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Belief Reports and the Property Theory of Content

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The property theory of content is a view about the metaphysics of mental content, which is motivated chiefly by standard examples of *de se* attitudes. According to the property theory, the contents of beliefs and other cognitive attitudes are not propositions. Instead they are properties, that is, entities without truth values that are constant across persons and other objects, places, and times (although properties can be said to be *true of* persons and other objects). In this essay, I develop an account of truth conditions for cognitive attitude reports – belief reports in particular – which appeals to the property theory of content. The theory of belief and the theory of belief reports are different things, but it seems clear that facts about what we believe must be what make our true belief reports true. Along the way I consider some competing semantic accounts that appeal to the doctrine of propositions, that is, the view that belief contents are propositions, conceived somewhat neutrally as entities with possible-worlds truth conditions. This essay is divided into four sections. The first has to do with the property theory of content and reports of *de se* belief, the second with belief reports in which *that*-clauses contain proper names or natural kind terms, and the third with what we might roughly describe as reports of purely *de dicto* belief. The result of the first three sections will be a few apparently disparate accounts of truth conditions for belief reports, offered without any claim to comprehensiveness. The fourth section contains some ideas about unifying the accounts offered in the first three sections, as well as a discussion of the logical form of belief reports and the sort of proposition they express.

1 *De Se* Belief Reports

The problem of *de se* belief is one of several great puzzles in contemporary philosophy of mind. The problem is best set against a background framework that includes the doctrine of propositions. Suppose, for example, that Valerie has the *de se* belief that she herself is a spy, that is, she believes herself to be a spy. Joe, on the other hand, has a belief that he would express by saying 'Valerie is a spy' or perhaps 'She [pointing to Valerie] is a spy'. For concreteness, let's suppose that Joe has read in the newspaper that Valerie is a spy, and that he sees Valerie wearing a trench coat, and thinks that everyone who wears a trench coat is a spy. For comfort, we might even wish to assume that Joe knows Valerie by name. In this case, the following claims are true:

(1) Joe believes that Valerie is a spy.

(2) Valerie believes that she herself is a spy.

The problem is to identify a proposition such that Valerie believes it, and such that her believing it makes (2) true. This is the belief she would express by uttering the words 'I am a spy'. However, it seems that Valerie could believe the proposition *that Valerie is a spy* without believing that she herself is a spy, since she might somehow fail to realize that she is Valerie. It seems too that for any property *F*, she could believe the proposition *that the F is a spy* without believing that she herself is a spy, since she might not think that she is the *F*. So, it seems that there is more to Valerie's *de* se belief that she herself is a spy than her belief in any proposition. How, then, is this kind of belief to be understood?

To get a bit clearer on this presentation of the problem, consider claim (1) above. What makes this true? Which proposition might Joe believe, and thereby believe that Valerie is a spy? Suppose we identify such a proposition and call it '*P*'. Joe believes *P* in virtue of some *third-person perspective* on Valerie. So, it seems possible for Valerie to believe *P* in virtue of a third-person perspective on herself, and as a result without the *de se* belief and first-person perspective associated with it. Whichever proposition Joe believes, then, it seems to be such that Valerie could believe it without believing herself to be a spy. Unless the doctrine of propositions is bolstered by other claims about the nature of belief, we seem to have the following result. The elusive proposition, which makes (2) true when Valerie believes it, cannot be the proposition *that Valerie is a spy*, cannot be the proposition *that the F is a spy*, and cannot be a proposition that anybody other than Valerie could believe.

The property theory of content solves the problem of *de se* belief by maintaining that the elusive content is not a proposition at all. The content of Valerie's belief is the property *being a spy*, which Valerie takes herself to

have. The contents of such beliefs are properties that their subjects believe themselves to have, not propositions that they believe to be true. Following Lewis (1979), I shall use the term 'self-ascription' for the relation between conscious subjects and properties that they believe themselves to have. Valerie, then, self-ascribes the property *being a spy*. The self-ascription relation is in an important way necessarily reflexive. To self-ascribe a property is to ascribe it *to yourself* and not to any other thing. One person simply cannot self-ascribe a property to another.

The version of the property theory that I will defend maintains that *in general*, belief can be understood as the self-ascription of properties. There is no good reason to restrict self-ascription to special beliefs like Valerie's. For example, when you believe that the smallest mountain is bigger than the largest bicycle, you self-ascribe a property, and when Joe believes that Valerie is a spy, he self-ascribes a property.[1] So, on the view I am defending, all belief turns out to be *de se* belief. Properties serve generally and uniformly as the contents of our beliefs.

Some property theorists, especially those inclined toward unstructured conceptions of propositions and properties, might wish to say that *de se* contents are centered propositions. A centered proposition is a set of centered worlds, and a centered world is a pair consisting of a possible world and an inhabitant of that world – the world is "centered on" the inhabitant. (This is one of several different but related conceptions of centered worlds.) On this account, the content of Valerie's *de se* belief that she is a spy is the set of centered worlds in which the center is a spy. This centered proposition corresponds in a strong way to the property *being a spy*. The content of the belief that the smallest mountain is bigger than the largest bicycle is also a set of centered worlds, but one that does not discriminate between worldmates (that is, for any world w and for any individuals x and y that inhabit w, $\langle w,x \rangle$ is in the set if and only if $\langle w,y \rangle$ is).[2] I shall continue to use properties rather than centered propositions, but the property theory can incorporate either approach. Since centered worlds are in a way isomorphic to properties, the different approaches might be (quite close to) mere terminological variants.

Even more generally, properties serve as contents not just for belief but for all of the so-called propositional attitudes. For example, Valerie's desire to be anonymous is understood in terms of her bearing the appropriate cog-

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[1] This view has been defended by Chisholm (1979, 1981), Lewis (1979, 1986: 27-40), and Feit (2008). Loar (1976) proposes a more restricted version of the view, according to which certain beliefs, but not all of them, are to be understood in terms of a self-ascription relation between believers and propositional functions.

[2] Egan (2006) calls this a *boring* centered proposition. The set of centered worlds in which the center is a spy, on the other hand, is *interesting* – it contains the pair of a world with one of its inhabitants but not the pair of that world and another of its inhabitants.

nitive relation – the analogue of self-ascription for desire – to the property *anonymity*. She wants to have this property. Having said that, I will restrict our official version of the property theory herein to the case of belief. The view is as follows:

> *Property Theory of Content*: Necessarily, a subject S believes something if and only if there is a property *F* such that S self-ascribes *F*. Belief is a dyadic relation – viz., *self-ascription* – between a subject and a property. The content of a belief is the property that the subject self-ascribes.

The property theory is built for *de se* belief. As such, an account of the truth conditions for *de se* belief reports flows naturally from it. (Throughout this essay, I will take a belief report to be an assertive utterance of a belief sentence.) According to this semantic account, (2) above does not have Valerie believing a proposition; instead it has her self-ascribing the property *being a spy*. The general account can be given as follows (to make things simple here, let S be a name for the subject of the belief and let F be a predicate that contains no demonstratives, indexicals, proper names, or kind terms):

> *Semantics for De Se Reports*: A belief report of the form ⌜S believes that she herself (or he himself) is F⌝ is true iff the bearer of S self-ascribes the property expressed by F.

The same account also provides truth conditions for attributions that contain infinitives, in particular those of the form ⌜S believes herself (or himself) to be F⌝, but for simplicity I shall focus on the other form here.

As I see it, the metaphysics of cognitive content is conceptually prior to the semantics of attitude reports, that is, before we undertake the task of giving an account of truth conditions for belief reports, we need to have a theory about the nature and content of belief. The case for the property theory of content, again as I see it, is overwhelming.[3] If this is correct, then any adequate semantic account must appeal to the property theory at the level of truth conditions; other accounts would be non-starters. Nevertheless, it will be useful here to compare the property-theoretic semantic account with a couple of its main rivals.

According to many neo-Fregeans, the Fregean conception of thoughts can accommodate the issues concerning *de se* attitudes.[4] These philosophers follow Frege in saying that each of us can employ a first-person mode of presentation that is inaccessible to others and is necessary and sufficient

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[3] See the works cited in footnote #1.
[4] For example, Peacocke (1981) and Forbes (1987) explicitly address *de se* belief and offer analyses along Fregean lines. See also Evans (1982), McDowell (1984).

for *de se* belief. Consider an utterance of 'Ralph believes that he (himself) is making a mess'. Forbes (1987: 23) offers the following analysis:

$$B(Ralph, [self]_{Ralph} \; \hat{} \; \lceil making \; a \; mess \rceil \;)$$

The analysis is Fregean in that the pronoun 'he' and the predicate 'is making a mess' do not have their customary references. In the regimentation, corner quotes are used to form a name of the sense of the expression within them, 'ˆ' stands for the way in which senses are combined together to form a single complex sense, and '$[self]_{Ralph}$' designates the mode of presentation of Ralph that only Ralph can employ in thought.[5] The idea is that there is a *type* of mode of presentation, namely [self], tokens of which are employed in thought on specific occasions. For example, when I believe myself to be making a mess, I grasp a *different* token of the same first-person type, which accounts for the way in which Ralph and I believe alike. Token senses – rather than types – must make up the contents of these beliefs, since different tokens of [self] determine different objects, and so this is the only way in which the beliefs could bear truth values.

The modes of presentation or senses at issue here – we might call them '*de se* senses' – are allegedly entities that can exist without being grasped or entertained, but that depend for their existence on a given individual (for example, $[self]_{Ralph}$ would not exist if Ralph did not exist). This is a departure from Frege's thought and part of what makes the present view *neo*-Fregean. *De se* senses belong to a class of neo-Fregean entities that are supposed to present or determine individuals, but not descriptively, that is, not purely in virtue of properties that the individuals uniquely possess. The entities in this broader class have been labeled '*de re*', 'demonstrative', 'indexical', and 'non-descriptive', and have been understood differently by different thinkers. Their exact nature is somewhat mysterious, insofar as *how* they pick out or determine particular individuals is not fully clear (at least not to me). In any case, the neo-Fregean semantic account will look something like this:

> *Neo-Fregean De Se Semantics*: A belief report of the form ⌜S believes that she herself (or he himself) is F⌝ is true iff the bearer of S believes the proposition: *[self]_S ˆ ⌜is F⌝*. (The corner quotes around 'is F' are sense-quotes.)

What shall we make of this attempt to solve the problem of *de se* belief while holding onto the doctrine of propositions? I shall briefly enumerate several problems, which seem to me quite serious when taken as a group. First, on the neo-Fregean view, the content of one's *de se* belief is a thought that nobody else can even grasp, let alone believe. This commitment to

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[5] Peacocke offers the same sort of analysis. For example, see Peacocke (1981: 191).

content that is in principle unshareable, I would argue, should be a last resort.

Second, the distinction between the various *token* senses – for example, [self]$_{Ralph}$ – and the *type* to which they belong adds an additional layer of complexity to the theory (especially since on many accounts token neo-Fregean senses are repeatable, which makes type/token terminology a bit misleading; determinable/determinate terminology would be better.)   This worry would not amount to much if the content of a token of [self] were, as is sometimes suggested, a mixed descriptive-demonstrative sense expressible in such terms as 'the subject of *this* experience'.   However, the claim that *de se* thoughts have the form 'the subject of this experience is F' is not plausible.   For example, it is possible for somebody to believe (correctly or mistakenly, it does not matter) that he is not the only thinker of a certain thought, for example she might believe that God is thinking it too.   More generally, she might think that she is not the only subject of any of her experiences, but it seems that she could still have plenty of *de se* beliefs.   If this is the case, however, then the contents of those beliefs cannot have the form 'the subject of this experience is F', since she does not think there is a unique subject, *the* subject, of her experiences.   Moreover, if somebody else (God perhaps, or a Siamese twin who shares some brain tissue) really were having the same token experiences, then all these neo-Fregean beliefs would be false.   But surely she could have some true *de se* beliefs.   I conclude that [self] cannot have a sense expressible in such terms as 'the subject of this experience'.   The upshot is that the nature of *de se* senses, and the way they function, is a matter of controversy and mystery.   If a *de se* sense does not determine an individual by means of a property or cluster of properties that the individual has, or by means of a mental state that she herself is experiencing, how then *does* it determine an individual?

Finally, any neo-Fregean semantics will inherit problems that confront the Fregean account of meaning in general and attitude reports in particular. There are familiar and powerful reasons to reject Frege's thesis that all singular terms express (descriptive) senses.   In addition to conflicting with the thesis of direct reference for singular terms, the Fregean account also violates the plausible principle of semantic innocence, according to which the semantic value of a term does not change when it is embedded in a 'that'-clause.   There are several other lines of criticism that make for a compelling case against the Fregean account, but I shall not review them here.

The Fregean account preserves the traditional conception of belief as a dyadic relation between the subject and the content of her belief.   Another popular account of belief holds that (even if belief itself is a dyadic relation between subject and proposition, and even if 'believes' expresses this relation) there is always more to having a belief than simply being related in a suitable way to a proposition.   On this account, which I call the triadic view

of belief, the relation between a subject and a believed-true proposition is mediated by the *way* in which the subject takes the proposition, or the *guise* under which she is familiar with it.[6] On the triadic view, subject S believes proposition P when there exists some third entity – a proposition guise or way of taking a proposition – such that S assents to P when S takes P in this way. Following Salmon (1986, 1989), I shall use the name 'BEL' for this triadic relation. So, S believes P if and only if there exists an X such that BEL (S, P, X).

The triadic view can provide a solution to the problem of *de se* belief. The triadic theorist can say that sentences (1) and (2) above have Joe and Valerie believing the same proposition after all. For the moment, let's suppose that guises are natural language sentences. When Joe believes that Valerie is a spy, then, he is related by BEL to the proposition *that Valerie is a spy* and the guise 'Valerie is a spy' (or perhaps 'That woman is a spy'). When Valerie believes that she herself is a spy, she is related by BEL to the same proposition but a different guise, 'I am a spy'. For many reasons, sentences will not adequately play the role that guises need to play: people who speak different languages can be related to the same proposition in the same way, creatures without language can have beliefs, etc. Sentence *meanings* are far better suited to such a role (though perhaps they do not play it perfectly). For example, when Valerie believes that she herself is a spy, the relevant guise is the linguistic meaning (the character) of 'I am a spy', that is, a function from contexts to propositions that maps each context to a proposition about the speaker of the context, to the effect that she is a spy. (It is interesting to note that this propositional function is importantly similar to the property *being a spy*.)

One advantage of the triadic view, at least *prima facie*, is that it seems able to provide a single, general semantic theory that applies to all belief reports, not just *de se* reports. The account of truth conditions goes like this:[7]

> *Triadic Semantics*: A belief report of the form ⌈S believes that P⌉ is true iff the bearer of S believes the proposition expressed by P, that is, iff ($\exists$x) BEL (S, P, x).

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[6] This general view of belief is shared by a wide variety of theorists who defend several different accounts of belief reports. The account of truth conditions to be considered in the text goes by many names, including *neo-Russellianism*, *Millianism*, *Guise Millianism*, *Ways Millianism*, and more.

[7] This account does make use of the metaphysics of content given by the triadic view of belief, but the name 'Triadic Semantics' might be misleading. Unlike, say, the hidden indexical theory, this account does not require or imply that 'believes' and other attitude verbs express three-place relations between subjects, propositions, and guises.

However, there are well known problems with this general account. For example – if we treat the Superman stories as fact – the sentence 'Lois believes that Clark Kent can fly' seems false, but there is a guise x such that BEL (Lois, *that Clark Kent can fly*, x). This is because the proposition *that Clark Kent can fly* is the proposition *that Superman can fly*, and Lois accepts this proposition when she takes it in some way. So, proponents of the triadic semantics must reject or explain away the intuition that Lois does not believe that Clark Kent can fly. Moreover, consider the famous example from Kaplan (1989) of the man with his pants on fire. He does not believe that he himself is wearing pants that are on fire (he will very soon!), but he is looking into a mirror, pointing to himself, and sincerely uttering 'His pants are on fire'. The sentence 'He believes that he is wearing pants that are on fire' seems to have a false reading, but (in the context) the *that*-clause expresses a proposition about this man to the effect that his pants are on fire – and he does accept this when he takes it in some way. So, the triadic semantics seems to give counter-intuitive truth conditions in these cases.

Triadic theorists have offered substantial explanations of the apparent difference in truth value between utterances of, say, 'Lois believes that Superman can fly' and 'Lois believes that Clark Kent can fly'. Most of them say that when we take an utterance of 'Lois believes that Clark Kent can fly' to be false, we are confusing the (true) semantic content of the report with what is really false, which is something that is pragmatically implicated or communicated in some way by the utterance.[8] For example, an utterance of 'Lois believes that Clark Kent can fly', might pragmatically implicate the falsehood that Lois believes *that Clark Kent can fly* under the mild-mannered reporter guise, or that she would assent to the sentence 'Clark Kent can fly'. Since I reject the metaphysics of belief associated with the triadic view, I shall have little to say about the plausibility of this or other explanations of apparent truth-value differences like those above. Instead, I would like to consider briefly whether the triadic view of belief might be able to accommodate our intuitions about *de se* belief reports.

What follows is a plausible triadic semantics for *de se* reports, although it might be more attractive to defenders of hidden indexical (or related) theories than to typical neo-Russellians. Let's use the term 'I-guise' for the character of a sentence with the form 'I am F'.[9] Neglecting some conven-

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[8] For examples, see McKay (1981), Salmon (1986, 1989), and Soames (1987, 1995). Braun (1998) offers a different sort of explanation, one that appeals to differences in *ways* of believing a single proposition but does not invoke pragmatic implications.

[9] This assumes that guises are sentence meanings or characters. In Feit (2008: 69), I give a more general account of an I-guise. The account to be given in the text is not unlike the semantics of *de se* belief reports given by Richard (1983).

tions for corner quotes to facilitate exposition, we can give the view as follows:

> *Triadic De Se Semantics*: A belief report of the form ⌈S believes that she herself (or he himself) is F⌉ is true iff there exists an x such that (i) x is an I-guise, and (ii) BEL (S, *that S is F*, x).

This semantic account, I think, adequately handles *de se* belief reports. The role that I-guises play here mirrors the role properties play in the property-theoretic semantics for *de se* attributions. Issues having to do with the metaphysics of content, however, tip the scale in favor of the property-theoretic account. I have argued elsewhere, particularly in Feit (2008), that the total evidence favors the property theory over the triadic view. What follows is a short review of the reasons that weigh in favor of the property theory.

First, the triadic view is a more complicated account of the metaphysics of cognitive content than the property theory is. Instead of a dyadic relation to properties, it analyzes belief in terms of a triadic relation to propositions and guises. The added complexity brings no theoretical advantages, as we shall see in the next section. Second, and related, the triadic view is less clear than the property theory insofar as the precise nature of guises is controversial. We have assumed that guises can be taken to be characters in Kaplan's sense, but it is unclear that such entities are adequate. Third, the triadic view has some controversial metaphysical commitments that the property theory does not have. For example, the triadic view entails that externalism – that is, anti-individualism about mental content – is correct, and so it begs an important question in the philosophy of mind. Any version of the doctrine of propositions must make this commitment, since it implies that intrinsic duplicates who believe themselves to have the same property will believe *different* propositions – one that contains or otherwise tracks one of the duplicates, and one that contains or tracks the other – and hence have different belief contents. The triadic view also implies that a plausible version of physicalism is false, since physically indiscernible worlds will differ mentally when intrinsic duplicates have different belief contents.[10]

2   Names and Natural Kind Terms

At the beginning of the first section, we used two sentences to illuminate the problem of *de se* belief. We have already dealt with sentences like (2) above, that is, *de se* reports. What about those like (1), according to which

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[10] See Feit (2006, 2008: 42-52) for arguments along these lines. Although I am now less confident in the argument from physicalism than I once was, I still think that it causes trouble for the triadic view that it does not cause for the property theory.

Joe believes that Valerie is a spy? In order to build up to an adequate ac-
count of the desired sort, let's start by considering Lewis's analysis of *de re*
belief. (I am not claiming that (1) is a *de re* attribution of belief, which will
become clearer soon.) Let's suppose for now that what makes (1) true is
that Joe has a belief, about Valerie, to the effect that she is a spy. On Lew-
is's property-theoretic view, this amounts to two things. First, there must be
a *relation of acquaintance* that Joe bears uniquely to Valerie, that is, to Va-
lerie and only to Valerie. Perceptual relations like *looking at*, *listening to*,
and the like are paradigm cases of relations of acquaintance, but any causal
relation that enables a *de re* belief about a particular object will suffice.
Second, Joe must take himself to bear this relation to somebody who is a
spy. This consists in Joe self-ascribing a property of a certain sort. If we let
'R' name the relation of acquaintance that Joe bears to Valerie, then Joe
must self-ascribe the property *bearing R uniquely to a spy* (for example, Joe
might see Valerie in her trench coat, and he might self-ascribe *looking at
one and only one person, who is a spy*). When these two conditions are
met, Lewis says that Joe *ascribes* the property *being a spy* to Valerie.[11]

This sort of ascription is other-ascription, not self-ascription (though it
is possible to ascribe properties to oneself in this way, as in the case of the
man whose pants are on fire). Let's consider an account of belief reports
with names that makes use of it. What follows is a preliminary account of
truth conditions for belief reports in which the complement sentences con-
tain proper names (here N is a proper name for individual *N*, and F is a
predicate that expresses the property *F*):

> *Preliminary Semantics for Belief Reports with Names*: A belief re-
> port of the form ⌈S believes that N is F⌉ is true iff there exists a re-
> lation of acquaintance R such that (i) the bearer of S bears R
> uniquely to *N*, and (ii) the bearer of S self-ascribes the property
> *bearing R uniquely to something that has F*.

Notice a couple of things about this preliminary account. First, a proper
name embedded in a *that*-clause introduces (at least at the level of truth
conditions) an existential quantifier over relations of acquaintance. Second,
relations of acquaintance play the same kind of role that guises, modes of
presentation, or descriptions play for other theories. Third, on this account,
the thing that bears the name N does not enter into the content of a belief
that would make a belief report of this form true (the content is given by the
italicized property in clause (ii) of the account above). So, the *that*-clause
does not specify the content of a belief that would make the report true; if it

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[11] In Feit (2000), I argue that Lewis's two conditions are not jointly sufficient for *de re* belief,
but this need not concern us right now.

did, then the content would have to be a singular proposition about the bearer of N.

It seems to me that these consequences are correct and that they are advantages of this account, and I will argue for this below. However, there seem to be two problems, at least *prima facie*, with the preliminary account. First, it implies that co-referential names are substitutable in belief contexts, and thus falls prey to Frege's puzzle (this is a result of incorporating a view of *de re* belief into the semantics for belief reports containing proper names within the scope of 'believes', that is, *de dicto* attributions of belief). So this account violates the intuition that substitution can make a difference to the truth value of a belief report. Second, the account implies that a belief report with a name in its *that*-clause cannot be true unless the name refers to something, and thus falls prey to the problem of empty names. In the rest of this section, I will briefly discuss these problems and tentatively construct a semantics that avoids them.

Let's consider the substitutivity issue first. Suppose that Ed has heard of a certain author under the name 'Mark Twain' and has even read one of his books. He sincerely utters 'Mark Twain was a novelist'. However, Ed is unfamiliar with the proper name 'Samuel Clemens' and would not assent to 'Samuel Clemens was a novelist'. It seems, then, that an utterance of (3) below would be true but an utterance of (4) would be false:

> (3) Ed believes that Mark Twain is a novelist.

> (4) Ed believes that Samuel Clemens is a novelist.

This causes trouble for the preliminary property-theoretic semantics, since the account – given that Clemens = Twain – does not allow such utterances to diverge in truth value.

According to the preliminary account, what makes (3) true, at least in part, is that Ed bears a relation of acquaintance uniquely to Mark Twain. (Since Clemens = Twain, he also bears this relation to Clemens, which causes the trouble here.) The relation is something like this one: *having heard of someone under the name 'Mark Twain'*. Let's call a relation like this a 'Twainish' relation. Such a relation need not be metalinguistic, for example there might be a Twainish relation that involves looking at a photograph of a man with such-and-such features. In any case, we can modify the preliminary account, with an eye toward making an utterance of (4) false, if we somehow exclude or disallow Twainish relations of acquaintance from entering into the evaluation of (4). We will do this in the final version of the account by maintaining that a relation of acquaintance must be *appropriate*. The idea is that there are contextually-supplied restrictions on which relations are appropriate, and so, for example, in a typical context of utterance for (4), no Twainish relations are appropriate.

Whether or not a relation of acquaintance is appropriate varies from context to context and is not determined by the semantic value of an embedded name. For example, an utterance of 'Lois believes that Superman is a reporter' would seem false relative to a context in which Supermanish relations of acquaintance (for example, ones incorporating the property *being a caped superhero*) are appropriate but where Clark-Kentish ones are not. However, there are contexts in which 'Superman' is embedded in a *that*-clause but Clark-Kentish relations are appropriate. Consider this example from Berg (1988):

> A viewer marveling at Superman's ability to conceal his identity might remark to another viewer, "Look, there's Superman in his Clark Kent outfit; he's incredibly convincing! *Everyone* thinks he's a reporter – Jimmy Olson, Mr. White – why even that clever *Lois Lane believes that Superman is a reporter*." (1988: 355)

The second problem concerned empty names, that is, names without bearers. By requiring a true belief report to be such that its subject is acquainted with the bearer of the relevant name, the preliminary account above has the intuitively implausible implication that utterances of the following could not be true:

(5) Virginia believes that Santa Claus will bring her presents.

(6) Le Verrier believed that Vulcan is the closest planet to the sun.

It has become fashionable, especially among direct reference theorists, to maintain that names like 'Santa' and 'Vulcan' do in fact refer, for example to abstract artifacts that are somehow brought into existence by human activity. I think this is unfortunate, especially since there are several plausible accounts of (genuinely) empty names that are consistent with the theory of direct reference.[12] We can, I think, achieve an adequate semantic account of utterances of (5) and (6) by making use of some theoretical machinery common to the theory of direct reference and the causal theory of names.

According to the picture developed in Kripke (1980), a name is first used in an initial baptism, whereby its bearer is identified by ostension or its reference is fixed by a description. The name is then passed from person to person, and an elaborate chain of communication involving uses of the name develops. Following Everett (2000), let's use the term 'referential framework' for this network of related utterances, mental states, and reference-fixing events. Consider, for example, uses of 'Plato' or 'Platon'. Nora's use of 'Plato' in New York in 2011, Terry's use in Toronto in 1995, and Pierre's use of 'Platon' in Paris in 1979 all belong to the same referen-

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[12] See Feit (2009) and the relevant works cited therein, including Braun (1993).

tial framework since all of them can be traced back to the same reference-fixing event around the time of Plato's birth.

There are also referential frameworks for empty names. These begin not with reference-fixing events, but with acts of misperception, misdescription, make-believe, and the like. For example, different uses of 'Vulcan' can belong to the same referential framework since they can be traced back to a common source, perhaps a single initial act of misdescription (along the lines of 'the planet causing the irregularities in Mercury's orbit'). Likewise, different uses of 'Sherlock Holmes' belong to the same referential framework since they can be traced to a single act of storytelling. In general, then, whether a name is empty or not, uses of it will belong to the same referential framework provided that they can be traced back to a common source. For co-referential non-empty names, this common source will be their referent, the bearer of the names. For empty names, the common source might be an act of misdescription, misperception, make-believe, or the like.[13]

I said above that a referential framework contains utterances and (token) mental states; overt utterances of names are not the only things that may belong to a referential framework. Such a framework, then, can contain token belief states (particular events of a subject believing something at a time) and the like. Such a belief state need not even involve a "mental tokening" of a proper name at all, so long as it is appropriately related to other events in a causal chain that began with a reference-fixing event or an act of misperception, misdescription, or make-believe. For example, a believer might employ in thought a description that she somehow associates with the relevant name. What goes for names also goes for these other items that might belong to a referential framework – two such items belong two the same referential framework just in case they can be traced back to a common source.

The following account, I think, adequately handles the problem of substitutivity and the problem of empty names, and thereby improves on the preliminary property-theoretic semantics given above (here N is a possibly empty proper name, and F is a predicate that expresses the property *F*):

> *Semantics for Belief Reports with Names*: A belief report of the form ⌈S believes that N is F⌉ is true iff (i) there is an appropriate relation of acquaintance R such that the bearer of S self-ascribes *bearing R uniquely to something that has F*; and (ii) the token self-ascription in (i), and the use of N in the utterance of the report, belong to the same referential framework.

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[13] This is overly simplistic, but will serve my purposes here. See Everett (2000) for more discussion, including discussion of how names like 'Santa' and 'Father Christmas' can belong to the same referential framework.

This account accommodates the intuition that an utterance of (3) above might be true while an utterance of (4) is false, that is, the intuition that co-referential names are not always substitutable *salva veritate*. As discussed above, there can be contexts where a given relation of acquaintance is not appropriate – in virtue of contextually determined restrictions that rule it out – even though the believer stands in that relation to the bearer of the relevant name. For example there are natural contexts of utterance for sentence (4) in which Twainish relations are not appropriate. The relation *having heard of an author under the name 'Mark Twain'*, even though Ed bears it to Samuel Clemens, would not be appropriate in such a context and so could not help to make true an utterance of (4).

The account also accommodates the intuition that true belief reports can contain empty names in their *that*-clauses. Unlike the preliminary account, the present view does not require the alleged believer to stand in any relation of acquaintance to the bearer of the relevant proper name. Instead, all that is required is that the believer's act of self-ascription belong to the same referential framework as the speaker's use of the name in the belief report. This can be the case even if the name lacks a bearer. So utterances of sentences such as (5) and (6) can be true on the proposed semantics. For example, if I utter (5) – 'Virginia believes that Santa Claus will bring her presents' – then I use the name 'Santa Claus', and this token belongs to a certain referential framework. Virginia might self-ascribe the property *having heard of a jolly man named 'Santa' who will bring me presents* (or, somewhat more formally, $\lambda x[x$ *has heard of some y such that y is a jolly man named 'Santa', and y will bring x presents]*). If Virginia's token self-ascription of this (relational) property belongs to the same referential framework as my utterance of 'Santa Claus', as it very well might, then my utterance is true.

I should note that with respect to belief reports containing embedded non-empty names, this account gives the same results as the preliminary account (putting aside the issues about "appropriate" relations). Suppose that I utter 'Ben believes that Obama is president'. Suppose also that for some (appropriate) relation of acquaintance R, Ben self-ascribes *bearing R uniquely to somebody who is president*. Now, if Ben's act of self-ascription and my use of the name 'Obama' belong to the same referential framework, they must share a common source, which in this case is Obama himself. But this means that Ben must bear R to Obama, as the preliminary account required.

The account of truth conditions given above seems a bit clumsy and complex. There is a way to simplify it, or at least to make it appear simpler. This is a matter of what makes a relation of acquaintance *appropriate* in a given context. Up until now, I have been thinking of this in descriptive terms. For example, imagine a context in which I am reporting the beliefs

of Lois Lane, and in which it would seem false for me to say 'Lois believes that Clark Kent can fly'. (Treat the Superman stories as actual fact – empty names are not the issue here.) Lois bears several relations of acquaintance to Superman/Clark Kent. Here are four: (a) *looking at a superhero in a blue and red suit*, (b) *having heard of somebody under the name 'Superman'*, (c) *having heard of somebody under the name 'Clark Kent'*, and (d) *remembering a mild-mannered reporter who wears black-rimmed glasses*. On the basis of descriptive information contained in the relations (which happens to be metalinguistic in two cases), I want to call the first two relations 'Supermanish' and the second two 'Clark Kentish'. I also want to say that this is a context in which Supermanish relations are not appropriate. And I have been supposing that what makes this the case is somehow a matter of the descriptive information, that is, of the way in which Lois thinks of Superman/Clark Kent. (An adaptation of the hidden indexical theory might explain why Supermanish relations are not appropriate in this context by maintaining that my utterance involves implicit reference to a Clark Kentish type of relation. More on this in section 4 below.)

So, descriptive information is relevant to what makes a relation of acquaintance appropriate in a given context of utterance. But if we count the information concerning referential frameworks as part of what makes a relation appropriate, we can simplify the account. That is, we can say that a relation of acquaintance R is appropriate only if its self-ascription by the subject belongs to the same referential framework as the speaker's use of the relevant embedded name in the belief report. For example, suppose I utter 'Lois believes that Clark Kent can fly', and suppose Lois self-ascribes a property of the form *bearing R uniquely to somebody who can fly*. Then, R is appropriate only if Lois' act of self-ascription belongs to the same referential framework as my use of 'Clark Kent' in the belief report. This just packs the content of condition (ii) from the *Semantics for Belief Reports with Names*, as well as the contextually supplied restrictions on descriptive information, into the concept of an appropriate relation of acquaintance. The simpler account looks like this:

> *Simplified Semantics for Belief Reports with Names*: A belief report of the form ⌈S believes that N is F⌉ is true iff there is an appropriate relation of acquaintance R such that the bearer of S self-ascribes *bearing R uniquely to something that has F*.

Again, an appropriate relation of acquaintance must conform to contextually supplied restrictions on descriptive information, and must be such that its self-ascription by the subject of belief belongs to the same referential framework as the speaker's use of N.

I would like to conclude this discussion by applying the foregoing semantics for proper names to Kripke's puzzle about belief. In Kripke's

(1979) example, utterances of 'Pierre believes that London is pretty' and 'Pierre believes that London is not pretty' are true, but Pierre himself is perfectly consistent and does not hold contradictory beliefs. My account is consistent with this natural description and provides a satisfying account of the example. Pierre bears two different relations of acquaintance (R1 and R2, let's say) to London, and he self-ascribes these two properties: *bearing R1 to a city that is pretty*, and *bearing R2 to a city that is not pretty*. These self-ascribed properties are perfectly consistent in the sense that it is possible to have both of them, and so Pierre is consistent. In the imagined contexts of utterance, R1 and R2 are appropriate relations and so the two belief reports about Pierre are both true. Again, the *that*-clauses in the reports do not specify the contents of Pierre's beliefs, that is, the properties that he self-ascribes. Pierre *ascribes* (in Lewis's sense) inconsistent properties to London, namely *being pretty* and *not being pretty*, but he does this in virtue of self-ascribing properties that are themselves consistent. So the property theory accounts for Pierre's consistency, and also provides some sense in which he might be said to have contradictory beliefs.[14]

I will conclude this section with a short discussion of natural kind terms and other general terms that can give rise to puzzles like Frege's and Kripke's. It is well known that such terms behave much like proper names, and (like the account of belief reports containing names) my account will respect the Kripke-Putnam semantics for such terms. In particular I will assume that there are referential frameworks for kind terms as well as for names. I will first present the semantics for belief reports with kind terms, which is analogous to the account of names, and then briefly make some remarks to clarify it. I make no claim to exhaustiveness here – the account of truth conditions applies to only one sort of belief report. Here is the account (let 'K' be a kind term, and let "appropriate" be understood as in the *Simplified Semantics for Belief Reports with Names*):

> *Semantics for Belief Reports with Kind Terms*: A belief report of the form ⌈S believes that K is F⌉ is true iff there is an appropriate relation of acquaintance R such that the bearer of S self-ascribes *bearing R uniquely to a kind of thing that has F*.

I take it that a subject bears a relation of acquaintance to a *kind* of thing provided she bears one to an instance of the kind. But to have a belief about the kind rather than about the instance, she must self-ascribe a property of the sort italicized above, that is, she must take herself to be related to a kind and not just to an instance. (This condition makes use of the notion of a kind having a property, but this might be construed as its instances having the property as context requires.) To illustrate the account, consider an ut-

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terance of 'Tom believes that gorse is spiny'. Suppose that Tom has heard of gorse under the term 'gorse' and that in the relevant context this relation of acquaintance is not ruled out on the basis of descriptive information. Then, if Tom self-ascribes a property such as *having heard of a spiny kind of shrub under the term 'gorse'*, and if Tom's self-ascription belongs to the same referential framework as the occurrence of 'gorse' in the utterance, this would make the report true.

By requiring a relation of acquaintance to be appropriate (in the relevant context of utterance) this account is consistent with intuitions about substitutivity. For example, it seems 'Tom believes that furze is spiny' might not be true in some context of utterance (even though furze is gorse). This is because contextually supplied restrictions might render inappropriate such relations as *having heard of a spiny kind of shrub under the name 'gorse'*. By not requiring the believer to bear some relation of acquaintance to the kind of thing picked out by the relevant general term, this account has no problem with empty kind terms. For example, an utterance of 'Joseph believes that phlogiston is released in combustion' might be true despite the fact that there is no phlogiston. As long as Joseph *takes himself* to be acquainted with a certain fiery element under an appropriate relation R, and self-ascribes a property of the form *bearing R to a kind of thing released in combustion*, the utterance is true. (Remember that part of what makes R appropriate is that Joseph's self-ascription involving it, and the occurrence of the term 'phlogiston' in the utterance, belong to the same referential framework).

In this section, I have defended an approach to the truth conditions of certain belief reports that respects a Kripke/Putnam/direct reference view of proper names and certain general terms. This sort of semantic externalism is compatible with the type of psychological internalism that I favor, according to which molecule-for-molecule intrinsic duplicates have the same cognitive contents – they self-ascribe all the same properties. (The property of self-ascribing a relational property can itself be an intrinsic property. I can be alone in my world, for example, but have the property *self-ascribing the property of looking at somebody who is a spy*.) Intuitions about substitutivity are handled with the notion of appropriate relations of acquaintance – any non-Fregean view will have to employ something of this sort, I think, either at the level of semantics or pragmatics. Embedded empty names and general terms in belief reports are handled by not requiring the (alleged) believer to stand in a relation of acquaintance to the name's bearer, but instead to have a mental token that belongs to the same referential framework as the speaker's use of the name. In the case of an embedded non-empty name, this has the effect that the believer must be acquainted with the name's bearer in order for the belief report to be true.

3 Purely *De Dicto* Belief Reports

In this section, I shall outline very briefly a semantics for belief reports that the previous two sections do not address. Reports like those given in (3)-(6) above are appropriately labeled *de dicto* in order to contrast them with *de re* attributions, but here I shall address reports that do not contain any of the following items: emphatic reflexives, pronouns, demonstratives, indexicals, proper names, and general terms for which Frege/Kripke puzzle cases might arise. So, I will briefly outline and defend an account of attributions of *purely de dicto* belief (if such there be). The following might be an example:

> (7) Fred believes that everyone who is good is happy.

The beliefs that we attribute to one another with utterances of (7) and the like are uncommon. *Purely de dicto* belief (belief that is expressible without kind terms, names, pronouns, etc.) is quite rare, much more so perhaps than is typically assumed. For belief of this sort, I adopt the property-theoretic account advanced by Chisholm and Lewis. Every proposition P has a corresponding property, *being such that P*, and an individual has this property just in case P is true. That is, necessarily, for every individual X and proposition P, X has *being such that P* if and only if P. To believe a purely *de dicto* proposition (that is, one expressible without pronouns, names, etc.) is to self-ascribe the corresponding property. This results in a welcome theoretical uniformity of belief contents – they are always properties. Given this, we can state the following semantic account of purely *de dicto* belief attributions (here, let the complement sentence 'P' contain no names, kind terms, pronouns, etc., and let '*P*' designate the proposition it expresses in the context of utterance):

> *Semantics for Purely De Dicto Belief Reports*: A belief report of the form ⌜S believes that P⌝ is true iff the bearer of S self-ascribes *being such that P*.

This semantic account makes use of the reduction of the *de dicto* to the *de se* discussed above. I have defended this view against several sorts of objection.[15] Here I will briefly discuss just one worry, which has to do with the cognitive abilities needed to self-ascribe a property. Some have claimed that since a certain amount of self-awareness is necessary to self-ascribe a property, the property theory entails that many children and non-human animals fail to have any beliefs (see Markie (1988) for example). It seems to me, however, that the property theory has no such implication about the mental states of children and non-human animals. One need not have a

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[15] See Feit (2010, 2008: chapter 4 especially).

robust sort of self-awareness in order to self-ascribe a property. There is no reason to think that the beliefs that require such self-awareness exhaust all of our beliefs; they might just make up a special subclass of *de se* beliefs. Non-human animals cannot self-ascribe many of the properties that we can self-ascribe (e.g., *being a philosopher*, *wanting the telephone to ring*), but this is a matter only of the peculiar contents of these beliefs. The property theory allows for the possibility that a subject might be capable of self-ascribing properties that correspond to propositions, while lacking the sort of rich psychology or self-awareness that is required to self-ascribe certain other properties. There is no good reason to deny that if one can believe the proposition *P*, then one can self-ascribe the property *being such that P*.

So, it seems that the present objection has no more force than, for example, the charge that the doctrine of propositions denies beliefs to children and animals because they lack the cognitive resources required to assent to propositions. One who wishes to press this objection must show that there is a need to distinguish believing a proposition from self-ascribing the corresponding property, and hence that *de dicto* belief cannot be subsumed under *de se* belief. The way to do this would be to show that believing a given proposition and self-ascribing the corresponding property must play different roles in the explanation of behavior. But I cannot think of any way to show this, and so I do not see any such need.

4   Truth Conditions, Logical Form, and Propositions Expressed

So far, I have proposed a few accounts of truth conditions for various types of belief report. In this final section, I will briefly consider how we might subsume these accounts under a more general approach to the truth conditions of belief reports. I will then briefly sketch my view on the implications of this for the project of providing interpretations of the logical forms of belief reports and identifying the propositions expressed by such reports (and attitude reports more generally).

I have proposed different accounts of truth conditions for different types of belief report: one account for *that*-clauses containing emphatic reflexives, such as 'she herself', another for *that*-clauses containing proper names, and so on. Might there be a more general account that applies to all types of belief report, regardless of the peculiarities of their *that*-clauses? The answer, I think, is yes and no. Yes in the sense that a general account can be provided, and no in the sense that the various specific accounts are still needed to make the general account precise.

The general account that I have in mind has been defended by Bach (1997). On this sort of account, a *that*-clause in a belief report does not

function to specify, or refer to, something that someone believes. Bach puts the point this way:

> The Specification Assumption is false: even though their 'that'-clauses express propositions, belief reports do not in general specify things that people believe (or disbelieve) – they merely describe or characterize them… A belief report can be true even if what the believer believes is more specific than the proposition expressed by the 'that'-clause used to characterize what he believes. (1997: 225)[16]

On the view I wish to defend, a *that*-clause of a belief report might very well express a proposition, but the belief report (the uttered belief sentence) can be true even if its subject does not believe this proposition. In fact, the proposition expressed by the *that*-clause might be a part of the report's logical form, and the belief report itself might express a proposition relating the believer to the proposition expressed by the *that*-clause. All of this, however, is consistent with the possibility that the belief report is true even though the proposition expressed by the *that*-clause is not the content of any of the subject's beliefs.

So, property theorists (and others who reject the Specification Assumption) might just make use of Bach's terminology and help themselves to something like the following general account of truth conditions for belief reports with *that*-clauses:

> *Semantics for Belief Reports*: A belief report of the form ⌈S believes that P⌉ is true in context c iff in c, the semantic content of P characterizes something that the bearer of S believes (that is, the psychological content of one of her beliefs).

In the absence of an account of what it is for something to *characterize* a belief, this view is not precise enough to do much work. However, we can take the accounts of truth conditions given in the previous sections to provide the desired precision. For example, if P contains an emphatic reflexive, as in 'Valerie believes that she herself is a spy', then the content of P characterizes one of Valerie's belief contents if and only if this belief content is the property *being a spy*. And if P contains a proper name, as in 'Ed believes that Mark Twain is a novelist', then the content of P characterizes one of Ed's belief contents if and only if it is the property *bearing R uniquely to a novelist*, where R is a contextually appropriate relation of acquaint-

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[16] Bach (1997) argues against the Specification Assumption, the view that *that*-clauses of true belief reports specify the contents of their subjects' beliefs. Here I agree with Bach. However, because of differences in our views about singular thought, I do not accept the view of truth conditions that Bach proposes (1997: 238). On Bach's view, moreover, although uttered belief sentences can communicate truths, they lack truth values (belief reports are not simply uttered belief sentences); this is something I would prefer to avoid.

ance. And so on. The specific accounts are doing the work, but the general semantics does seem to be a helpful way to unify them.

The general account above allows for a kind of context dependence of belief attributions. An utterance of a belief sentence might be true in one context while another utterance of the very same sentence is false in some other context. On the same note, the substitution of coreferential singular terms might change the truth value of a given belief sentence. As we have seen, the account offered in this paper posits contextually supplied restrictions on which relations of acquaintance are appropriate in order to allow this kind of context dependence. The impact this has on the logical form of, and the proposition expressed by, a belief report will be considered shortly.

Before turning to the issues concerning logical form, I would like to say one more thing about the general account of truth conditions just sketched. On this account, for a belief report to be true, the *semantic content* of the embedded sentence must characterize something that the subject believes. Why not just say that the *proposition expressed* by the embedded sentence must do this? There are, I think, a couple of reasons. One of them has to do with empty names. It is plausible to think that sentences with empty names (even when embedded) do not express propositions, and so – if we want true belief reports with embedded empty names – we cannot make use of propositions generally.[17] The other reason has to do with reports of *de se* belief. Chierchia (1989) argues persuasively, at least to my mind, that in cases of *de se* belief reports, *that*-clauses denote properties rather than propositions. Chierchia's main idea is that embedded sentences that contain pronominal elements can behave as open formulae, or properties. (This is similar to, and derives some support from, the way in which infinitives – as in, for example, 'Valerie wants to wear a trench coat' – plausibly denote or express properties.) So, if the semantic content of a *that*-clause containing a pronoun or emphatic reflexive is a property rather than a proposition, we have another reason not to make general use of the proposition expressed by an embedded sentence.

I would like finally to turn to the issue of the logical form of belief reports. If Chierchia is right, and I think he is, then at the level of form, belief reports sometimes report relations to properties and sometimes to propositions. More precisely, belief reports with embedded emphatic reflexives will report relations to properties, those with other pronominal elements (for example, 'Valerie believes that she is a spy') will have a reading on which they report relations to properties, and the others will report relations to

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[17] I assume that an embedded sentence with an empty name has some semantic content, which, although it is not a proposition, can play the role of characterizing a belief in a given context. For more discussion, see Feit (2009).

propositions. But I also think that a certain sort of contextualism makes the best sense of our total evidence having to do with attitude reports generally. That is, I am inclined to think that belief reports do not *just* report relations to properties or propositions, but to something else as well. This something else is most commonly taken to be a type of mode of presentation by means of which the subject is said to grasp the proposition in question (or perhaps one or more of its constituents). On my view, the something else will be a type of relation of acquaintance that the subject is said to bear to one of the proposition's constituents. So, I am inclined to accept a kind of hidden in-dexical or contextualist account of belief reports.[18]

Consider an utterance of 'Joe believes that Valerie is a spy', which is (1) above. The view that I favor assigns to this utterance something like the following form:

$$\text{(1f) } \exists m[\Phi m \text{ and Believes (Joe, <Valerie, being a spy>, m)}]^{19}$$

This form has Joe standing in a relation to a certain proposition and a cer-tain type of something else, m. We can think of m as a mode of presenta-tion of, or a way of grasping, the relevant proposition. On the property-theoretic approach, m will either be, or consist of, relations of acquaintance between the subject and one or more constituents of the proposition. For example, if (the speaker thinks that) Joe is looking at Valerie, then m might be composed of the *looking at* relation.[20]

A contextualist account of this sort has many virtues. First, it respects Direct Reference, the view that the meaning of a proper name is simply its referent. Second, it respects Semantic Innocence, the view that the semantic content of a linguistic expression does not change when the expression is embedded in a *that*-clause. Third, it makes sense of the intuition that the substitution of co-referring terms can change the truth value of an attitude report. However, it does this in a way that is consistent with a standard, plausible principle of Substitutability, namely the view that if two terms are co-referring in a given context, then they are intersubstitutable *salva verita-te* in that context. Belief reports like 'Ed believes that Mark Twain is a novelist' and 'Ed believes that Samuel Clemens is a novelist' can have dif-ferent truth values relative to different modes of presentation or relations of acquaintance, but context supplies the modes or relations. So, in the same

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[18] This sort of account was put forward by Schiffer (1977, 1992), although he does not actually endorse it. Versions of the general view, with important differences between them, have been defended by Crimmins and Perry (1989), Richard (1990), Crimmins (1992), Recanati (1993), Jaszczolt (1999, 2000), and others.

[19] See Schiffer (1992). On the view put forward by Schiffer, Φ is an "implicitly referred to and contextually determined type of mode of presentation" (1992: 503).

[20] In this case, m might also be composed of a type of way in which Joe is related to the kind *spy*, or to the plurality of spies. See Feit (2001, 2008: Ch. 6-7) for more discussion.

context the reports will have the same truth value, as Substitutability implies.

I will conclude by considering a few objections to the account just sketched, and by offering some replies. On my account, as it turns out, belief reports do report relations between believers and propositions (and something else, but the concern here has to do with propositions). One might worry that this is not consistent with the property theory of belief content presented at the beginning of this paper, or with the subsequent accounts of truth conditions. If the *that*-clause of a true belief report expresses a proposition, it seems, the subject must bear *some* relation to that proposition. Bach considers a similar sort of concern with his own account, and gives what I take to be the right response:[21]

> The trouble with this objection, however, is that the relation in question is not the belief relation. If it were, then Peter would bear the belief relation both to the proposition that Paderewski had musical talent and to the proposition that Paderewski did not have musical talent, in which case he would believe contradictory propositions. (1997: 232)

Bach's response has to do with rejecting the Specification Assumption. The proposition expressed by the *that*-clause does not specify the content of the subject's belief, it merely characterizes it. So, the relation between the subject and the proposition is not the belief relation itself; instead it is part of the characterization-of-belief relation. (Kripke's puzzles, as we saw briefly in section 2 above, give us strong independent grounds to reject the Specification Assumption.) The form of a belief report has the believer standing in a relation to a proposition and relations of acquaintance, and the report expresses the proposition that the believer is so related, but *this* proposition (the one expressed by the belief report) is not one that is true if and only if the believer believes the proposition to which she stands in the given relation. This is an important difference between my account and other hidden indexical theories.

Another objection to contextualist accounts has to do with compositionality. Since implicitly referred to, indexical entities (whether they be modes of presentation or relations of acquaintance) have no correlates in the grammar of belief sentences, the semantic value of a belief report is not merely a function of the structure of the uttered belief sentence and its constituents.[22] This is fair enough, a contextualist account of the sort I favor does violate this kind of compositionality, which might be taken to weigh against the account. But there are arguably many sorts of counterexample

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[21] Here Bach alludes to Kripke's case of Peter, who has heard of Paderewski in two different circles. Peter assents to both 'Paderewski had musical talent' and 'Paderewski did not have musical talent', mistakenly thinking that he has heard of two different men.

[22] For some discussion of this issue, see Bach (1997) and Brogaard (2008).

to this kind of compositionality, some of which are discussed by Crimmins (1992).[23] So, there is good reason to think that this kind of compositionality does not hold in general. Contextualist accounts are consistent with other plausible principles – which also deserve to be called principles of compositionality and allow for "unarticulated constituents" in the sense of Perry (1986) – and so we should not be too quick to reject them.

The concern having to do with compositionality is closely related to a concern about the "adicity" of the relation expressed by the verb 'believes'.[24] If we look at form (1f) above, we see that 'believes' is taken to express a triadic relation. Many people find this to be unreasonable since, on the face of it at least, 'believes' appears to express a dyadic relation (and the same goes for other attitude verbs). It seems to me, however, that the present concern is nothing over and above the concern about compositionality. Moreover, the linguistic evidence that 'believes' expresses a dyadic relation is far from conclusive.[25] And finally, Ludlow (1996) argues that the hidden indexical theory can accommodate the view that 'believes' does indeed express a dyadic relation. Ludlow's account would replace (1f) with a form that treats 'believes' as expressing a dyadic relation and has the hidden indexical in adjunct position.

It is important to remember that, even if 'believes' does express a triadic relation between subjects, propositions, and something else, the triadic relation is not the belief relation. The belief relation relates the subject and the content of her belief (on my view, this is a dyadic relation between subjects and properties). The triadic relation, on the other hand, holds between a subject and that which *characterizes* her belief (a proposition, along with contextually supplied relations of acquaintance that the subject bears to its constituents). The proposition expressed by a belief report, then, is one that relates the subject to that which characterizes her belief. Much of this paper has been focused on exploring truth conditions for such propositions.

I would like to conclude with a brief comparison of my view and a couple of related accounts. On Bach's (1997) account, *that*-clauses in belief sentences do not serve to specify the exact content of the attributed belief. However, on Bach's view, belief sentences do not have truth values. An uttered belief sentence is taken to be semantically underdetermined or incomplete. So it fails to express a complete proposition, although it can be

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[23] Crimmins calls this version of compositionality "full articulation," since it demands that everything that goes into the semantic value of an utterance be the content of some expression in the sentence uttered (see 1992: 9-21 for discussion). Utterances of 'It's raining' and 'I loved John's book' are plausibly taken to be counterexamples to full articulation since the first might involve implicit reference to a place that need not be the place of utterance, and the second might involve implicit reference to the relation John bears to the book, for example authorship or ownership.

[24] See especially Schiffer (1992, 1996).

[25] See Ludlow (1995, 1996) and Jaszczolt (2000) for discussion of the adicity problem.

used to *communicate* something with a truth value (Bach reserves the term 'belief report' for this).[26] What is communicated is partly a function of pragmatic information, but this does not contribute to the proposition expressed. On a second view – a pragmatic enrichment view – pragmatic information does contribute to the proposition expressed. Pragmatic processes enrich the logical form of a belief report to generate the complete proposition, which can include information about modes of presentation. On both of these views, the form of a belief report is simpler than it is on a hidden indexical account (these views agree with neo-Russellian views about form). I think the advantages of the hidden indexical view make up for this, but I see the second view just sketched as an attractive option if insuperable difficulties for hidden indexical theories arise.

The property theory of content provides the best treatment of *de se* belief and other *de se* attitudes. (I would also make the stronger claim that the property theory, or some variant of it, provides the only adequate treatment of *de se* attitudes.) Since *de se* attitudes and *de se* attitude reports are ubiquitous, and since the property theory provides an attractive account of the cognitive attitudes in general, our account of attitude reports should accommodate it. In this paper, I have appealed to the property theory to give an account of the truth conditions of a wide range of belief reports, and I have tried to show that a plausible and widely accepted (but not uncontroversial) account of logical form can yield these truth conditions.

References

Bach, K. 1997. 'Do Belief Reports Report Beliefs?', *Pacific Philosophical Quarterly*, 78: 215-241.

Berg, J. 1988. 'The Pragmatics of Substitutivity', *Linguistics and Philosophy*, 11: 355-370.

Braun, D. 1993. 'Empty Names', *Noûs*, 27: 449-69.

Braun, D. 1998. 'Understanding Belief Reports', *Philosophical Review*, 107: 555-595.

Brogaard, B. 2008. 'Attitude Reports: Do You Mind the Gap?', *Philosophy Compass*, 3: 93-118.

Chierchia, G. 1989. 'Anaphora and Attitudes *De Se*', in R. Bartsch et al., eds., *Language in Context* (Dordrecht: Foris), 1-31.

Chisholm, R. 1979. 'The Indirect Reflexive', in C. Diamond and J. Teichman, eds., *Intention and Intentionality: Essays in Honour of G. E. M. Anscombe* (Brighton: The Harvester Press), 39-53.

Chisholm, R. 1981. *The First Person* (Minneapolis: University of Minnesota Press).

Crimmins, M. 1992. *Talk about Beliefs* (Cambridge, Mass: MIT Press).

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[26] See Brogaard (2008) for more discussion of Bach's descriptivist account.

Crimmins, M. and J. Perry. 1989. 'The Prince and the Phone Booth: Reporting Puzzling Beliefs', *Journal of Philosophy*, 86: 685-711.

Egan, A. 2006. 'Secondary Qualities and Self-Location', *Philosophy and Phenomenological Research*, 72: 97-119.

Evans, G. 1982. *The Varieties of Reference* (Oxford: Oxford University Press).

Everett, A. 2000. 'Referentialism and Empty Names', in A. Everett and T. Hofweber, eds., *Empty Names, Fiction, and the Puzzles of Non-Existence* (Stanford: CSLI Press), 37-60.

Feit, N. 2000. 'Self-Ascription and Belief *De Re*', *Philosophical Studies*, 98: 37-51.

Feit, N. 2001. 'Rationality and Puzzling Beliefs', *Philosophy and Phenomenological Research*, 63: 29-55.

Feit, N. 2006. 'The Doctrine of Propositions, Internalism, and Global Supervenience', *Philosophical Studies*, 131: 447-457.

Feit, N. 2008. *Belief about the Self: A Defense of the Property Theory of Content* (New York: Oxford University Press).

Feit, N. 2009. 'Naming and Nonexistence', *Southern Journal of Philosophy*, 47: 239-262.

Feit, N. 2010. 'Selfless Desires and the Property Theory of Content', *Australasian Journal of Philosophy*, 88: 489-503.

Forbes, G. 1987. 'Indexicals and Intensionality: A Fregean Perspective', *Philosophical Review*, 96: 3-31.

Jaszczolt, K. M. 1999. *Discourse, Beliefs, and Intentions: Semantic Defaults and Propositional Attitude Ascription* (Oxford: Elsevier Science).

Jaszczolt, K. M. 2000. 'The Default-Based Context-Dependence of Belief Reports', in K. M. Jaszczolt, ed., *The Pragmatics of Propositional Attitude Reports* (Oxford: Elsevier Science), 169-185.

Kaplan, D. 1989. 'Demonstratives', in J. Almog, J. Perry, and H. Wettstein, eds., *Themes from Kaplan* (Oxford: Oxford University Press), 481-564.

Kripke, S. 1979. 'A Puzzle about Belief', in A. Margalit, ed., *Meaning and Use* (Dordrecht: D. Reidel), 239-283.

Kripke, S. 1980. *Naming and Necessity* (Cambridge, Mass.: Harvard University Press).

Lewis, D. 1979. 'Attitudes *De Dicto* and *De Se*', *Philosophical Review*, 87: 513-545.

Lewis, D. 1986. *On the Plurality of Worlds* (Oxford: Blackwell).

Loar, B. 1976. 'The Semantics of Singular Terms', *Philosophical Studies*, 30: 353-377.

Ludlow, P. 1995. 'Logical Form and the Hidden-Indexical Theory: A Reply to Schiffer', *Journal of Philosophy*, 92: 102-107.

Ludlow, P. 1996. 'The Adicity of "Believes" and the Hidden Indexical Theory', *Analysis*, 56: 97-101.

Markie, P. 1988. 'Multiple Propositions and "*De Se*" Attitudes', *Philosophy and Phenomenological Research*, 48: 573-600.

McDowell, J. 1984. '*De Re* Senses', *Philosophical Quarterly*, 34: 283-294.

McKay, T. 1981. 'On Proper Names in Belief Ascriptions', *Philosophical Studies*, 39: 287-303.

Peacocke, C. 1981. 'Demonstrative Thought and Psychological Explanation', *Synthese*, 49: 187-217.

Perry, J. 1986. 'Thought without Representation', *Proceedings of the Aristotelian Society Supplementary Volume*, 60: 263-283.

Recanati, F. 1993. *Direct Reference: From Language to Thought* (Oxford: Blackwell).

Richard, M. 1983. 'Direct Reference and Ascriptions of Belief', *Journal of Philosophical Logic*, 12: 425-452.

Richard, M. 1990. *Propositional Attitudes* (New York: Cambridge University Press).

Salmon, N. 1986. *Frege's Puzzle* (Cambridge, MA: MIT Press).

Salmon, N. 1989. 'Illogical Belief', *Philosophical Perspectives*, 3: 243-285.

Schiffer, S. 1977. 'Naming and Knowing', *Midwest Studies in Philosophy*, 2: 28-41.

Schiffer, S. 1992. 'Belief Ascription', *Journal of Philosophy*, 89: 499-521.

Schiffer, S. 1996. 'The Hidden-Indexical Theory's Logical-Form Problem: A Rejoinder', *Analysis*, 56: 92-97.

Soames, S. 1987. 'Direct Reference, Propositional Attitudes, and Semantic Content', *Philosophical Topics*, 15: 47-87.

Soames, S. 1995. 'Beyond Singular Propositions', *Canadian Journal of Philosophy*, 25: 515-549.