# Two (Related) World Views\*

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During the past two decades, the late Hector-Neri Castañeda developed a theory of guises, and applied that theory to the analysis of thought, language, and the structure of the world. Castañeda was deeply impressed by the uniformity of our thought processes, and in particular, by the fact that thoughts about existing objects were fundamentally similar in nature to thoughts about fictions. This impression had such a hold upon his imagination that he concluded that all of the objects of thought, i.e., all of the objects about which we think, are on an ontological par. He postulated a basic realm of such objects, which he called 'guises', and analyzed thought and language as primarily about guises. Indeed, he went one step further, and supposed that ordinary objects such as people, tables, chairs, etc., which we confront everyday in our perceptions, were nothing more than systems of such guises. Clearly, if the world consists of (systems of) guises, then thoughts about guises just are thoughts about the world. This is how Castañeda unified his metaphysics.

As imaginative and fascinating as it is, however, guise theory has come up against a wide range of criticisms. One of the most challenging critiques was offered by Plantinga in [1983]. Plantinga puts his finger squarely on some fundamental intuitions that guise theory gives up, and develops several objections to the guise-theoretic world view as a whole. I mention Plantinga's criticisms because they nicely serve the tasks I have set for the present essay, namely, (1) a comparison of the object theory I developed in [1983] and [1988] with Castañeda's guise theory in its most

recent incarnation in [1989], and (2) a critique of the latter from the point of view of the former. Castañeda and I have a common intellectual heritage, for we both follow Ernst Mally [1912] in postulating a special realm of objects distinguished by their 'internal' (or 'encoded') properties. Despite this common heritage, however, we organize, develop, and apply these special objects in distinctive ways. Our metaphysical views, therefore, differ significantly, and these differences become important when one considers Plantinga's critique of guise theory. In this essay, I hope to show that the object theory I've developed anticipates and addresses most of Plantinga's concerns about guise theory, by preserving intuitions guise theory has abandoned.

### Modes of Predication

In the first four paragraphs of [1983] §1, Plantinga runs through a list of things we ordinarily think: (in general) that the world around us contains ordinary objects that have properties, that each object has an infinite number of properties, that each object is distinct, though not separable, from its properties, that for any object x and property F, either x has F or has the complement of F; <sup>1</sup> (in particular) that the willow in Plantinga's back yard is a single object, that it has properties that are unique to it, and that it is numerically one and the same object as the tree more than 30 feet tall located at such and such map coordinates. I think most philosophers would accept the intuitions in this list. Now the theory of abstract objects, as I developed it in [1983], [1988] and elsewhere, does not reconstruct these intuitions (the way guise theory does) but rather straightforwardly preserves them, using the standard form of predication which we're all familiar with from ordinary logic. To see how, note first that the theory has variables and constants for individuals (objects) and variables and constants for properties (and relations in general), and it allows us to represent Plantinga's intuitions in terms of atomic formulas of the form ' $F^n x_1 \dots x_n$ ' (read: objects  $x_1 \dots x_n$  exemplify relation  $F^n$ ) that express a basic and familiar kind of predication. So if we use the constant 'w' as a name for the willow in Plantinga's back yard, formulas of the form ' $F^n x_1 \dots w \dots x_{n-1}$ ' express the relationships that w exemplifies with respect to other objects. When n=1, 'Fw' represents the fact that

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<sup>&</sup>lt;sup>1</sup>Plantinga is careful to say that for this to be true, we may need to restrict the Fs to some appropriate class, but I will ignore this subtlety in what follows.

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w exemplifies property F. It is a logical theorem (i.e., provable from the logical axioms and rules of inference alone) that w and every object whatsoever, is complete:  $\forall x \forall F(Fx \lor \bar{F}x)$  (where  $\bar{F}$  is defined as  $[\lambda x \neg Fx]$ ).

Object theory, however, postulates another basic form of predication in addition to this ordinary form of predication. It asserts that there are abstract individuals (i.e., individuals that couldn't have a location in spacetime) which are distinguished by the fact that they *encode* properties in addition to exemplifying properties. Since the notion of encoding is a kind of predication that corresponds to Castañeda's internal, Meinongian predication, these abstract objects are the counterparts of Castañeda's guises. This notion of predication traces back to Ernst Mally's [1912] view that the round square is 'determined by' (encodes) the properties of being round and being square without 'satisfying' (exemplifying) either of these two properties. I formally represent the primitive distinction between x's exemplifying and encoding the property F by using the two atomic formulas Fx and xF. The main comprehension axiom of object theory asserts that for any condition on properties, there is an abstract object that encodes just the properties satisfying the condition. If we use 'A!x' to assert that x is abstract, and we let  $\varphi$  be any condition on properties without free xs, then the following is an axiom schema that formally captures the comprehension schema:

$$\exists x (A!x \& \forall F(xF \leftrightarrow \varphi))$$

To take an example, let  $\varphi$  be the condition ' $F=R \lor F=S$ ' (where 'R' denotes roundness and 'S' denotes squareness). Then our axiom asserts that there is an abstract object that encodes just the two properties satisfying (in Tarski's sense) this condition. Since only two properties, namely roundness and squareness, do satisfy the condition, we get an instance of our schema that asserts that there is an abstract object that encodes just the two properties roundness and squareness.

The logic of encoding is simply annexed (without violence) to the logic of exemplification. This means in addition to being able to formulate encoding predications of abstract objects, we may also formulate exemplification predications. For example, in addition to saying of our abstract 'round square' that it encodes roundness and squareness, we may say that it exemplifies the following properties: being non-round, being non-square, having no shape, having no texture, being colorless, being thought about by Russell, being an infamous impossible object,

etc. Indeed, though our 'round square' is incomplete with respect to the properties it encodes (it encodes only two properties and no others), it is perfectly complete with respect to the properties it exemplifies. It is a full-blooded object, about which we may form a coherent conception as a determinate abstract object.

At this stage, we can point to some major differences between the present theory and Castañeda's. It should now be clear that Plantinga's two deepest objections to guise theory don't apply to the present one, for they are directed towards guise theory's abandonment of what Plantinga calls '(standard) Aristotelian predication.' He argues that guise theory can't do without Aristotelian predication for two reasons: first, this form of predication is needed to handle crucial pieces of data; and second, it is implicitly needed in the very statement of the theory itself. In support of his first objection, Plantinga offers not just the usual kinds of sentences that are customarily analyzed as standard predications of the form ' $F^n x_1 \dots x_n$ ', but also some special sentences that would seem to be true given the basic tenets of guise theory and object theory (see his [1983], p. 70). For example, we need standard Aristotelian predication to analyze such sentences as: "The round square is hard to grasp", "The round square has just two properties in its core" (this is from guise theory), and "The round square is abstract" (this is from object theory). But Plantinga's sentences are not problemmatic for our theory, since we have not eliminated Aristotelian predication. That is the form of predication we are calling exemplification. So these sentences are easy to analyze both assert that the round square exemplifies a certain property.<sup>2</sup> We look at the analyses of simple pieces of data in more detail in a subsequent section.

Plantinga begins his second objection as follows:

<sup>&</sup>lt;sup>2</sup>For the second sentence, we shall have to assume that there is such a property as "encoding two properties". Strictly speaking, the theory of objects doesn't guarantee that there is such a property, though the claim that there is might be consistently added to the theory. Plantinga doesn't offer a systematic theory of properties to underlie his use of italic expressions. He puts a nominalized predicate in italics and supposes that it denotes a property. Our axiomatic property theory tells us precisely the conditions under which this is legitimate (namely, if the complex predicate can be formulated by means of first order logic without identity and encoding; thus predicates containing primitive identity or encoding expressions do not automatically designate properties). But, to respond to Plantinga's objection, let us grant him the assumption that there is such a property as "encoding two properties".

By way of conclusion, I want to try to state a difficulty I think is crucial, but hard to articulate. I believe the Guise Theorist is obliged to presuppose the Aristotelian notion of property possession in stating his own theory. ([1983], pp. 72-3)

### He goes on to say:

I believe the very propositions Castañeda asserts in setting out the features of Guise Theory must be understood as involving Aristotelian property possession. There is no space to develop this notion properly, but note: according to Guise Theory, properties are the basic constituents of the world; that is, each property has the property being among the basic constituents of the world. Guises have properties as constituents; that is, each guise has the property having at least one property as a constituent. . . . None of these propositions, I think, can easily be seen as involving the kinds of property possession endorsed by Guise Theory. ([1983], pp. 74-5)

If we were to adapt Plantinga's objection here to the theory of objects, then part of Plantinga's objection is that we need Aristotelian predication to assert principles of the theory. And with this we have agreed. We retain Aristotelian predication to assert that abstract objects exemplify being abstract, that they necessarily fail to exemplify having a location in spacetime, etc. However, Plantinga may be putting his finger on something else, namely, that to say "x encodes F" is really to say "x and x exemplify (in the Aristotelian sense) the relation of encoding." This might be the force of his objection when applied to the object theory.

If it is, then our response is clear: the very formal notation and semantics of the theory reveals that this would be the wrong way to look at object theory. Encoding and exemplification are on a par. The formulas 'Fx' and 'xF' serve as the basic atomic formulas. Semantically, 'Fx' is true iff the object denoted by 'x' is in the exemplification extension of the property denoted by 'F', and 'xF' is true iff the object denoted by 'x' is in the encoding extension of the property denoted by 'F' (in the metatheory I've developed, properties receive two extensions—an exemplification extension and an encoding extension). Thus 'xF' is not shorthand for some higher order formula such as: Encodes(x, F). To suppose otherwise is just to misunderstand the theory, which is based on the presupposition that there is another form of predication as fundamental as Aristotelian

predication. Unlike guise theory, it doesn't replace Aristotelian predication with other forms of predication (such as identity, consubstantiation, consociation, and conflation). So when Plantinga asks rhetorically at the end of his article "Can it be coherently be maintained that internal property possession is in some way more basic or fundamental than the common garden-variety Aristotelian mode?" ([1983], p. 75), we note that object theory is developed without maintaining this.

As a result of these differences regarding basic modes of predication, guise theory and object theory analyze the philosophical data in radically different ways. Before we turn to a discussion of this, it would serve well to look first at the differences in ontology that emerge in the formulation of the two theories.

### **Basic Ontology**

While object theory begins with just two ontological kinds (individuals and relations) and two basic modes of predication, guise theory begins with relations and operations upon them. Some operations harness the properties and relations into complex properties and relations.<sup>3</sup> Another operation, the ' $\{\ldots\}$ ' operator, maps properties into sets of properties. And another operation, the 'c' operator, operates on sets of monadic properties and yields concrete individuals. Castañeda may then define his basic form of internal Meinongian predication 'x(F)' as follows, where  $x = c\{G, H, \ldots\}$ :

$$x(F) =_{df} F \in \{G, H, \ldots\}$$

In terms of this definition, Castañeda may say that (Meinongian) individuals x and y are identical iff  $\forall F[x(F) \leftrightarrow y(F)]$ . Finally, on top of this apparatus, Castañeda goes on to offer principles governing several basic, undefined modes of predication. These are the various forms of external predication, such as consubstantiation, conflation, and consociation, in terms of which much of the philosophical data is analyzed. We shall presume that the reader has some familiarity with these kinds of predication.

<sup>&</sup>lt;sup>3</sup>These operators are the metaphysical counterparts to Quine's predicate functors in his [1960]. Castañeda seems to invoke these operators as part of his ontology, whereas in object theory, they are not part of the ontology (the theory doesn't quantify over them), though they a part of the semantic apparatus used to interpret expressions that denote complex relations. No expression of the language of object theory denotes one of these operators.

However, as it stands, the current state of the development of guise theory leaves a host of questions. For example, what are operators? The theory has symbols that denote them but is silent about what they are or how they work. Can we quantify over them? What does the operator  $\{\ldots\}$  operate upon in order to yield sets of properties? One is tempted to say that it must operate on sets of properties. What laws govern Castañeda's set operators? Does the c operator, which operates on sets of monadic properties to form individuals, yield as output something which has the operator as a proper part? And what about the interaction of the individuals produced by the c operator and the original relations out of which everything is constructed? Can we use the former to produce relational properties? To do so suggests that there is a kind of Aristotelian predication, in which we can 'plug' an individual in a place of an n-place relation to form a relation having n-1 places. If we cannot form such basic relational properties, then how does the theory analyze them?

By contrast, object theory does not employ sets or operators of any kind. Individuals are not bundles, and are not composed of operators and sets of properties, but are entities "distinct though not separable from their properties." The a priori theory has little to say about contingent, ordinary individuals (such as you, me, and this computer terminal) other than that they do not encode properties, and that they are identical iff they necessarily exemplify the same properties. But it does have two comprehension principles, one for the special abstract objects that encode properties and one for relations, and these work symbiotically at the foundation. We've already seen what the comprehension principle for abstract objects says, namely, that for any condition on properties expressible in the language, there is an abstract object that encodes just the properties satisfying the condition. The comprehension principle for relations says that for any exemplification condition on objects expressible in the language, there is a relation that is exemplified by just those objects that satisfy that condition. This commits the theory to all the complex relations that one typically finds in the second-order predicate calculus. This comprehension principle can actually be derived from the following principle governing the  $\lambda$ -expressions:<sup>4</sup>

$$\lambda$$
-Equivalence:  $\Box \forall x_1 \dots \forall x_n ([\lambda y_1 \dots y_n \varphi] x_1 \dots x_n \leftrightarrow \varphi_{y_1,\dots,y_n}^{x_1,\dots,x_n})$ 

There are numerous advantages to having such a principle. For example, we get relational properties, such as being the mother of Socrates ( $[\lambda xMxs]$ ) and being a bachelor who supports his mother ( $[\lambda xBx\&\exists y(Myx\&Sxy])$ ). These can be given a straightforward analysis—the former has an individual as a constituent, whereas the latter is a more general property. Formally, these analyses can be expressed as consequences of  $\lambda$ -Equivalence:

$$\Box \forall z ([\lambda x \ Mxs]z \leftrightarrow Mzs)$$

$$\Box \forall z ([\lambda x \ Bx \ \& \ \exists y (Myx \ \& \ Sxy)]z \leftrightarrow Bz \ \& \ \exists y (Myz \ \& \ Szy))$$

No special reconstruction of these relational properties is required.

This view of complex properties yields an understanding of property equivalence, something which Plantinga says is missing from guise theory. He says:

The fourth and last form of external property possession is *conflation*, symbolized by '\*C' and explained thus:

"\*
$$C(a, b)$$
" is true if  $|a|$  is equivalent to  $|b|^5$ 

where |a| is the core of a and |b| is the core of b. So individuals or guises a and b are conflated iff and only if their cores are equivalent. Although Castañeda doesn't say what equivalence is, he gives examples: the man who murdered both Caesar and Napoleon, i.e.,  $c\{being\ a\ man\ and\ having\ murdered\ both\ Caesar\ and\ Napoleon\}$  is conflated with the individual  $c\{being\ a\ man\ having\ murdered\ Caesar\ having\ murdered\ Napoleon\}$ . I say that Castañeda doesn't say what equivalence is; that is important, because one would ordinarily explain equivalence in terms of property possession. Thus, a set of properies S is

 $<sup>^4\</sup>mathrm{The}$  comprehension principle for relations can be formulated as follows:

 $<sup>\</sup>exists F^n \Box \forall x_1 \dots \forall x_n (F^n x_1 \dots x_n \leftrightarrow \varphi)$ , where  $\varphi$  has no free Fs, no encoding subformulas, and no quantifiers over relation variables.

To derive this from the  $\lambda$ -conversion principle displayed above, you simply use necessitation and then apply existential generalization to the  $\lambda$ -predicate  $[\lambda y_1 \dots y_n \varphi]$ .

The formation rules for  $\lambda$ -expressions banish formulas  $\varphi$  containing encoding subformulas (and quantifiers over relation variables) from  $\lambda$ -expressions. Thus, one finds only the usual examples of these complex predicates. The complex relations denoted by this principle are just primitive to the theory. For purposes of metatheoretical investigation,  $\lambda$ -expressions are semantically interpreted by using logical functions that harness simple properties and relations into complex ones having exemplification extensions that mesh in the proper way with their component relations. For more details, see [1983], pp. 20-7, 61-8, and [1988], pp. 46-51.

<sup>&</sup>lt;sup>5</sup>From Castañeda [1978].

equivalent in the broadly logical sense to a set of properties  $S^*$  if and only if it is not possible that there be an object that has all the properties in S but not all the properties in  $S^*$ , and conversely. Here the sense of 'has' can't be identified with any of Guise Theory's modes of property possession.

Though Plantinga has pinpointed a problem with guise theory, it is not one that affects object theory.  $\lambda$ -Equivalence is a principle constructed with the sense of 'has' that Plantinga desires, and it tells us that it is impossible that something have (exemplify) the complex property of being a man who murdered both Caesar and Napoleon without also exemplifying the properties of being a man, having murdered Caesar, and having murdered Napoleon, and conversely.

We conclude this section by considering a final difference between the ontologies of the two theories. In object theory, we have two basic ontological categories, individuals and relations. The notion of identity, as it applies to each category, is defined in terms of one of the modes of predication. Two individuals x and y are identical iff either (a) they are both ordinary objects and necessarily exemplify the same properties, or (b) they are both abstract objects and necessarily encode the same properties. Two properties F and G are identical iff necessarily, they are encoded by exactly the same objects.<sup>6</sup> These definitions reduce the notion of identity to the primitives of the theory, and so our language does not need a primitive identity symbol. Note that the definitions are not circular. Encoding is a primitive mode of predication, and can, without circularity, be used in a definition of property identity. Moreover, abstract objects are not 'constructed out of' or 'bundles of' properties. They are basic entities, just like properties. So the definitions do not say that object identity depends on the identity of entities 'out of which they are constructed' (i.e., the properties), the identity of which in turn depends on the objects that 'can be constructed out of them'. This constructive interpretation of objects and properties is inappropriate. Rather, these definitions tell us what it is we know in theoretical terms when we judge that two objects or two properties are identical. Moreover, the definition of property identity does not fall prey to the counterexamples that undermine a certain popular definition of property identity, namely, that two properties are identical iff necessarily, they are exemplified by the same objects. Our definitions are compatible with the idea that two properties can necessarily have the same exemplification extension yet be distinct (i.e., necessarily equivalent properties may be distinct).

Guise theory, however, because of the 'constructive' flavor of its primitive operations and the underlying suggestion that the ontological status of guises depends on the intellectual activity of persons, cannot so easily adopt a corresponding definition of property identity in terms of internal predication. To address this question properly, we have to know whether properties and objects have equal ontological status, as they do in object theory, or whether properties have a prior ontological status. Castañeda talks as if the latter were the case. He says:

In good old Platonistic style, the abstractist conception of the world takes properties by themselves, that is, separated from particulars, to be the ultimate components of the world. ([1974], p. 10)

This discussion of the operators  $\{\ldots\}$  and c suggests that individuals do not constitute a primitive ontological domain.<sup>8</sup> Furthermore, Castañeda seems to suggest that if there were no intellectual activities on the part of persons, there would be no guises.<sup>9</sup> If we take this at face value, then

<sup>&</sup>lt;sup>6</sup>Formally, we have:  $F = G =_{df} \Box \forall x (xF \leftrightarrow xG)$ .

<sup>&</sup>lt;sup>7</sup>In some applications of the theory, we do make use of a special relation,  $=_E$ , which is the relation of identity that applies to *ordinary* individuals. This is a relation with which we are all familiar, and it behaves in its usual way when it relates ordinary individuals.

<sup>&</sup>lt;sup>8</sup>This is not absolutely clear to me, for there is the question of how the theory is to represent the ontological priority of properties. Are the variables 'x', 'y', ... in guise theory primitive notation that range over a primitive domain of individuals? Even if they aren't, the notation ' $\{...\}$ ' and ' $c\{...\}$ ' must denote individuals in some domain other than the domain of properties. So despite the alleged posterior ontological status of individuals, it looks like there must be some primitive domain that serves as the range of the  $\{...\}$  and c operators. What then is meant by assigning individuals a secondary ontological status? What is meant by saying that individuals are composed of operators and sets of properties as parts?

<sup>&</sup>lt;sup>9</sup>See Castañeda [1978], p. 196, where he says:

<sup>...</sup> all those fragmentations of the ordinary particulars of the world are at bottom grounded on epistemological considerations. That is, all those fragmentations hinge on the introduction of propositional attitudes, ....

Plantinga in [1983] (p. 53), notices this passage as well, with its implicit suggestion that the existence of guises depends on the existence of minds.

Compare this with object theory, where there is no suggestion at all that the being of abstract objects is mind-dependent. If there were no persons with minds, there would just be fewer ordinary objects of a certain kind. But all the abstract objects,

the identity of objects is linked to entities that have a prior ontological status (recall that x and y are identical iff the same properties are internally predicated of x and y). But then, the proposed definition of property identity in terms of internal predication would link the identity of properties to entities that have a secondary and dependent ontological status (the proposed definition of property identity is: F and G are identical iff they are internally predicated of the same objects). This is a rather curious situation. Though this doesn't constitute an objection, it does seem unsatisfying that the prior domain of properties can't be given identity conditions without invoking a domain that may depend for its existence on the existence of minds. But then maybe Castañeda would have preferred some other way of defining property identity.

## Analysis of Language: Simple Predications

The analysis of language from the point of view of object theory looks very different from that of guise theory, and we shall spend the remainder of the paper contrasting the two. In this section, we examine simple predications. We shall find that, in general, object theory treats names like "George Washington," "Richard Nixon," and descriptions such as "the fortieth President of the U.S." and "the first man on the moon" as referring to ordinary individuals, *not* to the special objects of the theory that encode properties. In some cases, however, we'll find that special

abstract objects may serve to give a *secondary* reading to what appear to be denotationless descriptions, in order explain how they can be used in true sentences. In the next section, we consider the analysis of belief reports and identity statements. In contast to guise theory, we construe our special objects as the *senses* of terms that denote ordinary objects and offer a strict analysis of identity statements. In the final section, we look at the language of fiction. Here our special objects serve as denotations; for example, they serve as the denotations of 'Sherlock Holmes' and 'the fountain of youth'.

When Castañeda turns to the analysis of sentences of ordinary language, he has only one option when faced with the question, what do proper names and descriptions refer to? His answer must be that they refer to guises. Castañeda employs guises primarily at the level of reference, no matter whether the language is about real or fictional objects. In the following passage, Plantinga first describes Castañeda's view, and then quotes from one of Castañeda's articles:

Furthermore, our definite descriptions—"my willow tree," "the cleverest Guatemalan philosopher," "the meanest man in North Dakota," for example—refer primarily to guises and only secondarily to ordinary objects. Castañeda puts it thus:

- 2. Guises are units of individuation manageable by (finite) minds: they are the *primary* objects of reference, and hence, of perception and beliefs.
- 3. Guises are exactly what individual referring expressions of the form 'the F' refer to, e.g., 'the man next door [at present]', 'the Queen of England in 1973'.
- 4. The objects of the world are secondary objects of reference; when one thinks of the so-and-so, taking it to exist, one refers primarily to (the guise) the so-and-so and secondarily to a postulated infinite structure of guises which assumedly includes (contains or involves) the so-and-so. (Castañeda [1975], p. 128)

(Plantinga [1983], p. 68)

This pretty well encapsulates the approach that guise theory takes to natural language.

which encode up all the possibilities, would still be there. So our definition of property identity in terms of being encoded by the same (abstract) objects would not be affected.

<sup>&</sup>lt;sup>10</sup>There may even be a formal circularity if one adopts this definition of property identity in guise theory, but as yet, I do not yet have a clear enough grasp on the foundations of guise theory to establish this point with any certainty. The problem is this. Suppose in guise theory we define: F = G iff  $\forall x[x(F) \leftrightarrow x(G)]$ . But every individual x is a guise of the form  $c\{\ldots\}$ , and so 'x(F)' can itself be defined, as we saw above, as  $F \in c\{\ldots\}$ . Now at this stage, we just don't know what the status of the '\in ' symbol is. It looks like it is just a primitive symbol of guise theory. But recall Castañeda asserts that '{...}' is an operator and the objects it yields (i.e., the sets) are not as fundamental, from an ontological point of view, as properties. Does that mean  $\in$  is definable? In terms of what? One is tempted to say:  $F \in \{...\}$  iff  $\{...\}$ maps F to  $\{\ldots F\ldots\}$ . But I am not sure I understand this. What exactly does the operator {...} operate upon to produce sets of properties? It can't be single properties, for what would the arguments be that produce, respectively, the sets  $\{F\}$ ,  $\{G\}$ , and  $\{F,G\}$ . If  $\in$  is not to be defined, then it needs to be acknowledged as a primitive piece of notation. If it is primitive, then there is no formal circularity in the proposed definition. If it is not primitive, then we can not yet settle the question of circularity until we see the how  $\in$  is defined.

Plantinga discusses a sentence that can serve nicely to introduce the discussion concerning simple predications. He considers the following:

(29) My willow has leaves.

This sentence appears to be a simple predication, in which the property of having leaves is predicated of Plantinga's willow. As Plantinga correctly points out, however, from the perspective of guise theory, this sentence is ambiguous, and has at least four different readings. Here is Plantinga's understanding of the four readings:

On Guise Theory, the sentence (29) is ambiguous; it may express any of

- (30)  $c\{\text{being my willow tree}\}\$ internally posseses having leaves,
- (31)  $c\{\text{being my willow tree}\}\ \text{consubstantiationally possesses}\ having leaves,}$
- (32) c{being my willow tree} consociationally possesses having leaves,

or

(33) c{being my willow tree} conflationally possesses having leaves.

(Plantinga [1983], p. 68)

These readings involved defined notions in guise theory. Sentence (31) is the preferred reading of (29), and it can be expanded further in terms of the following, primitive notions: the guise  $c\{\text{being my willow tree}\}\$  is consubstantiated with the guise  $c\{\text{being my willow tree}, \text{having leaves}\}\$ . A similar expansion can be given for (32) and (33). The important point is that readings (30) – (33) resolve an ambiguity postulated in the data. The postulated ambiguity is not a lexical one (neither the subject nor the predicate is treated as if it had more than one meaning), but rather a four-way structural ambiguity in the natural language copula.

By way of contrast, object theory supposes that there is a two-way lexical ambiguity in the subject term and a two-way structural ambiguity in the copula. The structural ambiguity is straightforward: the copula is analyzable either as an exemplification predication or as an encoding predication. The lexical ambiguities of the subject term are more subtle, however. Subject terms typically denote ordinary objects. The proper name 'George Washington' denotes the ordinary individual, and the definite description 'the Queen of England in 1973' denotes the ordinary object that uniquely exemplifies being Queen of England in 1973. So we get the reading of (29) ("My willow has leaves") that Plantinga desires. The principal analysis of the description reads it as "the x that exemplifies being a willow and exemplifies being on Plantinga's property". Symbolically, this reading is:  $\iota x(Wx \& Ox)$ . The entire sentence is taken to be an exemplification predication of the form "x exemplifies the property of having leaves". Symbolically, this is represented as: Hx. So our primary analysis of (29) may be represented symbolically as follows:

$$H\iota x(Wx \& Ox)$$

The fact that our preferred reading uses ordinary objects and exemplification establishes that object theory preserves the intuition that thought and language are primarily about ordinary objects.

However, the definite descriptions of natural language have a subtle ambiguity to them, and therefore get a secondary reading. On this reading, they denote an object that encodes rather than exemplifies the properties denoted by the matrix of the description. This is particularly useful for such descriptions as 'the round square' and 'the Russell set'. On the standard, exemplification reading of these descriptions, they denote nothing at all, for there are no objects that exemplify being round and being square or which exemplify being a set of non-self-membered sets. So this standard reading doesn't help us to understand the truths that can be cast in terms of these descriptions. So we give them a second reading, on which they denote objects that encode properties. Some examples of this are in order.

Consider the assertions (which sound obvious and a priori) that "The man who first set foot on the moon was first to set foot on the moon" and

<sup>&</sup>lt;sup>11</sup>Consubstantiation, conflation, and consociation, as introduced by Castañeda, are primitive relations between guises. So (31), for example, uses a defined mode of predication that holds between a guise  $c\{\ldots\}$  and a property F just in case the former is consubstantiated with the protracted guise  $c\{\ldots, F\}$ . The defined mode of predication 'consubstantiationally possesses' is used directly in the analysis of the data.

 $<sup>^{12}</sup>$ The exact construction of this second reading depends on how the description is being used on a particular occasion, but for now, we shall look only at the simplest case.

"The round square is square." These sentences have something like the form "The F, G-thing is G." Now if we stick just to exemplification readings of the description and the exemplification reading of the predication, the first sentence turns out to be true. But the second sentence turns out to be false, since nothing exemplifies both roundness and squareness (assuming Russell's view that simple predications containing non-denoting terms are false). However, this doesn't capture the reading on which both of the sentences of natural language are making a true a priori claim. To capture this reading, we give an encoding analysis to both the description and the predication. <sup>13</sup> The descriptions in both sentences receive a secondary reading on which they denote the object that encodes just the properties F and G. In addition, one can construe the predication involved in both sentences as encoding. We therefore get a reading on which the sentences assert that the object that encodes just F and Gencodes G. This is clearly a truth, and moreover, is derivable from the a priori axioms of the theory (thus explaining the a priori air about the sentences).<sup>14</sup>

Object theory thus guarantees that there will always be a true reading of the special predications of the form "The  $F_1, \ldots, F_n$  thing is  $F_i$ "  $(1 \le i \le n)$ . The description "The  $F_1, \ldots, F_n$  thing" can be given a reading on which it denotes the abstract object that encodes just  $F_1, \ldots, F_n$ . Then we can use this reading of the description together with an encoding reading of the copula to get an analysis on which our datum sentence asserts that the object that encodes just  $F_1, \ldots, F_n$  encodes  $F_i$ , for  $1 \le i \le n$ .

This analysis offers a response to an objection raised by Tomberlin in his [1992] review of guise theory. On the one hand, given Castañeda's view that definite descriptions primarily denote guises, it would seem that the statement "The so-and-so is a guise" will always be true. In particular, Tomberlin argues that guise theory yields "The unique non-guise is a guise" as a truth. But Tomberlin objects that any reasonable theory of definite descriptions would never make the statement "The unique non-F'er is F" true. In object theory, both of Tomberlin's contentions fail to apply. Sentences of the form "The so-and-so is an abstract object" are not always true, since the readings of definite descriptions in which they denote ordinary objects give the lie to this claim. Moreover, we get true readings not only for some sentences of the form "The non-F (thing) is F", but also for some sentences of the form "The F, G is not-F". For an example of the former, consider the property of being something that Tomberlin thinks about, which we may represent as  $[\lambda x Ttx]$ . If we call this property 'F', then 'non-F' is  $[\lambda x \neg Ttx]$ . Now suppose Tomberlin considers the object that encodes just the property non-F. Then we get a true reading for "The non-F (thing) is F". To see this, (a) let F be the property just described, (b) read the description "the non-Fer" as the object that encodes just the property  $[\lambda x \neg Ttx]$ , and (c) read the copula 'is' as exemplifies. We then get the truth that the object in question does exemplify the property of being thought about by Tomberlin. This is no contradiction since the object in question doesn't exemplify the property of not being thought about by Tomberlin, but rather just encodes this property. Moreover, we get a true reading for sentences of the form "The F,G is non-F." Let F be the property of being round and G be the property of being square. Then it should be clear that the following is a reading of this sentence on which it is true: the object that encodes the two properties being round and being square exemplifies the property of not being round. This is consistent with the theory, since we may suppose that our special objects that encode properties fail to exemplify the property of having a shape (on the grounds that they are abstract) and so fail to exemplify the property of being round, and thus exemplify the property of not being round (by  $\lambda$ -Equivalence).

<sup>&</sup>lt;sup>13</sup>So as a matter of course, we generate (but ignore) several readings of even such simple predications as Plantinga's sentence (29) (above), readings which treat the description 'my willow' as denoting the object that encodes being Plantinga's willow tree and which treat the predication as encoding. For ordinary simple predications of natural language, such readings play no useful role.

<sup>&</sup>lt;sup>14</sup>On some occasions, a description like 'the round square' may denote the object that encodes all the properties entailed by the properties of being round and being square, or more generally, the object that encodes all the properties predicated of the round square in the standard story about it. For example, if one is trying to account for the truth of the utterance "The round square has a shape," one must analyze the description as denoting the object that encodes all the properties entailed by being round and being square, or as denoting the object that encodes all the properties attributed to the round square in the relevant story. Then we analyze the datum as asserting truly that the object that encodes all the properties entailed by being round and being square (or all the properties attributed to it in the relevant story) indeed encodes the property of having a shape. For a complete discussion of the treatment of descriptions, see my [1988], Chapters 5 and 7.

# Analysis of Language: Belief Reports and Identity Statements

One of the sharpest criticisms that Plantinga levels at guise theory concerns its treatment of the puzzles of belief and identity statements. In this section we compare the guise-theoretic solution to these puzzles with our own, reconsidering Plantinga's criticisms in the process. The puzzles of belief reports are well known, and so to keep the discussion focused, we consider the example discussed by Castañeda and Plantinga concerning Oedipus' beliefs at a certain point in time:

- (1) Oedipus believes that the previous King of Thebes is dead.
- (2) Oedipus doesn't believe that Antigone's paternal grandfather is dead.

However, unbeknownst to Oedipus, the following is true:

(3) The previous King of Thebes just is Antigone's paternal grandfather.

The puzzle is that (1), (2), and (3) all seem to be true, but in addition, seem to be jointly inconsistent. Castañeda's analysis of this case and others like it consists of two parts. One part of the analysis begins by denying that (3) is what it appears to be, namely, a statement of strict identity. Castañeda thinks that the descriptions "The previous King of Thebes" and "Antigone's paternal grandfather" denote different guises, and so strictly speaking, the identity statement is not true. Castañeda would explain the apparent truth of (3) by pointing out that the two guises in question are consubstantiated, and so by reading (3) as a consubstantiation predication as opposed to a statement of identity, we can understand why it is taken to be true. The other part of Castañeda's analysis consists in treating the form of predication in (1) and (2) as consociation predication. This is the form of predication in which two guises are "thought together". Here is Plantinga's understanding of the guise theoretic analysis of (1), which Castañeda accepts:

Suppose that Oedipus believes that the previous King of Thebes is dead; what really goes on is that the individual the previous King of Thebes is consociated with its being-believed-by-Oedipus-to-be-dead protraction; that is,  $c\{being\ the\ previous\ King\ the\ previous\ the\ prev$ 

of Thebes) is consociated with  $c\{being\ the\ previous\ King\ of\ Thebes,\ being\ believed\ by\ Oedipus\ to\ be\ dead\}$ . And an object consociationally possess a property P if it is consociated with its P-protraction. (Plantinga [1983], p. 49)

Assuming that we have an adequate understanding of consubstantiation and consociation, Castañeda's analysis does offer readings of the data which preserve their truth value and apparent consistency. From the fact that the guise The previous King of Thebes is consociated with its believed by Oedipus to be dead protraction (the preferred reading of (1)), and the fact that the guise The previous King of Thebes is consubstantiated with the guise Antigone's paternal grandfather (the preferred reading of (3)), it does not follow that the latter guise is consociated with its believed by Oedipus to be dead protraction (the negation of the preferred reading of (2)). So we have a consistent set.

Now one of Plantinga's principal criticisms of this analysis is that it forces us to give up the view that (3) is a strict identity claim. Plantinga thinks it is plausible to suppose that the interpretation of (3) as a strict identity claim is practically required:

More specifically: couldn't it be that, for example, it is part of the data that (3) expresses a strict identity—i.e., couldn't

(15) (3) expresses the proposition the previous King of Thebes is strictly identical with the grandfather of Antigone

be part of the data? Or couldn't it be that that proposition itself, i.e.,

(16) The previous King of Thebes is strictly identical with the grandfather of Antigone

is part of the data?  $\dots$  Some propositions of the sort exemplified by (3) also seem to me to deserve datanic status: for example

(17) The willow in my back yard is strictly identical with the tallest tree in my back yard

...I would take these to be data relative to the problems presented by the relevant triadic sieves.
(Plantinga [1983], pp. 58-9)

Plantinga uses this to challenge Castañeda's theory/data distinction. And he argues that the correct analysis of the paradoxes engendered by cases such as (1) - (3) is to reject the Principle of Substitution (as distinct from the principle of the Identity of Indiscernibles). The Principle of Substitution is:

- (ID) If x is strictly identical with y, then anything true of x is true of y. This is to be distinguished from the principle of the Identity of Indiscernibles:
- (II) For any objects x and y and property P, if x is identical with y, then x has P iff y has P

#### Plantinga suggests:

(II) is extremely plausible. ... (II) is an ontological principle that makes no comments at all about the results of substituting one term for another in English sentences. (II) seems altogether compelling; but what plausibility is there to (ID)? (Plantinga [1983], p. 60)

Planting goes on to give examples of contexts which allegedly show that (ID) is false. Then later he returns to the point:

But the weak point, obviously, is is the claim that (ID) is initially plausible. Why should we think so? Once we see that it is distinct from (II) (and, indeed, isn't so much as suggested by the latter) we probably won't find it plausible at all. (Plantinga [1983], p. 62)

I think Plantinga's case against (ID) is not conclusive. The way Plantinga has formulated (ID), it is just as much a de re principle about objects as (II) is. The variables x and y range over objects! If indeed x and y are the same object, then how could something that is genuinely about x be true and not also be a truth genuinely about y? None of examples that Plantinga produces to the contrary are genuine counterexamples. He considers the two descriptions 'the meanest man in North Dakota' and 'the shortest spy in North Dakota', and assumes that they both refer to the same individual. Then he argues that the following two contexts are such that "the result of putting the [one] but not the [other] description in the blank expresses a truth" (Plantinga [1983], p. 60):

- (19) '\_\_' contains the letter 'm'.
- (20) It is necessarily false that there is a spy in North Dakota shorter than \_\_\_.

Now I would argue that (19) offers no refutation of (ID) because the result of substituting the descriptions in question is not a truth about the man who is the meanest man in North Dakota, but rather a truth about an expression of English. But then the relevant x and y in (ID) must be the respective descriptions, and if so, then x and y are distinct. So this is no instance of (ID). Moreover, (20) doesn't constitute a refutation of (ID), because it is ambiguous. There is at least one reading of "there is a spy in North Dakota shorter than the shortest spy in North Dakota" on which it is genuinely a de re claim about the man who is the shortest spy in North Dakota. On that understanding, the relevant instance of (20) is simply not true, for it is possible that there is a spy shorter than him! So again, we have no instance of, and thus no counterexample to, (ID).

So whereas Plantinga's criticism of guise theory is a good one, his own response to the puzzles concerning these belief contexts is not conclusive. Object theory agrees with Plantinga that (3) is a strict identity claim about two ordinary objects. The object that exemplifies being the previous King of Thebes is strictly identical with the object that exemplifies being Antigone's paternal grandfather. However, we suppose that the Principle of Substitution (ID) is a perfectly good a priori principle. Our solution is to take a view that is somewhat eclectic—it has some of the features of the direct reference view and some features of Frege's view.

<sup>&</sup>lt;sup>15</sup>In [1988], Chapter 5, I show how to analyze the intuition: it necessarily false that there is a spy in North Dakota shorter than the shortest spy in North Dakota. This is the intuition that Plantinga thinks demonstrates that (ID) fails. To analyze this intuition, we assume that the description does not denote the man in question, call him 'Ortcutt', for then it would be about him, and as we saw, that would make the resulting sentence false (for why couldn't there be a spy shorter than Ortcutt?). Instead, I treat the description "the shortest spy in North Dakota" as if it denoted the object that encodes the property of being the shortest spy in North Dakota (this special object objectifies our conception of the shortest spy qua his being the shortest spy). Call this special object 'a'. I then read the sentence in question as: Necessarily, it is not the case that there is a spy in North Dakota shorter than the object that exemplifies the property a encodes (if there is such). This is true, for no matter which world you go to, it is not the case that there is at that world a spy in North Dakota shorter than the object that exemplifies the property of being the shortest spy in North Dakota shorter than the object that exemplifies the property of being the shortest spy in North Dakota

We take reports such as (1) and (2) to be ambiguous. On their *de re* reading, where all the terms refer to their usual denotations (as determined by the direct reference theory), indeed (1) and (2) are just inconsistent. However, we suppose that there is an alternative way to read (1) and (2) on which they are consistent. For this alternative reading, we use our special objects that encode properties.

On our view, terms of natural language have something like a Fregean sense. We say 'something like' because we don't suppose that the sense of a term determines its denotation. The sense of a term is taken to be an abstract object that encodes properties, and it can serve as a mode of presentation even if it encodes properties that the denotation of the term fails to exemplify. We hold this view in its full generality, for we suppose that the predicate 'is dead' has a sense as well. Just as there are abstract individuals that encode properties of individuals, our type theoretic theory yields, at the level of properties (and thus in addition to ordinary properties), abstract properties that encode second order properties. We take the denotation of 'is dead' to be an ordinary property, and suppose that the sense of this predicate is an abstract property that encodes second order properties. Now just as the ordinary property of being dead may be plugged up with the ordinary individual denoted by 'The previous King of Thebes' to produce a propositional complex, the abstract property that serves as the sense of 'is dead' can be plugged up with the abstract individual that serves as the sense of 'The previous King of Thebes' to produce a propositional complex. These two propositional complexes have the same logical structure, but the second one has abstract properties and individuals standing in the places that ordinary properties and objects typically occupy. Our view is that in de re belief, the subject is related to the former propositional complex, whereas in dedicto belief the subject is related to the latter propositional complex. 16

Our analysis can be captured by the following formal representations:

Let ' $\iota x \varphi$ ' represent the standard exemplification reading of the English description 'The previous King of Thebes',

Let ' $\iota x \psi$ ' represent the standard exemplification reading of the English description, 'Antigone's paternal grandfather',

Let ' $\iota \underline{\iota} \underline{\iota} \underline{\nu} \underline{\varphi}$ ' denote the abstract object that is the sense of 'The previous King of Thebes',

Let ' $\iota x \psi$ ' denotes the sense of 'Antigone's paternal grandfather',

Let 'B' denote the belief relation between an individual and a propositional complex,

Let 'D' denote the property of being dead,

Let  $\underline{D}$  denote the sense of the predicate 'is dead', and

Let 'o' denote Oedipus.

We then get (1a) as the de re reading of (1) and (1b) as the de dicto reading:

(1a) 
$$B(o, D\iota x\varphi)$$

(1b) 
$$B(o, D\iota x\varphi)$$

The relevant two readings of (2) are:

(2a) 
$$\neg B(o, D\iota x\psi)$$

(2b) 
$$\neg B(o, D\iota x\psi)$$

The reading of (3) is simply:

(3a) 
$$\iota x \varphi = \iota x \psi$$

So we explain the facts of the case by noting that whereas (1a), (2a) and (3) are jointly inconsistent, (1b), (2b), and (3) are jointly consistent. The de dicto reading of (1) tells us that Oedipus stands in a certain relation to a propositional complex that has abstract constituents replacing the ordinary constituents. This is what makes the belief report true. (2b) tells us he is not so related to a certain other propositional complex (having different constituents). Note for Oedipus to have a true belief in the case of (1b), one has to look not at the propositional complex to which he is related by the 'B' relation (this gives the cognitive content of his mental state), but rather to the propositional complex it goes proxy for. This is the propositional complex that results by replacing the abstract property with the ordinary property it represents and the abstract individual by the ordinary individual it represents.

 $<sup>^{16}</sup>$ Actually, our theory allows us even more latitude than this, but for now, we are just sketching the operation of the theory in the simplest kind of case.

Thus, on our account, (3) is a strict identity claim, and the Principle of Substitution is a good one. Belief reports (1) and (2) are ambiguous: they receive a primary reading on which the ordinary denotations of 'The previous King of Thebes' and 'Antigone's paternal grandfather' and 'is dead' play the principal role, and they receive a secondary reading on which the senses of these terms play the principal role. In this secondary reading, the senses of 'The previous King of Thebes' and 'Antigone's paternal grandfather' differ, and this explains the intuition that it is illegitimate to substitute these descriptions for one another in the ordinary English.

### Fiction and Nonexistence

In this final section, we defend our theory against one last criticism of guise theory developed in Plantinga's article. This concerns the treatment of fiction and the ontological status of nonexistent objects. Let us begin by looking at some of the intuitions that Plantinga has concerning these issues:

Furthermore, on our ordinary and familiar ways of thinking about objects, there aren't any that don't exist; everything whatever exists. Of course, there are true sentences of the form ' $\alpha$  does not exist'; Superman, for example, does not exist, and the same must be said for such colleagues of his as Captain Marvel and the Green Lantern. But from the truth, acknowledged by all, that Superman does not exist, it doesn't follow that there are some things that don't exist. After all, while it is true that Superman does not exist, it is equally true that there is no such thing as Superman; and presumably no one is much tempted to conclude that there are some things such that there aren't any such things. On our ordinay ways of thinking, there aren't any things that don't exist—although, of course, we can and sometimes do use the sentence 'There are some things that don't exist' to express a truth—a truth that can perhaps be put more exactly by 'There are some true sentences of the form " $\alpha$  does not exist". (Plantinga [1983], p. 44)

It seems to me that Plantinga has presented the data in a biased way right at the outset of this passage. Notice that he says, on the one hand

(in the material mode), that on our ordinary and familiar way of thinking, that there aren't any objects that don't exist. But, then, he shifts into the formal mode, and admits that there are true sentences of the form ' $\alpha$  doesn't exist'. Now why doesn't Plantinga stay in the material mode and agree that, on our ordinary and familiar ways of thinking, Superman doesn't exist? By shifting into the formal mode to express this, Plantinga is already taking a philosophical position. What he should have done is point out that our ordinary and familiar ways of thinking are in conflict on this point. On the one hand, we think that Superman doesn't exist, but on the other hand, we think that there are no nonexistent objects. By describing things the way he has, Plantinga is from the outset presenting his philosophical view that the ordinary thought that Superman doesn't exist is the problemmatic one, and that to prevent confusion, we must shift into the formal mode and reexamine the truth conditions of the sentence "Superman doesn't exist". But it is Plantinga's solution that seems to run counter to ordinary ways of thinking. After all, most people, when they say that Superman doesn't exist, or that Santa Claus doesn't exist, do not mean that there just is no such thing. By using the proper name 'Superman', they take themselves to be referring to something, if only an 'idea' or 'concept'. They are unwilling to say that there is no such thing as Superman because they can talk about him, deny that he exists, use coreferential pronouns such as 'him' to refer to him. It is the simplest way to report experiences, such as hopes, counterfactual musings, dreams, daydreams, etc., into which Superman figures.

To explain the conflict in our intuitions, object theory makes a distinction between physical and logical existence. It uses the existence predicate 'E!' to express the former: 'E!x' asserts that x has a location in spacetime. This is contrasted with the notion of logical existence, which is expressed by the quantified sentence ' $\exists y \ y = x$ '. This asserts that there is something which is x. If  $\tau$  is a term, then if ' $\exists y \ y = \tau$ ' is true, we know that  $\tau$  has a denotation. Intuitively, this means that  $\tau$  is something about which we can talk and over which we can quantify. Ordinary objects such you, me, and this computer terminal physically, and hence, logically exist. However, the special, abstract objects that encode properties logically exist but don't physically exist. Indeed, we define 'x is abstract' ('A!x') as: x couldn't possibly have a location in spacetime (' $\neg \diamondsuit E!x$ '), i.e., x couldn't possibly have a physical existence. This captures an intuition we have about what it is to be abstract. We then treat the name 'Superman' as a

name of the abstract object that encodes just the properties that satisfy the open sentences of the form "In the story, Superman is F". In other words, the theory takes the theoretical sentence "Superman encodes F" to be equivalent to the sentence "According to the story, Superman is (exemplifies) F", where the latter sentence is part of the data that is given. In terms of this identification, we can form analyses of ordinary sentences involving 'Superman'. For example, "Superman can leap tall buildings in a single bound" is false if treated as an exemplification predication, but true if treated as an encoding predication. This squares with our ordinary intuition that, Superman notwithstanding, nothing really exemplifies the property of being able to leap tall buildings in a single bound. On the other hand, the sentence "Superman is more famous than Batman" is false if treated as an encoding predication, but true if treated as an exemplification predication (this is not something that is attributed to Superman in the story).

Moreover, we may reconcile the conflict between the intuitions expressed by (4) and (5):

- (4) Superman doesn't exist.
- (5) There are objects that don't exist.

We take (4) to have two readings, both of which are true. On the one hand, (4) can be construed as correctly asserting that Superman doesn't have physical existence (' $\neg E!s$ '). On the other, it can be construed as correctly asserting that there is no object whatsoever that exemplifies just the properties attributed to Superman in the story (or, given our theoretical identification of Superman, that nothing exemplifies the properties Superman encodes). I think both of these readings are buried in our ordinary, everyday claim that Superman doesn't exist. Now given that there is a distinction to be drawn between physical and logical existence, there are two ways to read (5). The false reading is (5a) and the true one is (5b):

(5a) 
$$\exists x \neg \exists y \ y = x$$

(5b) 
$$\exists x \neg E! x$$

The fact that negation of (5a) is a theorem of object theory means that the theory does not commit itself to "objects such that there are no such objects."<sup>17</sup> Moreover, the fact that (5b) is true should not be objectionable to philosophers such as Plantinga. After all, even such philosophers believe that there are some things that don't have physical existence (such as properties, states of affairs, or sets). So they should have no objections in principle to the claim that there are objects that do not (physically) exist.

Thus, object theory preserves our ordinary ways of thinking. I suggest it is much more in line with everyday ways of thinking than Plantinga's own analysis of these matters. For unlike Plantinga, we do not assume that ordinary uses of the word 'exists' express the philosophical notion of logical existence. Plantinga does not consider the plausible suggestion that ordinary uses of 'exists' typically express a notion of physical existence. Moreover, Plantinga can not object to our theory on the grounds that it posits concrete nonexistent objects. The theory does not posit unicorns, flying horses, cyclops, sirens, or any of the other fantastic creatures of myth and fiction. That is, it doesn't posit things that exemplify being a unicorn, a flying horse, etc.. Rather it postulates abstract objects of a special kind (which encode these properties) and employs them in a natural explanation of ordinary things we say about fictional objects.

This brings us to one final point of comparison with Castañeda's theory of guises. It concerns Castañeda's conception of guises as 'concrete individuals'. Plantinga says:

The notion of a concrete individual is central to Castañeda's thought. In his later writings, he speaks not of concrete individuals, but of guises,... What are guises like? Properties, Castañeda says, are "the ultimate components of the world," and concrete objects, or guises, are in an important

<sup>&</sup>lt;sup>17</sup>Plantinga takes (5) to be part of the data, and he thinks that (5a) is the proper way to read it. See his discussion of sentence (26) in [1983], pp. 67-8.

<sup>&</sup>lt;sup>18</sup>See the previous footnote. In the passage from Plantinga [1983], p. 44, quoted above, Plantinga says "After all, while it is true that Superman doesn't exist, it is equally true that there is no such thing as Superman." I suggest that most ordinary speakers would accept this, on the reading that there is nothing which exemplifies the properties attributed to Superman in the story. But most people would not accept "Superman is nothing". Presumably, they are rejecting the reading '¬ $\exists y \ y = s$ ', which says that Superman is not some thing. But this is the reading they would have to accept if Plantinga is to establish that ordinary uses of "α doesn't exist" just mean that "there is nothing which is (identical with) α". From his discussion on p. 63 (of examples (27) and (28)), it seems that Plantinga thinks ordinary (non)existence claims express this latter proposition.

sense bunches or clusters or bundles of properties. A concrete object has constituents; ... (Plantinga [1983], p. 46)

And later on he says,

Only some of these concrete objects, furthermore, *exist*. I said we ordinarily think that there aren't any objects that don't exist. On Castañeda's view, however, there are many more concrete objects than we would ordinarily suppose; and many of them do not exist. ... Fundamentally, then, a concrete object is a bundle of properties. (Plantinga [1983], p. 47)

It seems to me that one of the deep-seated reasons that Plantinga is reluctant to accept guise theory is that it seems to 'fractionate' the ordinary physical world into too many concrete objects. Contrary to guise theory, the ordinary world just has *one* concrete object, the willow tree in Plantinga's back yard, which is complete with respect to the properties it exemplifies. Moreover, what could Castañeda mean by 'concrete' that would lead him to say that each of the guises consubstantiated into this object is itself concrete?

By way of contrast, the fundamental conception behind our special objects that encode properties is that they are abstract. They are objects that have internal as well as external properties, but we do not think of them as the ingredients of ordinary physical objects. Object theory leaves the ordinary concrete world intact, and says very little about ordinary objects. It assumes that ordinary individuals are not bundles of properties, and that they are concrete precisely in the sense that they have location in spacetime. And this is precisely the sense in which abstract objects fail to be concrete. <sup>19</sup> We do not postulate 'concrete nonexistent objects'. So even if we assert that there is a very large domain of abstract objects, we are not thereby suggesting that the ordinary world of our experience has more concrete objects in it than we might ordinarily think. The fact that Castañeda's theory makes such a suggestion is, I suspect, one of the important underlying reasons that Plantinga has for rejecting the theory.

### Conclusion

Of course, I have not be able to consider how *all* of Plantinga's objections to guise theory fare when construed as objections to object theory. No doubt the reader will want to examine the ones I have omitted, to see whether they have any force against the present view. But, given the limitations of space, I have tried to deal with the most important objections that Plantinga has raised.

Moreover, I have entirely omitted a discussion of the differences in the way in which the formal details of object theory and guise theory have been developed. Such a comparison is inappropriate at this point, since guise theory is not cast in an antecedently defined formal language, having a well-defined semantics and proof theory. That means we don't know, for example, whether \*C, C\*, etc., denote primitive relations, whether '\*C(x, y)' has nominalistic or realistic truth conditions, whether the operator c has a denotation, whether we can recover, from the denotation of 'c{...}', the denotation of its semantically significant parts, whether there is a finished list of axioms for the theory, etc. These are some of the questions that guise theory must address before a more specific comparison can be made.

<sup>&</sup>lt;sup>19</sup>Of course, some fictional characters will *encode* the property of being concrete, or the property of existence, since this is a property attributed to it in the relevant story. But it doesn't follow that they exemplify concreteness.

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