Soames arrive at the idea that the proposition that grass is green is a "minimal event type" –the type of thing that occurs when one thinks that grass is green. Since what is "added" to propositional constituents to produce the proposition is the same across thinkers –predicating greenness of grass --the proposition that grass is green encodes necessary and sufficient conditions for entertaining the thought that grass is green. In general, the proposition that P is to be identified with the sort of cognitive event that occurs when and only when one thinks that P. It is the event that consists of "the structure and sequence of cognitive acts of predication that are necessary and sufficient for entertaining" P. (106) As Soames sees it, this account has the upshot that propositions have their truth conditions "intrinsically" and "essentially" (103) "because of their intrinsic connection to the inherently representational cognitive events in which agents predicate some things of other things." (107)

It is hard to take issue with the idea that predicating greenness of grass is necessary and sufficient for thinking that grass is green, since (in unadorned, pre-theoretical English) saying that someone ascribed greenness to grass is just giving two

dollar expression to the ten cent idea that she thought that grass is green.¹³ But Soames wants that the notion of predication to do considerable descriptive and explanatory work. The account of propositions that Soames develops in the most detail is one on which "every proposition is formed simply by predicating an n-place property of n arguments." (110) This includes the propositions expressed by negations, conjunctions, disjunctions, and the like. On this model, thinking that squirrel A is running away and squirrel B is standing still involves: ascribing running away to A; ascribing standing still to B; thereby producing tokens of the propositions that A is running away and B is standing still; then ascribing joint truth to the tokens. The conjunctive proposition that A is running away and B is standing still is the event type of performing this series of predications.

As Soames realizes, one might well balk at this proposal. Surely there are cognitively unsophisticated creatures –dogs, cats, and two year old humans, for example - -that are able to entertain and believe the conjunctive claim that A is running away and B is standing still although it is not plausible that they are in a position to ascribe anything like *untruth* or *joint truth* to complex event types or other such candidates for propositions. Not only is it not plausible that the dog and the two year old have the concepts of truth, it is not plausible that they have the ability to think about representational acts or events in a way that makes them available for predication.¹⁴

¹³ 'thinking' here is supposed to be a generic mental attitude, one common to entertaining, believing, assuming, doubting, knowing, and so on; in this sense, one thinks that grass is green when (for instance) one thinks that if grass is green, then hay is beige.

¹⁴Soames himself poses such an objection to a "deflationary" account of propositions that takes them to be nothing more than theoretical posits introduced by the theorist. On such an account, a proposition might be something along the lines of an ordered pair of a property and the right number of constituents; to entertain it is to ascribe the property to the constituents. This means that the proposition that A and B is <the property of being

Given the range of things that can have conjunctive beliefs –adults, toddlers, dogs, computers --it's less than clear that there is anything substantive one can say about the psychological particulars of believing that Fa and Gb, beyond saying that it's having a belief that represents the state of affairs of a's being F and b's being G.

Soames suggests that we can get around this kind of objection with a modest increase in the inventory of mental activities that constitute the glue that holds propositions together. In particular, he suggests we might identify conjunctive and other complex propositions with event types that don't involve predicating properties of propositions:

There are two ways to explain how one can believe [truth functional propositions like conjunctive and disjunctive ones] without predicating truth of anything. One

jointly true, <the proposition that A, the proposition that B>; believing it is ascribing joint truth to the propositions.

The deflationist's propositions are abstract, set theoretical structures. Soames objects that we don't think about such things when we think, for example, that snow is not crimson, and thus can't be credited with making them objects of predication. As he puts it:

...it is not obvious that agents can correctly be said to have *any* of the theorist's abstract structures [any of those she might identify with propositions within the context of her theory] in mind in a sense sufficiently robust to make them the targets of the agents' acts of predication. (97)

Soames concludes that a deflationary account of propositions is not in offing: we must adopt a 'realist' account of propositions, on which they are "parts of the reality being modeled, rather than merely components of the model." (98)

What is not obvious, I would say, is why propositions *must* be something that an agent "has in mind in a robust sense". Their primary purpose, as I see it, is a classificatory one. My point in this section, as will become clear, is that it is implausible that there is a **single** "robust" sense in which someone needs to have to have a proposition "in mind", in order to be correctly said to believe or entertain it.

is to make them event-types in which one entertains their constituent propositions, without predicating anything further, distinguishing the two by the different roles they play in thought. Another way of doing the same thing involves relations R& and RV. Predicating these of *a*, *redness*, *b*, and *roundness* represents *a as red and b as round* (and only this), and *a as red or b as round*, respectively. To believe these is to believe *that a is red and b is round* and *that a is red or b is round*. To believe their negations is to believe propositions in which one negates R& and RV. None of these beliefs requires making propositions predication targets. By taking R& and RV to be 2-place relations each argument of which is an n-place property followed by an ordered n-tuple, we can embed propositions formed using them under R& and RV themselves, thereby making truth-functional cognition safe for squirrels and 2-year olds.¹⁵

Toddler cognition posed a problem because (a) Soames wishes to identify the proposition that P with an event type that encodes (necessary) necessary and sufficient conditions for entertaining the thought that P, but (b) the event types with which he (tentatively) identified complex propositions are not events of which all things that can think the propositions are capable of being agents. The proposal above thus solves the problem only if *either* (1) there is a role R (presumably an inferential role) two propositions may play in thought such that (it is a necessary truth that) something entertains a conjunctive thought that P and Q just in case the propositions that P and that Q play role R in the

¹⁵ Soames, ms. B.

thing's thought, *or* (2) (it is a necessary truth that) someone entertains a conjunctive thought that P and Q just in case they ascribe a relation like the relation R&.

(2) seems like a non-starter so long as we think of predication –as Soames himself does –as a relation which requires some sort of cognitive acquaintance with the objects of predication. The relation R& is a relation that holds between a property or relation and *an n-tuple* of objects of predication. But as Soames himself observes, objecting to the view that propositions are something like n-tuples of propositional constituents:

Agents perform ... predications because they have both the properties predicated, and that of which they are predicated, in mind..However... it is not obvious that agents can correctly be said to have ...abstract structures [like n-tuples] in mind in a sense sufficiently robust to make them the targets of the agent's acts of predication. (95-97.)¹⁶

(1) strikes me as involving a change in Soames' view. Soames' original proposal makes having a propositional attitude a little like talking to one's self: To entertain the

¹⁶ This is just the objection to the deflationary account of propositions discussed in note 14.

Soames presumably made the relations R& and RV relations to n-tuples so that he could avoid variations to standard objection to Russell's multiple relation theory of belief. The multiple relation theory, as Russell presented it, requires an infinity of belief relations: the three place relation I bear to you and happiness when I believe that you are happy, the four place relation I bear to you, admiring, and Frege when I believe that you admire Frege, the five place relation This seems objectionable because it leaves us without a single relation to assign to the verb 'believes'. If the number of constituents in p and q controls the relation used to form their conjunction, it's not altogether clear that one could give a finitary theory of propositions that would, for example, assign to each conjunction the correct conjunctive propositions.

Even if this problem and the one in the text can be evaded, the resulting theory would still be liable to the objections lodged below.

proposition that P, one (mentally) identifies P's constituents, and predicates some of them of the others; the proposition that P is the event type of such a stretch of interior monolog. Dispositional facts enter into this picture in distinguishing one attitude towards a proposition from another: to believe p, for example, is "to be disposed to endorse, accept, or subscribe to the predications needed to entertain p." (65) But now dispositional mental --presumably inferential --roles associated with mental tokens are being called upon to differentiate (for example) entertaining the thought that P and Q from entertaining the thought that if P, then Q. What inferential role a mental token has is presumably largely a matter of how the tokener is disposed to manipulate that token in thought. So the conjunctive and conditional propositions will have to be individuated in terms of the possession of (fairly high level) dispositions.

In and of itself this new direction is not objectionable. But it is less than clear that it will provide an adequate account of truth functional propositions and our attitudes towards them. One can certainly believe or assert a disjunctive or conditional claim even when one's grasp of the inferential role of disjunction or implication is less than sterling. Suppose the proposal, for example, is that to believe the conditional, if p then q, one must be disposed, inter alia, to infer not-p from not-q, and to have mastered conditional proof. This, I can assure you, means that many American college students do not have conditional beliefs.

It is of course true that *one way* one can come to believe a truth functional claim is by having within one's cognitive repertoire a well developed grasp of a particular inferential role combined in a belief making way with the claim's propositional constituents. But that's not the *only* way to believe such a claim. One can also be a

marginal member of a linguistic community that has a word that is associated, in cognitively refined members, with a well developed inferential ability corresponding to a truth function. A marginal member will be a position to *represent* the state of affairs expressed by a conditional sentence, even if her command of what's represented is less than sterling. So here are two ways to believe or entertain conditional claims. Why exactly should we think that these are the *only* ways in which one might have the ability to entertain or believe such a claim? Surely it is reasonable to think that there is a somewhat open-ended family of things that count as the relevant sort of representation: one involves subsumption of (tuples of) propositions under one or another category; another involves having refined inferential dispositions vis à vis the relevant propositions; another involves tokening a sentence that normally has a certain inferential role in one's linguistic community; yet another involves behavioral dispositions triggered by perceptual experience. Indeed, arguably one way for it to be true that x believes that such and so is to (be disposed to) behave in a way that triggers *in an observer* of a certain sort an impulse to co-classify x's states with states of believers whose representations are articulated in certain ways.

One might at this point suggest that truth functional propositions are disjunctive event types: the proposition that A and B, for example, is the sort of thing that happens when either one predicates joint truth of the propositions that A and B, or those propositions play a certain functional role in one's thought, or one accepts a sentence that in one's community plays for many members a certain inferential role, or one ascribes R& to the propositions that A and that B, or.... In so far as the disjunction is open ended, the suggestion is not far from the suggestion that (for example) the proposition that A and

B is the event type of representing that A and B. This suggestion does not give a particularly illuminating to the (sort of) question

In virtue of what is the proposition that A and B representational, and thus the bearer of truth conditions?

which it was Soames' goal to answer. It is not clear what the motivation for adopting this sort of account of propositions might be, as opposed to the more straightforward account of propositions sketched in the first sections of the present discussion.

Kindred points, it seems me, to apply to Soames' views about atomic propositions, ones that represent an n-tuple of individuals as standing in one or another relation.

Soames thinks –surely correctly –that representational properties are to be explained in terms of the properties and relations of things that represent. He thinks that the fundamental notion in such an explanation is of a thinker *predicating* a property of an object. But what, exactly, is predication? Soames takes it as a primitive, so we are not going to get a definition. We are told that it is '*what the agent does*' (65) in asserting, conjecturing, and so forth. It is something that occurs in perception (when we see x as an F), in judging that an object is F, and when we understand a sentence that says that x is F.

If Soames' proposal were that the proposition that (say) John is smarter than Louis was the event type of ascribing being smarter than to <John, Louis> **and** that believing this proposition was making the ascription in a certain ("belief making") way, it would obviously be wrong. Surely some of our beliefs are tacit, and do not involve anything plausibly described as ascription. Now, Soames does not hold that having a belief that

John is smarter than Louis requires actually predicating the relation of the individuals; to have the belief is "to be disposed to endorse, accept, or subscribe to" the predication. Soames' idea, I take it, is that the basic representational phenomenon is (what we might call) *explicit predication*; propositions are the kinds of events that occur when this basic representational phenomenon occurs; belief and other attitudes are certain dispositions towards what happens when these events occur.

The problem with this view, as I see it, is that ("basic") representation and attitudes like belief are considerably more variegated than Soames allows. We would, for example, normally say that a teacher who suffered from an implicit bias towards her African-American students believed that they were inferior in various ways to other students; though she might *say* that she believed that African American students were equally intelligent as other students, she does not believe this. The prejudiced teacher is disposed to endorse the ascription of the property of being just as intelligent as the average white student to her African-American students, though her behavior makes it obvious that she doesn't believe those students to be as intelligent as the white students. More significantly, it is not at all clear why we should want to say that the teacher ascribes the property of being less intelligent than other students to the African-American students simply because her behavior manifests a consistent disposition to treat those students in ways appropriate only if they are less intelligent. There are more ways to believe that a is F than predicating, or being disposed to predicate, F of a.

Of course, there is a (philosopher's) use of 'predicating' on which *b thinks a is F* and *b predicates F of a* are more or less synonymous. But surely it's an odd idea, that predication in the sense of some sort of cognitive *activity* generally enters into

representation. Take perceptual belief as an example. Properties and objects are in some sense available to human consciousness in human perception. They are available to animal cognition in animal perception. But I'm not sure it makes much sense to speak *quite generally* of the agent, or something subpersonal, or my dog actively predicating properties of objects in perception. Aspects of perceptual states (quasi-) systematically covary with aspects of what produces them; some of these aspects are subpersonally correlated in such a way that they function over time as a representation of a single covarying object or enduring instantiation of a property. Perceptual states control behavior in a way that makes them systematically responsive to the manifest objects and properties that produce them. Historical and social relations of aspects of the mental make some interpretations of such states more reasonable than others. What makes it true that properties are predicated of objects in perception (or that states of affairs are perceptually represented) is that perceptual states have such a complex of causal, counterfactual, psychological, social properties and relations.¹⁷ Perception is representational because of the sort of complex facts just alluded to. That it involves property ascription is not an *explanation* of its representational properties, but just another way of saying that it is representational.

What is right about Soames' idea, that thinking that such and so is a matter of (being disposed to make a sequence of) predication(s) is that **paradigms** of thinking that such and so are cases in which the explanation of why the thinker thinks that such and so is that (a) the thinker has made or at least is disposed to make various predications, and

¹⁷ Whether it's reasonable (and thus, I would say, correct) to say that something has a belief may depend on factors that across the situations in which we ascribe (or withhold) ascription of the attitude. I discuss this in [Reference removed for review].

(b) those predications (or states connected with her dispositions to make them) have a functional role more or less well described by various truisms about when adults make/are disposed to make such predications and how such predications / dispositions typically lead to behavior. Attitudes are **states that are in various ways like such paradigms**. Like them in what way? Well, that depends on various things –for example, our interests in talking about beliefs.¹⁸ But it is a familiar fact about paradigm structures that something may be an F but be very unlike paradigm Fs.

If all this is right, notions of a proposition like Soames' notion, on which the proposition that P is something like "the" cognitive activity involved in thinking that P, haven't much of an explanatory or descriptive role to play, in either philosophy of mind or semantics. I rather doubt that there is just one, or even a handful, of kinds of cognitive activity that are necessary and sufficient for representing that snow is white; likewise for representing that if snow's not white, then grass isn't green. Certainly there is little point in trying to build into an account of *propositions* –that is, an account of the things picked out by the complement clauses of attitude ascriptions –the presumably disjunctive and probably open ended collection of ways in which one might represent a state of affairs. The job of a proposition is simply to provide a way to classify representational states in terms of what would make them accurate or otherwise. This is achieved if we say that propositions are states of affairs, and attitudes are various representational relations to them.

¹⁸ We will, for example, generalize from the paradigm in one way if we are trying to give an account of everyday attitude ascription, perhaps in quite another if we are doing cognitive science.

We invoke propositions in an account of mind and language as the semantic values of complement clauses. An account of propositions that sees them as states of affairs –ways for things to be, ways individuated in terms of the objects and properties they involve –is adequate for this purpose. There is a deflated sense in which propositions *cum* states of affairs are representational –they are representational simply because they are things that *we call* true or false, and their truth and falsity conditions can be straightforwardly defined to verify instances of the schema *it's true that S iff S*. But there is also a sense of 'representational' in which propositions so conceived aren't representational at all: they are what are represented, actual or possible facts. What's representational in the fundamental sense isn't the object of representational states; it's the relation between (a state of) she who represents and the state of affairs represented. There are no facts about representation, attitudes, or belief that require that propositions be representational in any inflated sense. It is pointless, and potentially obfuscatory, to build representational properties into propositions.¹⁹

¹⁹ Note removed for review.

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