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# **Two Versions of Millianism**

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# Two Versions of Millianism Scott Soames

With the addition of Kit Fine's Semantic Relationism to the mix, there are now two main

versions of Millianism on offer.<sup>1</sup> Both maintain

- (i) that the semantic contents of names, indexicals, and variables (appropriately relativized) are their referents,
- (ii) that the semantic contents of sentences (so relativized) are the propositions they express,
- (iii) that attitudes like assertion and belief are relations to propositions, and
- (iv) that the semantic contents of attitude reports [A asserts/believes that S] represent the agent as bearing the attitude to the proposition expressed by S (relative to the context of utterance and any relevant assignment of values to variables).

While these versions of Millianism both assign the standard Russellian propositions in P1 to the

sentences in (1), relationism adds a coordination scheme to (P1c) (which non-relationism also

assigns to (2)) to produce the structure (P2R), which relationism assigns to (2).

- 1a. Delia Fara is a Princeton philosopher.
- b. Delia Graff is an MIT PhD.
- c. Delia Fara is a Princeton philosopher and Delia Graff is an MIT PhD.
- P1a. < DGF, being a Princeton philosopher >
  - b. < DGF, being (one with) an MIT PhD >
  - c. <<<DGF, being a Princeton philosopher>, <DGF, being (one with) an MIT PhD>> CONJ>
- 2. Delia Fara is a Princeton philosopher and Delia Fara is an MIT PhD.
- P2R. <<<<u>DGF</u>, being a Princeton philosopher>, <<u>DGF</u>, being (one with) an MIT PhD>> CONJ>

Sentences (1c) and (2) both predicate being a Princeton philosopher and being an MIT

PhD of the same person. However, understanding (1c) (which contains two names) doesn't

require one to realize this, whereas understanding (2) (which contains two occurrences of the

<sup>&</sup>lt;sup>1</sup> Kit Fine, *Semantic Relationism*, (Oxford: Blackwell), 2007. In what follows, I use 'relationism' for a view based on, and inspired by, Fine, which, nevertheless, does not follow him in every detail. The view here is what I take to be the simplest, most plausible, version of the relational ideas he introduces. I will discuss, in footnotes, in the text, and in an appendix points about which the view I focus on may differ from his. The reader should also be aware of a relational view that differs in some important details (most notably involving quantification) that is sketched by David Kaplan in an unpublished lecture "Word and Belief" given in the late 1980s.

same name) does. For relationism this difference is reflected in the propositions expressed. Since understanding a sentence involves grasping the proposition it expresses, entertaining the coordinated proposition (P2R) requires knowing that the individual it represents as a Princeton philosopher is the same as the one it represents as having an MIT PhD. Since understanding sentence (1c) doesn't require this, entertaining the uncoordinated proposition (P1c) that it expresses doesn't either. So, relationism maintains, (P2R) is epistemically equivalent to (P3) -- which is expressed by (3a,b) -- but (P1c) is not.

3a. Delia Fara is both a Princeton philosopher and an MIT PhD.

b.  $\lambda x$  (x is a Princeton philosopher & x is an MIT PhD) Delia Fara

P3. < DGF, being a Princeton philosopher and (one with) an MIT PhD >

The coordinated dyadic proposition (P2R) and the uncoordinated monadic proposition (P3) are truth-conditionally equivalent to, but not inferable from, the uncoordinated dyadic proposition (P1c); while being trivially inferable from one another. They differ in that while (P3) predicates a compound 1-place property of a single individual, (P2R) predicates two simple properties of a pair of individuals that are, in Fine's words "represented as the same."

As a rule, the two versions of Millianism assign different, epistemically non-equivalent, propositions to sentences the understanding of which requires one to recognize multiple occurrences of terms as standing for the same thing. However, there are exceptions, like (4a,b), involving pronominal anaphora.

4a. John harmed himself.

b. *John* thinks that Mary likes *him*.

On my version of non-relationism, anaphoric relations are semantically significant structure, the pronouns in (4) are bound variables as in (5), and the propositions expressed are (6a,b).<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Soames, "Attitudes and Anaphora," *Philosophical Perspectives*, 8, 251-272, 1994; reprinted in Soames, *Philosophical Essays*, Volume 2, (Princeton and Oxford: Princeton University Press), 2009.

- 5a.  $\lambda x$  (x harmed x) John
- b.  $\lambda x$  (x thinks that Mary likes x) John
- 6a. < John, Self-harming >
  b. < John, thinking that Mary likes one >

By contrast, Fine assimilates (4a,b) to (7a,b), which contain multiple occurrences of the same name, and so express the coordinated propositions (8a,b).<sup>3</sup>

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7a. John harmed John.
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- b. John thinks that Mary likes John.
- 8a. << **John**, **John**>, Harm>
- b. << John, < <Mary, John>, Likes>, Belief.>

Although he distinguishes propositions (6a,b) from (8a,b), he would agree that each (a) proposition is trivially inferable from the other, and similarly for the (b) propositions.

The chief attraction of relationism is its simple treatment of some instances of Frege's Puzzle. To many, it seems pre-theoretically obvious that one can believe the propositions semantically expressed by 'Hesperus is Hesperus', and 'Hesperus isn't Phosphorus', without believing the propositions semantically expressed by 'Hesperus is Phosphorus' or 'Hesperus isn't Hesperus'. This creates a *prima facie* difficulty for non-relational Millianism – to be dealt with by such extra-semantic factors as guises, ways of entertaining a proposition, pragmatic enrichment, the distinction between semantic and assertive content, the multiple assertion theory, and the least common denominator conception of meaning. By contrast, the relationist's

<sup>&</sup>lt;sup>3</sup> Pp. 39-40, 41, and 122-123. On 39-40, we are told "The names 'Cicero' and 'Cicero' in the identity sentence 'Cicero = Cicero' both represent the same object, as do the names 'Cicero' and 'Tully' in the identity 'Cicero = Tully'. But the first pair of names represents the object *as the same* whereas the second pair does not ... An object is represented as the same [by two terms] in a piece of discourse only if no one who understands the discourse can sensibly raise the question of whether it is the same. Suppose that you say "Cicero is an orator" and later say "Cicero was honest," intending to make the very same use of the name 'Cicero'. Then anyone who raises the question of whether the reference was the same would thereby betray his lack of understanding of what you meant." According to Fine, sentences containing occurrences of terms that represent an object *as the same* express coordinated propositions. Since it is plausible to take sentences like (4a,b) to pass this test, it is plausible to take them to express (8a,b). This is confirmed on page 41, where we find the following: "We might also observe that in cases of anaphora (as when I say "I saw John, he was wearing a bowler hat") we can have two expression representing an object as the same without the expressions themselves being the same;..." Pages 120-121 square this analysis of anaphora in terms of coordination with the observation that the pronoun derives its referent from its antecedent.

distinction between coordinated and uncoordinated propositions accommodates the apparent pretheoretic possibility directly in the semantics. Since this may seem to be an advantage, I ask, *"Should Millians become semantic relationists?"* One way of taking this question asks whether relationism itself, without auxiliary machinery developed by non-relational Millians, is sufficient to deal with the full range of attitude puzzles. A more modest way of taking it simply asks whether we should *add* coordinated propositions to the standard Millian tool kit. My remarks will bear on both.

#### From Semantic Content to Assertive Content

First, it is necessary to identify cases in which the two approaches have significantly different empirical consequences. Although the two versions of Millianism assign different *semantic contents* to some sentences and discourses, it would be question begging to assume that semantic content is always transparent. In fact, it appears not to be; there are many cases in which competent speakers seem to understand expressions that have same semantic content without realizing that they do, and even thinking they don't.<sup>4</sup> What is required for competence is not the ability to recognize whenever two sentences have the same semantic content, but the ability to recognize most of the information the sentences are used to *assert* or *convey* in various contexts. On this picture, the main role of the theoretical notion *semantic content* is to constrain the information sentences are used to assert or convey. The dispute between relational and non-relational Millianism is over how this is done. To adjudicate the dispute, we must find cases in

<sup>&</sup>lt;sup>4</sup> See, for example, (i) Saul Kripke, (the *furze / gorse* example) in "A Puzzle About Belief," *Meaning and Use*, A. Margalit, ed., (Dordrecht: Reidel),1979, pp. 239-283; reprinted in *Propositions and Attitudes*, N. Salmon and S. Soames, eds., (Oxford: Oxford University Press), 1988, pp. 102-148, at page 134, (ii) Nathan Salmon (the *ketchup / catsup* example) in "How to Become a Millian Heir," *Nous*, vol. 23, 1989, pp. 211-220, at pages 216-217, and in "A Millian Heir Rejects the Wages of *Sinn*," in *Propositional Attitudes: the Role of Content in Logic, Language, and Mind*, C. A. Anderson and J. Owens, eds., (Stanford, CA., CSLI), 1990, pp. 215-247, (iii) Stephen Reiber "Understanding synonyms without knowing that they are synonymous," *Analysis*, vol. 52, 1992, pp. 224-228, and (iv) Soames, "Substitutivity," in *On Being and Saying: Essays for Richard L. Cartwright*, J.J. Thomson, ed., (Cambridge, Mass.: MIT Press, 1986), pp. 99-132, in particular sections III, IV, and IX.

which the two accounts lead to different predictions about assertive or conversational content.

#### **Instances of Assertive Equivalence**

With this in mind, consider examples (9-12).

- 9a. Delia Graff is (identical with) Delia Fara.
- b. Delia Fara is (identical with) Delia Fara.
- c. Delia Fara is self-identical.
- 10a. Delia Fara is a Princeton philosopher and Delia Graff is an MIT PhD.
  - b. Delia Fara is a Princeton philosopher and Delia Fara is an MIT PhD.
  - c. Delia Fara is both a Princeton philosopher and an MIT PhD.
- 11a. Mark Twain admired Samuel Clemens.
  - b. Mark Twain admired Mark Twain.
  - c. *Mark Twain* admired *himself* (i.e., was a self-admirer).
- 12a. Norma Jeane wanted the public to admire Marilyn.
  - b. Marilyn wanted the public to admire Marilyn
  - c. *Marilyn* wanted the public to admire *her*.

Relational Millianism takes the propositions *semantically* expressed by the (b) and (c) sentences to be epistemically equivalent; non-relational Millianism denies this. However, both recognize the sentences to be *assertively equivalent*. Standardly, one who assertively utters (b) asserts the propositions semantically expressed by both (b) and (c). Thus, these examples don't clearly discriminate the two theories.

The Paderewski case is of a similar type, but is, I think, an outlier. Peter, who assertively utters (13a), while wrongly taking the two 'Paderewski'-occurrences to be occurrences of referentially distinct, but phonologically identical, names, is arguably correct in *not* taking himself to assert the absurd proposition (13b).

13a. The composer Paderewski was a brilliant musician, but the statesman Paderewski wasn't.
b. λz ([the x: Composer x & x = z] (x was a brilliant musician) but [the y: Statesman y & y = z] ~ (y was a brilliant musician)) Paderewski

According to non-relationism, Peter asserts the proposition semantically expressed by the sentence he utters – which, though necessarily false, is not transparently so. His mistake about the name-occurrences, which mediate his relation to the proposition expressed, is responsible for

his failure to recognize that it both predicates and denies something of one and the same person. Relationism tells a different story. According to it, the semantic content of (13a) is a coordinated proposition that is trivially equivalent to the transparently absurd proposition expressed by (13b). For relationism, Peter's failure to recognize the same name as occurring twice is a failure to understand the sentence he utters, and so to grasp the proposition it expresses.<sup>5</sup> Because of this, it could be argued, that proposition isn't asserted, and its uncoordinated sibling takes its place.<sup>6</sup> I won't here make anything of the difference between these two stories. Suffice it to say that despite the semantic differences between relationism and non-relationism, the empirical evidence involving communicative content doesn't clearly discriminate between them in cases like these.

#### **Assertive Utterances of Attitude Ascriptions**

To find relevant differences we need to look at assertive utterances of attitude ascriptions in which the content clause contains multiple occurrences of directly referential terms. Of course, not all such examples will do. If Peter assertively utters

14. I believe that the composer Paderewski was a brilliant musician, but the statesman Paderewski wasn't,

he will *not* ascribe to himself belief in the absurd proposition expressed by (13b), or in any epistemically equivalent proposition, for the same reasons as before. By contrast, one who utters

<sup>&</sup>lt;sup>5</sup> As Fine says, "For competence in the use of a name requires that different uses of the same name be coordinated and a proper understanding of the use of a name requires that one understand when its different uses are coordinated." p. 105 Since Peter does not understand this, he does not understand his use of (13a).

<sup>&</sup>lt;sup>6</sup> This isn't the story Fine tells. According to him, Peter has two semantically different uses of the name 'Paderewski', which means that his utterance is not coordinated, and so does not semantically express a coordinated proposition. (See chapter 4, especially section E.) This, in my opinion, is a mistake. It confuses semantics, which is about expression types and their occurrences, with pragmatics, which is about instances of language use, such as acts of asserting something by assertively uttering a sentence. The name 'Paderewski' that Peter uses is a name in the common language (which for purposes of the puzzle can be taken to be unambiguous). The sentence, (13a), he utters is also unambiguous, which means that the semantic relationist has no choice but to take its semantic content to be a coordinated proposition. The fact that Peter mistakenly takes two occurrences of an unambiguous name for occurrences of different names (or for occurrences of the same name with a different meanings) is a *pragmatic* fact about him that doesn't magically bring any new *semantic* content into being for the sentence he utters. From the point of view of relationism, he misunderstands the sentence (despite understanding each of its parts), and for that reason doesn't assert the proposition it semantically expresses when he utters it. Thanks to Alexandru Radulescu for reminding me of the relevant passage in *Semantic Relationism*.

(15a), recognizing that the name 'Hesperus' occurs twice, asserts and conveys that one believes both the proposition (15b) (semantically expressed by the content clause according to nonrelationism) and the proposition expressed by (15c,d) – namely, that Hesperus is a planet that is smaller than the Earth.

15a. I believe that Hesperus is a planet and Hesperus is smaller than the Earth.

- b. <<<Venus, being a planet>, <Venus, Earth > being smaller than> CONJ>
- c. Hesperus is a planet that is smaller than the Earth.
- d.  $\lambda x$  [ x is a planet & x is smaller than the Earth] Hesperus

Again, the two versions of Millianism produce indiscernible results about assertive content.

What about the sentences in (16)?

- 16a. Bill believes that Phosphorus is a planet and Hesperus is smaller than the Earth.
  - b. Bill believes that Hesperus is a planet and Phosphorus is smaller than the Earth.
  - c. Bill believes that Phosphorus is a planet and Phosphorus is smaller than the Earth.
  - d. Bill believes that Hesperus is a planet and Hesperus is smaller than the Earth.

First consider (a) and (b), which differ only in the order of occurrence of 'Hesperus' and 'Phosphorus'. Since these sentences contain occurrences of different names, relationism and non-relationism assign them the same semantic content, which represents Bill as believing an uncoordinated proposition in which Venus occurs twice. Since more than this is standardly asserted or conveyed by utterances of the sentences, and since what is asserted or conveyed by an utterance of one often differs from that asserted or conveyed by an utterance of the other, both approaches must appeal to extra-semantic factors to explain this. One such factor is pragmatic enrichment. Since it is widely recognized that 'Phosphorus' names a body seen in the morning while 'Hesperus' names one seen in the evening, in many contexts (16a) - (16d) would be used to assert or convey the information given by (17a) - (17d).

- 17a. Bill believes that the body, Phosphorus, seen in the morning is a planet and the body, Hesperus, seen in the evening, is smaller than the Earth.
  - b. Bill believes that the body, Hesperus, seen in the evening is a planet and the body, Phosphorus, seen in the morning, is smaller than the Earth.

- c. Bill believes that the body, Phosphorus, seen in the morning is a planet and the body, Phosphorus, seen in the morning, is smaller than the Earth.
- d. Bill believes that the body, Hesperus, seen in the evening is a planet and the body, Hesperus, seen in the evening, is smaller than the Earth.

Distinguishing between the communicative contents of utterances of (16a) and (16b) in this way also distinguishes each from utterances of (16c) and (16d), the communicative contents of which are given by (17c) and (17d). In this way, non-relational Millianism distinguishes communicative contents of utterances of (18a-d) from one another.

- 18a. A believes that ...n...m... ('n' and 'm' coreferential)
  - b. A believes that ...m...n...
  - c. A believes that ...n...n...
  - d. A believes that ...m...m...

Relationists can do the same, if they are willing to accept, rather than attempt to replace, mechanisms like pragmatic enrichment. Not all are. Fine himself sometimes speaks as if, once we have coordinated propositions, we can return to a kind of Fregean transparency about meaning without guises, ways of believing, pragmatic enrichment, and the like.<sup>7</sup> The different communicative contents of utterances of (16a,b) and of (16c,d) constitute a prima facie problem for this ambitious view– to which I will return later.

#### An Assumption about Relational Quantification

At this point I need an explicit assumption about quantifiers and variables in a relational framework. Informally put, the assumption is that the semantics of formulas containing variables, relative to assignments, parallels that of corresponding sentences containing names. When a and b are different Millian names referring to an object o, the sentence [aRa] semantically expresses a coordinated proposition that arises from the uncoordinated proposition expressed by [aRb] by adding a coordination scheme to the latter connecting the occurrences of o in the proposition

<sup>&</sup>lt;sup>7</sup> See, for example, pp. 33-35, 40, 46-50, 60-65.

corresponding to the two occurrences of a in [aRa]. Similarly, when v and v\* are distinct variables both of which are assigned the value o by an assignment A, the formula [vRv] semantically expresses a coordinated proposition relative to A that arises from the uncoordinated proposition expressed by [vRv\*] relative to A by adding a coordination scheme to the latter connecting the occurrences of o in the proposition corresponding to the two occurrences of v in [vRv]. When the existential quantifier is added to [vRv] – giving us  $[\exists v (vRv)]$  -- the proposition semantically expressed predicates being sometimes true of the propositional function that assigns a coordinated proposition epistemically equivalent to the proposition that o self-R's to each object o. Thus, the quantified proposition is epistemically equivalent to the proposition *that something self-R's*. To take a particular case, the quantified sentence 'For some x, x admires x' semantically expresses a proposition p that is epistemically equivalent to the proposition *that someone admires himself* (i.e. is a self-admirer). This proposition, p, follows from the coordinated proposition that Cicero admires Cicero, which is itself epistemically equivalent to the proposition that Cicero admires himself (i.e. is a self-admirer). Similar remarks hold for the universal quantifier. The sentence 'For all x, x admires x' semantically expresses a proposition q that is epistemically equivalent to the proposition that everyone admires himself (i.e. is a self-admirer). Proposition q entails the coordinated proposition that Cicero admires Cicero, which is epistemically equivalent to the proposition that Cicero admires himself (i.e. is a self-admirer).

This treatment of quantification fits the guiding ideas of relationism according to which (i) names are Millian, and (ii) differences in logical form are reflected in differences in propositions expressed. Since names are Millian, the semantic content of a name that refers to o is identical with the semantic content of a variable v relative to an assignment of o to v. Since the logical form of [vRv] differs from the logical form of  $[vRv^*]$  in precisely the same way that the logical form of

[aRa] differs from that of [aRb], the treatment of [aRa] as expressing a coordinated proposition dictates that [vRv] does too. In short, relationism's commitment to (i) and (ii) dictates that the proposition expressed by [vRv] relative to an assignment of the referent of a to v is identical with the coordinated proposition expressed by [aRa].<sup>8</sup>

The way this commitment plays out in the analysis of particular cases is illustrated by (19).

- 19a. Mary doesn't know whether John is F and John is G
  - b. John is such that Mary doesn't know whether he is F and he is G
  - c. Someone is such that Mary doesn't know whether he is F and he is G

Given that there is someone, John, about whom Mary lacks relevant knowledge, the truth of (19a) should guarantee the truth of (19b,c). Since, according to relationism, the proposition semantically expressed by (19a) is epistemically equivalent to the claim that Mary doesn't know whether John is *both* F and G, and since (19c) tells us that what Mary doesn't know about John is something she doesn't know about someone, it should follow that the proposition semantically expressed by (19c) is epistemically equivalent to the claim that someone is such that Mary doesn't know whether he is *both* F and G. This is just what the above relational analysis of quantification gives us. If, for

<sup>&</sup>lt;sup>8</sup> Fine gives a relational semantics for variables in a first-order language on pp. 25-32. Since the language is extensional, his semantics assigns only extensions to sentences and other expressions (as opposed to intensions and propositional contents). These limitations mask the significance of his relational semantics, which doesn't fully emerge until hyperintensional considerations are discussed, at which point we get the assignment of propositions to (sequences of) formulas, and the evaluation of hyperintensional constructions. Such constructions aside, coordinated propositions are intensionally equivalent to corresponding uncoordinated propositions. Thus, Fine's semantics for variables verifies the theorems of classical quantificational theory for extensional and intensional languages, but does not do so when hyperintensionality is encountered. (This point is made in footnotes 10 and 11 on p. 139).

Nevertheless, the idea of coordination is central to his semantics at all levels. See in particular pp. 30-31, where we are told that it is *coordinated sequences of expressions* (which result from adding coordination schemes to sequences of expressions to mark unbound occurrences of *the same variable* in a manner similar to the way in which different occurrences of the same name are coordinated) -- rather than expressions themselves which are the objects of semantic evaluation. This idea is reinforced on pp. 38-39, where the semantic difference between the coordinated 'x = x' and the uncoordinated 'x = y' is used to motivate the semantic difference between the coordinated 'Cicero = Cicero' and the uncoordinated 'Cicero = Tully'. On p. 97, and pp. 115-117 (which carries note 11 just mentioned) Fine makes explicit his commitment to the propositional semantics given in the text above, and to the falsity of the usual quantified statement, ' $\forall x \forall y (x = y \supset (Fx \Leftrightarrow Fy))$ ', of Leibniz's Law (called by him the Substitutivity of Identicals). In this, Fine parts company from Kaplan (see fn 1), whose treatment of quantification is thoroughly classical.

whatever reason, the relationist were to deny this account, and treat the repetition of variables bound by the same quantifier as being semantically inert, rather than as inducing semantic coordination, he would have to characterize (19a) as *true* and (19c) as *false* in a situation in which (i) John is Juan, and (ii) Mary knows that John is F and Juan is G, (iii) there is no one else who either is, or is taken by Mary to be, a relevant candidate for being F, or for being G, and (iv) she fully understands, and is genuinely unsure, whether 'John is both F and G' and 'Juan is both F and G' express truths. Since this disconnect between (19a) and (19c) is counterintuitive, the natural extension of the relational semantics for sentences containing names to formulas with variables – and thereby to the resulting quantificational sentences -- is empirically mandated, once relationism about names has been accepted.

The same point can be made by the examples in (20).

- 20a. Each man is such that Mary wonders whether he is F and he is G
  - b. Mary wonders, regarding each man, whether he is F and he is G
  - c. Mary wonders whether John is F and John is G, whether Bill is F and Bill is G, and whether Bob is F and Bob is G.

We observe that what (20a,b) says Mary wonders about each man is what (20c) says she wonders about John, and Bill, and Bob. To deny the relational analysis of quantified cases, while accepting it for names, would require denying this observation, and maintaining instead that the truth of (20a) – in a case in which John, Bill, and Bob are in the domain of quantification – does not guarantee the truth of (20c). Since this too is counterintuitive, the relationist has strong empirical reasons to extend coordination involving names to coordination involving variables of quantification.

#### A Semantic Difference that Might Make an Empirical Difference

Given all this, we are now in a position to consider a difference between the two versions of Millianism that may have significant empirical consequences. We begin by observing that both versions recognize the obvious fact that (21b) follows from (21a) together with the claim: *Delia* 

#### Fara is Delia Graff.

- 21a. Don believes that Delia Fara is a Princeton philosopher and Delia Graff is an MIT PhD.
  - b. For some individuals x and y, such that x=y, Don believes that x is Princeton philosopher and y is an MIT PhD. (For some pair of individuals, the first of which = the second, Don believes that the former is a Princeton philosopher and the latter is an MIT PhD.)

The two versions of Millianism also agree that (21d) does not follow from (21b).

- 21c. For some x, Don believes that x is a Princeton philosopher and x is an MIT PhD. (Don believes of someone that she is a Princeton philosopher and she is an MIT PhD.)
  - d. For some x, Don believes that  $\lambda z$  [z is a Princeton philosopher and z is an MIT PhD] x (Don believes of someone that she is both a Princeton philosopher and an MIT PhD.)

They differ regarding (21c). According to non-relational Millianism, (21c) is a semantic

consequence of (21b), but (21d) is not a consequence of (21c). Relationism reverses this, taking

(21d) to be a consequence of (21c), while denying that (21c) is a consequence of (21b).

This difference between the two approaches stems from the semantic contents they assign

to clauses (22b), (22c), and (22d), relative to an assignment A of the same thing to 'x' and 'y'.

- 22a. ...n...m...
  - b. ...x...y...
  - c. ...x...x...
  - d.  $\lambda z [\dots z \dots z \dots] x$

According to non-relationism, (22b) and (22c) express the same proposition, which one can believe without being able to infer proposition (22d). According to relationism, proposition (22d) is epistemically equivalent to proposition (22c), but not to (22b). Just as believing proposition (22b) won't, without further information, put one in position to infer propositions (22c,d), so, relationism maintains, believing them won't put one in a position to believe proposition (22b).

How do these semantic claims square with what ordinary speakers would glean from utterances of the sentences in (21)? The points on which the two versions of Millianism agree would, I think, be uncontroversial – namely that the identification of Delia Fara with Delia Graff

plus the truth of what is asserted by an utterance of (21a) *does* license a corresponding utterance of (21b), but would *not* guarantee the truth of an utterance (21d). As for the moves from (b) to (c) and from (c) to (d), I suspect that, taken in isolation, speakers would be inclined to accept each, while being unsure which to reject when the full argument was presented. If so, then both versions of Millianism have little choice but to attribute some common responses to factors other than semantic competence, including, in some cases, speaker error.

Which story is most plausible? Against relationism, its assignment of different truth values to (23b) and (23c), violates a principle, that bindable occurrences of objectual variables must be purely designative, that has been treated axiomatic by Quine and Kaplan, among others.<sup>9</sup>

- 23a. Don believes that ...a...b...
  - b. Don believes that ...x...y... (relative to an assignment A of the same value to 'x', 'y')
  - c. Don believes that ...x...x... (relative to A)
  - d. Don believes (or may trivially infer) that  $\lambda z [...z...] x$  (relative to A)

Because of this, relationism violates the usual formulation (24a) of Leibniz's Law while retaining (24b), by denying, contrary to conventional wisdom, that (24a) follows from (24b).<sup>10</sup>

24a.  $\forall x \forall y \ (x = y \supset (Fx \leftrightarrow Fy))$  [where Fx differs from Fy by containing one or more free occurrences of 'x' where Fy contains corresponding occurrences of 'x']

24b. For all x and y, if x is identical with y, then any property of x is a property of y.

Since I am not wedded to (24a), and don't accept the principle that bindable occurrences of objectual variables must – no matter under which constructions they may appear -- be purely designative, I don't take this objection to be conclusive.

Against non-relationism, the move from (23c) to (23d), which non-relationism claims not to be semantically justified, is indeed hard to resist. But this isn't conclusive either, since the move's attraction can be attributed to a series of steps, one of which is non-semantic. First, we

<sup>&</sup>lt;sup>9</sup> See Kaplan, "Opacity," in *The Philosophy of W.V. Quine*, Lewis, E. Hahn and Paul A. Schilpp eds., (La Salle, Ill: Open Court), 1986.

<sup>&</sup>lt;sup>10</sup> Kaplan differs from Fine in embracing (24a).

recognize that if (23c) is true because of what Don believes about some person P, then *P's utterance* of (23-P) would also be true.

23-P. Don believes that ... I...I...

Second, we recognize that if this is true, then an utterance, by Don, of (23-Don) using 'you' and addressing P, or using a name 'd' for P, would be true.

23-Don. I believe that ... you/d...you/d...

Finally, we recognize that Don's *assertive utterance* of (23-Don) would routinely carry the information (23d+), from which (23d) follows.

23d+. Don believes (or may trivially infer) that  $\lambda z$  [...z...] you/d

All of this is correct, and within the competence of speakers. But it doesn't show that the proposition *semantically* expressed by (23d) follows from the one expressed by (23c), since, as we saw in our discussion of (15), the move from Don's utterance of (23-Don) to an utterance of (23d+) is *pragmatically* validated, whether or not the proposition semantically expressed by the latter follows from that expressed by the former.

Thus, the sentences in (21) don't provide a decisive advantage for relationism. In fact, the scales seem to tip the other way. It is pretty clear that if (21a) is true, then the proposition expressed by 'Don believes that x is a Princeton philosopher and y is an MIT PhD' is true relative to an assignment of Delia to both 'x' and 'y'. But then, the proposition expressed by (21dgf) in a context with Delia as agent, and hence the proposition expressed by (21c), should also be true -- even if the propositions expressed by (21d+), and hence (21d) are not.

21dgf. Don believes that I am a Princeton philosopher and I am an MIT PhD.

- 21c. For some x, Don believes that x is a Princeton philosopher and x is an MIT PhD. (Don believes of someone that she is a Princeton philosopher and she is an MIT PhD.
- 21d+ Don believes of someone, namely Delia, that she is both a Princeton philosopher and an MIT PhD.

If this is right, then not only have we failed to find decisive evidence in favor of relationism, we have found an objection to it. I will return to this objection after we look at discourses.

## The Contents of Discourses

Frege's puzzle, which plays an important role in motivating relationism, isn't limited to the cognitive differences between single sentences containing multiple occurrences of the same term and corresponding sentences containing occurrences of distinct coreferential terms. The pairs (25) and (26) are instances of Frege's puzzle every bit as much as (27) and (28) are.

- 25a. Hesperus is a planet.
  - b. Phosphorus is a planet.
- 26a. Don believes that Hesperus is a planet.
- b. Don believes that Phosphorus is a planet.
- 27a. Hesperus is Hesperus.b. Hesperus is Phosphorus.
- 28a. Don believes that Hesperus is Hesperus.
  - b. Don believes that Hesperus is Phosphorus.

Although the members of each pair differ in what Frege calls "cognitive value," relationism treats (25) and (26) differently from (27) and (28). The (a) and (b) sentences of (25) and (26) are said to semantically express *the same proposition*, and hence to mean the same thing; while the (a) and (b) sentences of (27) and (28) are said to express different epistemically non-equivalent propositions, with those expressed by (28) being truth-conditionally non-equivalent as well. The semantic asymmetry of these claims about meaning is worrisome. To dispel the worry relationism appeals to discourses.

If the parties in a conversation have already used the name 'Phosphorus' in expressing the information that Venus is regularly seen in the morning, while using the name 'Hesperus' in expressing corresponding information about Venus in the evening, then, according to relationism, a subsequent utterance of (25a) will carry different information from a corresponding utterance of (25b) – quite apart from any pragmatic enrichment. Whereas an utterance of (25a) results in the acceptance of the coordinated sequence (29a) of propositions, an utterance of (25b) results in the acceptance of the differently coordinated sequence (29b).

- 29a. <Venus, being visible in the morning>, <<u>Venus</u>, being visible in the evening>, <<u>Venus</u>, being a planet>
  - b. <<u>Venus</u>, *being visible in the morning*>, <Venus, *being visible in the evening*>, <<u>Venus</u>, *being a planet*>

This in turn is supposed to explain why in the former case the information *that something visible in the evening is a planet* is transparent to speakers, while in the later case the information *that something visible in the morning* is a planet is transparent. In itself, however, this point carries no weight, since, as we have seen, the non-relationist can explain the same thing on the basis of knowledge of which name has been used twice.

Discourses involving multiple attitude ascriptions are more complicated. This time we imagine a conversation in which it has already been said – *using the name 'Phosphorus'* -- that most people, including Don, know that Venus is regularly seen in the morning, and also that a similar remark has been made -- *using 'Hesperus'* – about Don's, and others, knowledge of Venus's visibility in the evening. The relationist's account of the difference between uttering (26a) and uttering (26b) in this context is represented by the sequences in (30).

- 30a. <<Don, <Venus, *being visible in the morning>>*, Belief >, <Don, <<u>Venus</u>, *being visible in the evening>>*, Belief >, <<Don, <<u>Venus</u>, *being a planet >>*, Belief>
  - b. <<Don, <<u>Venus</u>, being visible in the morning>>, Belief >, <Don, <Venus, being visible in the evening>>, Belief >, <<Don, <<u>Venus</u>, being a planet >>, Belief>

If relationism is to provide a general solution to Frege's puzzle relying on coordinated propositions alone, it must assign different truth conditions to these discourse sequences. One way to do so is to maintain that the conjunction of the three belief attributions is true only if Don believes the coordinated conjunction of the individual propositions he is represented as believing

- in the case of (30a), the coordinated proposition (30a-&); in the case of (30b), the coordinated proposition (30b-&).

- 30a-& <<Venus, being visible in the morning>, <<u>Venus</u>, being visible in the evening>, <<u>Venus</u>, being a planet >, CONJ>
- 30b-& <<<u>Venus</u>, being visible in the morning>, <Venus, being visible in the evening>, <<u>Venus</u>, being a planet > CONJ>

Since believing the former is tantamount to believing that a planet is visible in the evening, while believing the latter is tantamount to believing that a planet is visible in the morning, the semantic truth conditions of the two discourses are distinguished in more or less the desired way.

But this can't be right. The principle that one believes P, Q, and R only if one believes their conjunction can't be built into a semantic theory because it is false. Since beliefs have credence thresholds, and since the credence of a conjunction can be far less than the credence of its conjuncts, it is not uncommon for one to believe a sequence of propositions while not believing their conjunction. Clearly a weaker principle is needed. Here is a thought. The two sequences of belief ascriptions in (30) are, as we may put it, Venus-coordinated. Using this notion of an the object-coordinated sequence, the relationist might posit the Belief Coordination Principle.

The Belief Coordination Principle

A sequence of ascriptions attributing belief in a sequence of o-coordinated propositions to an agent A is true only if A would recognize those propositions as things A believes, while recognizing, or being in position to recognize, that if all the beliefs are true, then the conjunction of properties attributed to o in the sequence is true of a single thing, o.

With this principle, one could assign different truth conditions to (30a) and (30b). However, this principle is almost certainly not quite right, either. As presently stated, it (implicitly) requires any agent capable of believing coordinated propositions – which (one would imagine) ought to include small children and some animals – to have higher-order attitudes about the agent's own mental states, as well as beliefs and other attitudes about sets of propositions, conjunctions of

properties, and the relationship between the two when the truth of the former guarantees the latter to be *true of* something. Surely, this is beyond the ken of some possible believers. Nevertheless, I will, in what follows, ignore this difficulty -- both to leave open the possibility that the idea behind the Belief Coordination Principle might be restatable in a way that avoids it, and because there is an even more serious difficulty to be faced.

What, given the principle, are we to say about truth values of belief ascriptions in a situation in which the truth conditions for discourse (30a) are satisfied, but those for (30b) aren't? The Belief Coordination Principle is compatible with different options. We could, if we wished, say that the first two ascriptions in (30b) are true, while the third isn't, or we could say of each ascription that it's true, while denying that this is sufficient for the sequence of ascriptions as a whole to be true. The difference between these options doesn't matter here. The important point is that in addition to characterizing the sequence of propositions (30a), taken as a whole, as true in the situation, relationism will characterize the sequence (30b) -- which is expressed by the discourse (30bw) -- as false in the situation.

30bw. Don believes that Phosphorus is seen in the morning. He further believes that Hesperus is seen in the evening. He also believes that Phosphorus is a planet.

Next consider the discourse (30cw), and the corresponding uncoordinated sequence (30c)

of propositions expressed in the discourse.

- 30cw. Don believes that Phosphorus is seen in the morning. He also believes that Hesperus is seen in the evening. In addition, for some x, Don believes that x is a planet, where x = Phosphorus.
- 30c. <<Don, <Venus, *being visible in the morning>>*, Belief >, <Don, <Venus, *being visible in the evening>>*, Belief >, <<Don, <Venus, *being a planet >>*, Belief>

Surely the sequence (30c) is true. This leads us to the real problems, illustrated by (31).

31a. There is a planet (x) which was such that when the ancients observed it/x in the morning they said and believed that it/x was visible only in the morning, but when they saw it/x in the evening, they said and believed that it/x was visible only in the evening.

- b. The ancients said and believed, when they saw me in the morning, that *I* was visible only in the morning, but they said and believed, when they saw me in the evening, that *I* was visible only in the evening. (Said by Venus)
- c. The ancients said and believed, when they saw you in the morning, that *you* were visible only in the morning, but they said and believed, when they saw you in the evening, that *you* were visible only in the evening. (Said by Mars to Venus)
- d. The ancients said and believed, when they saw Venus in the morning, that *Venus* was visible only in the morning, but they said and believed, when they saw Venus in the evening, that *Venus* was visible only in the evening, though they didn't use that name, and were unaware they were observing the same thing, morning and evening.

If semantic coordination were a reality, these examples would correlate with (30bw), and be

false. The fact that they are true is, therefore, an argument against Millian relationism.

Consider a single example, (31a). Relationism plus the facts about the ancients entail that

(31a) is true only if discourse (32a) is true relative to an assignment of Venus to 'x', which is

true only if the coordinated sequence of propositions (32b) is true.

- 32a. The ancients believed, when they saw x in the morning, that x was visible only in the morning. They further believed, when they saw x in the evening, that x was visible only in the evening.
- 32b. <<Ancients, <<u>Venus</u>, being visible only in the morning>>, Belief (at  $t_{morning}$ )>, <<Ancients, <<u>Venus</u>, being visible only in the evening>>, Belief (at  $t_{evening}$ )>

However, according the Belief Coordination Principle, (32b) can't be true, which means that (32a), and hence (31a), can't be true, either. Since they are, in fact, true, the Belief Coordination Principle is false, and the strategy of using discourse correlations to solve instances of Frege's puzzle involving (26a) and (26b) is in trouble.

Nor will it do to reject the assumption that the relational semantics of variables relative to assignments parallels that of names. In constructing these examples, I have assumed that when  $\alpha$  and  $\beta$  are different Millian names referring to an object o, or different variables both of which designate o relative to an assignment A, the sentence  $\lceil \alpha R \alpha \rceil$  semantically expresses, relative to A, a coordinated proposition that arises from the uncoordinated proposition expressed by  $\lceil \alpha R \beta \rceil$ 

relative to A by adding a coordination scheme to the latter connecting the two occurrences of o in that proposition. Although rejecting this assumption would allow the relationist to acknowledge the truth of (31a), it would also prevent him from correctly characterizing the relationship between the (a) and (c) sentences in (19) and (20). Since incurring this empirical cost would leave (31b) – (31d) intact as counterexamples to the Belief Coordination Principle, nothing would be gained and something further would be lost.<sup>11</sup>

#### **Two Further Difficulties**

I will mention two further difficulties before ending with more general remarks. First, although Millian relationism sharply distinguishes the propositions semantically expressed by (33a) and (33b), it often trivializes the inference from the former to the latter, while wrongly predicting an asymmetry between that and the corresponding move in the opposite direction.

- 33a. Don believes that Delia Fara bears R to (e.g. paints portraits of) Delia Fara.
  <<Don, << DGF, DGF>, R-hood>>, Belief>
  - b. Don believes that Delia Fara bears R to (e.g. paints portraits of) Delia Graff. <<Don, << DGF, DGF>, R-hood>>, Belief>

According to relationism, (33a) reports belief in a coordinated proposition that is epistemically equivalent to the proposition that Delia self-R's (e.g. paints self-portraits). But if Don can think of Delia once, and ascribe self-Ring to her, he will typically be in a position to think of her twice using two different terms, predicating R of the uncoordinated pair of their referents. Attending one of her lectures, he may say "She [pointing at Delia] is Delia Fara," and from this plus his belief that Delia Fara self-R's conclude "Delia Fara bears R (i.e. paints portraits of) to her" -- thereby expressing his belief in the uncoordinated proposition belief in which is makes (33b) true. But often more than this is required to make our acceptance, or assertive utterance of, (33b)

<sup>&</sup>lt;sup>11</sup> In the appendix I discuss Fine's claim, on page 104, that 'believe' is semantically ambiguous between a "pure *de* re reading" and a "weak *de dicto*" reading. The argument in this section implicitly presupposes the latter reading. The appendix explains why positing the other "reading" won't save relationism.

correct, on the basis of a similar acceptance, or utterance of, (33a). There is no such shortcut to justify a move in the opposition direction – from (33b) to (33a).

Non-relational Millianism avoids this asymmetry. Although sentences of the two forms are taken to semantically express the same propositions, non-semantic factors – guises, ways of believing, pragmatic enrichments, and the like – are used to distinguish the communicative and cognitive contents of uses of these sentences in particular contexts. Absent special features of the relation R (such as the reflexivity or irreflexivity), the truth of the information carried by a use of (33a) - e.g., that Don believes that the Princeton professor Delia Fara paints portraits of Professor Fara – is no more likely to support the truth of the information carried by a use of (33b) - e.g., that Don believes that the Princeton professor Delia Fara paints portraits of the MIT PhD Delia Graff – than the other way around. This, I believe, is the right result.

One might think that the relationist's problem could be solved by appealing, as the nonrelationist does, to different tacit information associated with the two names. Although this is possible, it risks making the difference between coordinated and uncoordinated propositions irrelevant. To avoid this, the relationist is driven to think of the extra information associated with the names as inducing a larger, partially tacit, discourse represented by a sequence of belief ascriptions in which the content clauses of ascriptions containing the name 'Delia Fara' semantically express propositions coordinated with unexpressed but assumed propositions that represent Don as believing her to be a professor, while the content clauses of the ascriptions containing the name 'Delia Graff' are coordinated with similarly unexpressed but assumed propositions that represent him as believing her to be an MIT PhD. In short, the fix is to solve the problem with the relationist's account of (33) by transferring the explanatory burden to the treatment of discourses counter-exemplified by (31). Not very promising, I think. The final empirical difficulty is illustrated by (34).

34a. *Jim* told Mary that he wasn't *Jim*.

b. *Each man* told Mary that *he* wasn't *that man*.

Since the two 'Jim'-occurrences in (34a) are occurrences of the same name, and since the occurrence of 'he' is anaphoric on the first such occurrence, relationism tells us that entertaining the proposition expressed requires recognizing that the person represented as speaking to Mary is identical both with the person represented as the first argument of the non-identity relation and with the person represented as the second argument of that relation – from which it follows that grasping the propositions expressed by (34a) guarantees the ability to (trivially) recognize the two arguments of the non-identity relation to be one and the same. If this means that the complement of 'told' expresses a coordinated proposition, the relationist will get the wrong truth conditions for (34a). If it doesn't mean this, we need to be told what it does mean.

Whatever is proposed must also handle (34b), in which 'he' and 'that man' function as variables bound by 'each man'. This sentence should be true iff for each assignment A of a man to 'x' the proposition expressed by (34c) is true relative to A.

34c. x told Mary that x wasn't x

These truth conditions will be correct only if the proposition expressed by (34c) relative to an assignment of o to 'x' represents Mary as believing the *uncoordinated* proposition that predicates non-identity of the pair both members of which are o. However, this isn't what relationism tells us, instead identifying the remark made to Mary with a coordinated proposition trivially equivalent to the proposition that o is non-self-identical.

I believe this difficulty stems from the wrong way of thinking about anaphora. Consider the contrast between (34) and (35), on the readings of the latter in which 'his' is anaphoric on 'he', which in turn is anaphoric on the subject of 'told'.

- 35a. *Jim* told Mary that *he* loved *his* mother.
  - b. *Each man* told Mary that *he* loved *his* mother.
- 36a.  $\lambda x$  [x told Mary that  $\lambda y$  (y loved y's mother) x] Jim
- b.  $\forall x$ : Man x [x told Mary that  $\lambda y$  (y loved y's mother) x]

On this reading of (35a), the proposition told to Mary predicates *being one who loves one's own mother* of Jim; with (35b) we get such a predication of each man. These readings are possible for (35), but not (34), because the conditions required for anaphora in the complement clauses are met in (35), but not (34). To me this suggests that relationism's assimilation of anaphora, which is subject to substantial grammatical restrictions, to cases in which the same name occurs two or more times, which are not, is on the wrong track. Nor, I suspect, will it do to add bells and whistles to a relationist account of anaphora to remedy this defect. Even if the relationist blocks coordination of the pronoun in (34a) with the second occurrence of 'Jim', while insisting on the coordination of each with the first occurrence of 'Jim', it is doubtful that such a maneuver will prevent relationism from assigning incoherent truth conditions to the perfectly coherent dialog (37), said in response to an assertive utterance of (34a).<sup>12</sup>

37. What are you saying? That Mary told Jim that he – Jim – wasn't Jim? Yes, that's exactly what I'm saying.

## **Coordination and the Metaphysics of Propositions**

This completes my list of empirical problems for relationism. I close by asking an unabashedly metaphysical question. What are coordinated propositions anyway? Fine takes them to be structured entities, instead of functions from world-states to truth values. This is surely right. Such functions are too coarse-grained to do justice to the attitudes, no matter how fine-

<sup>&</sup>lt;sup>12</sup> Like the problems posed by (31a-d) those posed by (34a,b) and (37) might tempt the relationist to posit "pure *de* re" readings of attitude verbs. This potential defense is explicated and criticized in the appendix, which also revisits the relational treatment of anaphora.

grained we make truth-supporting circumstances.<sup>13</sup> The unstructured approach also gets the order of explanation wrong, taking truth values and worlds as basic, and using them to explain properties and propositions. This is backwards. Instead, give me properties and objects; I will give you propositions. Give me propositions; I will give you truth. Give me truth and propositions; I will give you world-states.<sup>14</sup> Finally, the unstructured approach misses the fact that propositions are entities that inherently represent things as being certain ways, and so impose conditions the world must satisfy, if they are to be true. This key fact, which makes them the source of the truth conditions of sentences, is missed by any view that claims that a proposition is merely a set of things (no matter what the things), or merely a function from a set to two distinct primitives that are called "truth values," but which could equally well be the North and South Poles.<sup>15</sup>

It is, of course, also missed by any approach that identifies propositions with n-tuples of objects and properties, or with the nested sets that are familiar stand-ins for such n-tuples. Purely abstract tree structures with objects and properties annotating their nodes are no better, since -- in and of themselves, without interpretation by us -- they don't represent anything either. Abstract structures of these sorts may serve as models of propositions -- so long as we can read off the real propositions, and their genuinely representational structure, from the models. There is, I

<sup>&</sup>lt;sup>13</sup> See Soames, "Direct Reference, Propositional Attitudes and Semantic Content," *Philosophical Topics*, 15, 1987, 47-87, and Soames, "Why Propositions Can't be Sets of Truth-Supporting Circumstances," *Journal of Philosophical Logic*, 37, 2008, 267-276; both reprinted in Soames, *Philosophical Essays*, Volume 2.

<sup>&</sup>lt;sup>14</sup> For details see Soames, "Truth, Propositions, and Possible World-States," unpublished manuscript on personal website. Also see, Soames, *What is Meaning?* (Princeton: Princeton University Press), 2010, and Soames *Philosophy of Language*, (Princeton and Oxford: Princeton University Press), 2010.

<sup>&</sup>lt;sup>15</sup> See "Truth, Propositions, and Possible World-States.

believe, a plausible way to do this for n-tuples that represent ordinary Russellian propositions.<sup>16</sup> But I am not sure it can be extended to Fine's coordinated n-tuples.

For me, agents are the source of intentionality. When one thinks that snow is white, one predicates whiteness of snow, and thereby represents it as white. The proposition entertained is an abstract event type in which an agent predicates whiteness of snow – which is something one does whenever one sees snow as white, imagines that it is white, or judges it to be white. In each case, one bears an attitude to a proposition p by performing a cognitive act that brings about a token of the event type that is p. The simplest propositions are event types in which one merely predicates properties of objects. Complex propositions involve other operations – such as conjoining or disjoining properties, or operating on the two-place relation R to form the oneplace relational property *self-Ring*. Complex propositions may also predicate higher-order properties of propositions formed from lower-order predications of simple or complex properties of objects. On this story, the proposition that Cicero is wise is the event type of predicating being wise of Cicero; the proposition that he is eloquent and wise is the event type of first conjoining being eloquent and being wise, and then predicating the result, being eloquent and wise, of Cicero; the proposition Tully shaved Cicero is the event type of predicating the shaving relation of the pair each member of which is Cicero; and the proposition that Cicero shaves himself is the event type of first operating on the shaving relation to get the relational property of being one who shaves oneself, and then predicating it of Cicero.

What, then, is the coordinated proposition that Cicero shaved Cicero, which is supposed to differ from all these? It ought to be the event type of predicating the shaving relation of the pair each member of which is Cicero -- while judging or assuming the first member of the pair to

<sup>&</sup>lt;sup>16</sup> See the works listed in fn 14 -- also King (2007) for a different approach to naturalized propositions which rejects the possible-worlds conception of propositions, the traditional views of Frege and Russell, and contemporary variants of the structured proposition approach that ignore the issue of what makes propositions representational.

be the same as its second member. But what does that mean? You might think it meant predicating the relation of the pair, while judging or assuming that the individual one's predication represents as the shaver is the same as the individual one's predication represents as being shaved. But I doubt that. To predicate the relation of the pair, one must think of the relation and of the pair, but one doesn't also have to make a higher-order judgment or assumption about one's act of predication and what it represents. Surely there are actual and possible agents who predicate properties of objects, and thereby have propositional attitudes, without bearing any significant attitude to propositions about their own cognitive activities. Nor can the coordinated proposition be identified with the event type in which one predicates shaving of the pair each member of which is Cicero, while judging or assuming Cicero to be Cicero. This time the problem is to spell out what judging or assuming Cicero to be Cicero is. It can't be bearing the judging or assuming relation to the *uncoordinated* proposition that Cicero is Cicero. Nor can it be bearing that relation to the *coordinated* proposition, since that would involve explaining coordination by taking coordination for granted.

It appears that the only remaining option is to take *judging or assuming the members of a pair to be the same* as primitive -- with the stipulation that to predicate shaving of the pair each member of which is Cicero, while bearing this primitive attitude to the pair, is somehow different from predicating *self-shaving* of Cicero, and also that to predicate *being* F of o, and *being* G of o, while bearing the primitive attitude to them, is somehow different from predicating *being* F and G of o. One may question whether there is such a primitive attitude, but even if there is, this isn't the end of the story. It remains to be seen that this attitude is the kind that is represented in propositional structure – i.e., that plays a role in characterizing *what we think or believe* as opposed to *how we believe it*.

On my account, propositions are event types that encode sequences of cognitive acts. Since the alleged primitive *taking the members of a sequence of objects to be the same* is a cognitive act, it might seem that there ought to be propositions the entertaining of which requires the agent to think of the members of a sequence of objects in this way. However, there are limitations on what cognitive acts propositions can encode. Thinking of a certain tune while, or immediately after, predicating redness of an object is a cognitive act, or sequence of cognitive acts, as is predicating a relation of a pair, while, or immediately before, feeling affection toward one of its members. However, the event types that encode these cognitive acts, or act sequences, are not propositions because one of their act-type constituents is irrelevant to how the agent is representing things to be. This suggests that the question of whether there are Finean coordinated propositions reduces to the question of whether the alleged primitive attitude of *taking objects to be the same*, while predicating R of them, is representational in the right sort of way.

If there is a primitive attitude of *taking objects to be the same*, it would seem that agents ought to be able to *mistakenly* bear it to non-identical things. Are we then to suppose that some propositions can be entertained only by one who predicates a relation of non-identical things, while mistakenly *taking them to be the same*? If Fine's coordinated propositions are genuine, it is hard to see why these shouldn't also be genuine. However, it's not clear that they are. Suppose an agent mistakenly takes Cicero and his brother (each of whom shaves the other but neither of whom shaves himself) *to be the same*, while predicating the shaving relation of them. If this sequence of cognitive acts is encoded by a genuine coordinated proposition, then there must be an answer to the question *Is it true or not*? However, neither answer seems satisfactory. To say that it is true is to suggest that the needed primitive attitude is nonrepresentational, thereby threatening the status of the event type as genuinely propositional. To say that it is untrue

suggests that in taking a pair of distinct individuals *to be the same* we are, in effect, predicating something untrue of them – identity, I suppose. This suggests that we don't have a primitive at all, but just another instance of predication. Either way, the existence of coordinated propositions is threatened.

The presumption, congenial to relationism, behind this dilemma is that the difference between a coordinated proposition and its corresponding uncoordinated counterpart has nothing to do with truth-conditional, or representational, content, but is entirely a matter of what is required to entertain, and to bear other cognitive attitudes, toward it. Fine makes this clear in the following passage.

But the coordinative aspect of the coordinated content of a sentence, such as 'Cicero wrote Cicero' is entirely lacking in any special descriptive or truth conditional character and relates entirely to how its truth conditions...are to be grasped [entertained]. It is a significant feature of the traditional Fregean view that there can be no difference in what it is to grasp [entertain] the sense of an expression without there being a difference in how the sense has application to [or represents] the world. ... But under the relational view, these two aspects of sense come completely apart. There is no difference in what it takes for the sentences "Cicero wrote about Cicero" and "Cicero wrote about Tully" to be true, even though there is a difference in their coordinated content.<sup>17</sup>

This suggests the first horn of the above dilemma, and with it the worry that the event type of predicating a relation of a pair of objects while bearing the allegedly primitive attitude of *taking the objects to be the same* might not satisfy the conditions needed to be a proposition.

This is one of several related worries. Is there, in addition to the primitive attitude of *taking objects to be the same*, also a primitive attitude of taking *objects to be different*. If the positive attitude is genuine, and part of propositional structure, I am not sure why the negative attitude shouldn't be. Are there, then, propositions one can entertain only by predicating a relation of objects, while -- correctly or mistakenly – bearing this primitive negative attitude to them? Since I don't see propositional contents, as opposed to ways of entertaining those

<sup>&</sup>lt;sup>17</sup> Page 59.

contents, as requiring any of this, I remain to be convinced that Fine's primitive attitude is part of propositional structure. Since I also doubt that the use of language to express thought changes this basic picture, I am skeptical about both the empirical consequences and the metaphysical foundations of Millian relationism.

#### **Appendix: Can Ambiguity Save Semantic Relationism?**

In presenting the argument against the Belief Coordination Principle based on the examples in (31), as well as in discussing the problem raised by (34a,b), I tacitly assumed -- what I believe to be true -- that 'believe' and other attitude verbs are semantically unambiguous as they appear in ascriptions of the form [A attitude verbs that S]. In addition, I assumed that the proposition semantically expressed by [A believes that S] is true iff the agent bears the belief relation to the proposition semantically expressed by S. Hence, if there are coordinated propositions, and S expresses such a proposition p, then the ascription is true iff the agent believes p. To this the Belief Coordination Principle adds that when a *sequence of ascriptions* reports belief in a sequence of propositions the members of which are coordinated. Since in (31b)–(31d) the sequence of ascriptions are the conjuncts of a conjunction, this means that the conjunction is true only if that is so -- which, as observed, is incorrect. Since, as I showed, similar reasoning applies to (31a), it too is wrongly characterized as false.

There is, according to Fine, a reading of 'believe', which he calls "weak *de dicto*," that fits the assumptions in this argument, and leads to the conclusion that (31a-d) are false. It is this reading that is tacitly assumed (with no indication that attitude verbs are semantically ambiguous) throughout the first three chapters in which belief and other cognitive notions play crucial roles in introducing and explaining coordinated propositions. About halfway through chapter 4, however, Fine mentions another "reading" of the belief predicate, which he calls "the pure *de re*."<sup>18</sup> Unfortunately, he does very little with this reading, and his statement of it (which occurs in a discussion of Kripke's puzzle) is given only in the following oversimplified form, as a preliminary to other "readings" in which he is more interested.

Suppose we make a composite report of someone's beliefs. We say: he believes  $S_1$ , he believes  $S_2$ , ..., he believes  $S_n$ . Let us also suppose that the person would express the beliefs we are attempting to describe by means of the sentences,  $T_1, T_2,..., T_n$ . To avoid needless complications, we may suppose that, except for the choice of names, he would use the very same words in expressing his beliefs as we use in describing them and that the correctness of the report simply turns on there being an appropriate connection between the sequence of names,  $M_1, M_2,..., M_k$  that we use in describing his beliefs and the corresponding sequence of names,  $N_1, N_2,..., N_k$  that he uses in expressing them.

We now ask: under what conditions might the belief report be considered correct? Three answers suggest themselves.

1. *Pure de re reading*: This is the reading under which all that is required for the correctness of the report is that the corresponding names should be coreferential. Under this reading, of course, Kripke's puzzle will not arise since it will clearly be correct to report the person as believing both that Paderewski is musical and that Paderewski is not musical. (102-103)

This passage is followed by characterizations of two additional readings: the already mentioned

"weak de dicto," and another, irrelevant for our purposes, called "strict de dicto."<sup>19</sup> On page 104,

Fine endorses all of these readings as genuine semantic ambiguities, and focuses his discussion

of Kripke's puzzle on the *de dicto* varieties.

This proliferation of semantic ambiguities is, I think, a serious weakness in the theory, and the idea that a "pure *de re* reading" can save it from trouble is an illusion. The thought, of course, is that such a reading would neutralize the difference between coordinated and uncoordinated propositions, and so allow the amended theory to accommodate examples like (31) and (34), where the usual appeal to coordination gets things wrong. On this "reading" of

<sup>&</sup>lt;sup>18</sup> This reading, which, if genuine, might accommodate the truth of (31a-d), is not to be confused with what Fine calls on p. 96 a "*de re* understanding" of belief reports, which, it is evident, cannot accommodate the truth of (31a-d).

<sup>&</sup>lt;sup>19</sup> Fine also mentions what he calls "the regular *de dicto*," ft. 5, p. 138.

'believe' (and 'say') (31d) could be recognized as true -- by virtue of the ancients' (uncoordinated) uses of 'Hesperus' and 'Phosphorus' in expressing their beliefs -- despite the fact that the uses of 'Venus' by us are coordinated, as are the members of the sequence of propositions semantically expressed by the pair of complement clauses in our reports. Presumably, the Belief Coordination Principle shouldn't come into play.<sup>20</sup>

The next step would be to extend this result to (31a-c). For this, we need a more general statement of the truth conditions of "pure *de re*" ascriptions than the one Fine provides. There is, however, a difficulty in knowing how to formulate it. The problem in a nutshell is this. In introducing and explaining what a coordinated proposition is, Fine makes crucial use of a family of cognitive notions expressed by the verbs 'entertain', 'believe', 'know', 'infer', and the like. Indeed, we are told, the only difference between a coordinated proposition and its uncoordinated counterpart concerns the extra conditions placed by the former on agents who entertain, believe, know, or infer it (from something else). It is precisely because we understand these attitude verbs without further explanation that we understand what coordinated propositions are supposed to be. This works fine until we run into cases that are problematic for the theory, when we are told that 'believe', and by extension the other attitude verbs, also have "pure de re readings" that apply to coordinated propositions in a way that differs from the way we were told they applied when such propositions were introduced. The worry, of course, is that the new reading undermines the previous explanation, or renders it circular. To know what a coordinated proposition is we have to take belief and other cognitive notions for granted, but we can't simply take them for granted because they are, allegedly, ambiguous between readings that differ solely on what it is to bear the relevant attitudes to coordinated propositions. And what are those

<sup>&</sup>lt;sup>20</sup> The simplest way to get this result is to rewrite the principle explicitly indicating that the occurrences of 'believe' and 'belief' that it contains are to be understood as carrying the normal "weak *de dicto*" reading.

*again*? If all we had been told at the beginning was that the coordinated proposition that Cicero shaves Cicero is a proposition that can be "entertained" ("believed" etc.) *in different ways* -- including one in which the agent recognizes that a single individual is both the subject and the object of the shaving relation, and one in which no such recognition is involved -- we would have been mystified. Non-relational Millianism, with its distinction between "ways of entertaining/believing" a proposition tells us that! However, once relationism has been amended to include Fine's posited ambiguity between the "weak *de dicto*" and the "pure *de re*" we don't have too much more to go on than that. As a result, it is more difficult than might be expected to bring forth examples that definitively refute the predictions of the theory – but only because it is more difficult than expected to definitively identify what it predicts.

Nevertheless, some progress can be made. Since what Fine calls "the weak *de dicto* reading" on page 103 is what he implicitly presupposes, and takes to be normal, in explaining coordinated propositions, we may be able to use it make sense of the alleged "pure *de re* reading." There seem to be two main options for doing so.

#### Option 1

To believe, in the pure *de re* sense, a proposition p is simply to believe, in the weak *de dicto* sense, the uncoordinated proposition that differs at most from p in containing no coordinated elements. To believe, in the pure *de re* sense, a sequence of propositions  $p_1$ , ...,  $p_n$  is to believe, in the weak *de dicto* sense, the sequence of propositions  $q_1$ , ...,  $q_n$  that differs at most from the original sequence in containing no coordinated elements.

# Option 2

To believe, in the pure *de re* sense, a proposition p is to believe, in the weak *de dicto* sense, either p itself, or any of the propositions that differs from p by reducing the instances of coordination. To believe, in the pure *de re* sense, a sequence of propositions  $p_1, \ldots, p_n$  is either to believe, in the weak *de dicto* sense (which is governed by the Belief Coordination Principle), either that sequence of propositions itself, or at least one sequence of propositions  $q_1, \ldots, q_n$  that differs from the original sequence by reducing the instances of coordination.

For our purposes, we need not choose between these options. There are problems either way.

The first point to notice is this: if we adopt one of Fine's assumptions about when coordination in language and thought occurs, then we can show that neither option gives the relationist what he needs. The assumption is that sentences containing pronominal anaphora express coordinated propositions (which may be objects of the attitudes).<sup>21</sup> With this in mind, consider (38).

38. The ancients said, and believed, when they saw Venus in the morning, that *Venus* was (exactly) twice the size of *it's* nearest heavenly neighbor, but they said and believed, when they saw Venus in the evening, that *Venus* was (exactly) three times the size of *its* nearest heavenly neighbor (though they didn't use name the 'Venus', and were unaware they were observing the same thing, morning and evening).

This example is to be understood as containing two instances of anaphora, one in the content clause of the first ascription -- in which an occurrence of the possessive 'its' is anaphoric on an occurrence of 'Venus' -- and one in the content clause of the second ascription -- in which another occurrence of 'its' is anaphoric on a different occurrence of 'Venus'. So understood, (38) is a variant of (31d). Intuitively, what its truth requires -- above and beyond what is required for the truth of (31d) – is a belief held by the ancients, when they observed Venus in the morning, which they expressed by saying "*Phosphorus* (or *It*) is twice the size of *its* nearest heavenly neighbor" (taking the possessive pronoun to be anaphoric on the subject), plus a belief they held, when they observed Venus in the evening, which they expressed by saying "*Hesperus* (or *It*) is three times the size of *its* nearest heavenly neighbor" (taking the size of *its* nearest heavenly neighbor.

Though (38), as used by us, bears precisely this reading, it can't be captured either by Fine's imagined pure *de re* reading, or by any of his *de dicto* readings. The *de dicto* readings don't work for the same reason they falsify the examples in (31). The pure *de re* reading doesn't work because it doesn't require the ancients to believe of Venus, when observed in the morning,

<sup>&</sup>lt;sup>21</sup> See the passages in Fine indicated in footnote 3 for the justification of this assumption.

that it has the property *being one that is twice the size of one's nearest heavenly neighbor*, nor does it require them to believe of Venus, when observed in the evening, that it has the property *being one that is three times the size of one's nearest heavenly neighbor*. Since all the examples in (31) could be elaborated in the way that (38) elaborates (31d), positing a pure *de re* reading will not save Fine's semantic relationism from the underlying difficulty illustrated by (31a-d).

This is so, provided one follows Fine in treating anaphora of the sort illustrated in (38) as instances of semantic coordination that result in the expression of coordinated propositions. For him, an important consideration supporting this assumption is that instances of anaphora of this sort appear to pass his informal test for coordination. Applying his test (given on p. 40) to anaphora we get: Suppose you say [ $\alpha$  is F] and later say [ $\beta$  is G] intending  $\beta$  to be understood as anaphoric on  $\alpha$ . Then anyone who raises the question of whether the reference (of  $\alpha$  and  $\beta$ ) was the same would thereby betray his lack of understanding of what you meant. Fine uses the fact that we can say something similar when  $\alpha$  and  $\beta$  are identical names to justify the claim that different occurrences of the name in a discourse are semantically coordinated.<sup>22</sup> Since giving up the assumption that instances of anaphora (of the sort found in (38)) are similarly coordinated casts at least some doubt on this informal test, it complicates the task of showing that names themselves have a relational semantics.

This doesn't, of course, prevent us from imaging a coherent – though perhaps not very well motivated -- version of semantic relationism that excludes anaphora from its account of coordination, and restricts itself, more or less, to cases involving multiple occurrences of the same term. When anaphora is separated out in this way, relationism takes, e.g., the propositions *that a bears R to a* and *that a is F and a is G* to be coordinated, and to differ from, but to be

<sup>&</sup>lt;sup>22</sup> See the passage from Fine quoted in note 3.

trivially and transparently equivalent (epistemically) to, the uncoordinated propositions *that a bears* R *to itself* and *that a is* F *and* G, respectively, *when the propositions are entertained*, *believed*, *or otherwise cognized "in the de dicto way" – i.e.*, *by one of the de dicto attitudes* (*expressed by the de dicto "readings" of 'entertain'*, *'believe'*, *etc.*). However, when these propositions are entertained, believed, or otherwise cognized "in the pure de re way" –- by a pure *de* re attitude (expressed by the pure *de re* "reading" of the attitude verb) – the propositions *that a bears* R *to itself* and *that a is* F *and* G are not apriori inferable from the propositions *that a bears* R *to a* and *that a is* F *and* G. Why there should be two broad classes of cognitive attitudes that treat these pairs propositions so differently, and how language users are supposed to catch on to this difference, I leave to proponents (if any) of this possible view.

Though the view is coherent, it faces serious explanatory problems, illustrated by (39-41).

- 39. The ancients said, and believed, when they saw Venus in the morning, that <u>Venus</u> was (exactly) twice the size of the heavenly body nearest to <u>Venus</u>, but they said and believed, when they saw Venus in the evening, that <u>Venus</u> was (exactly) three times the size of the heavenly body nearest to <u>Venus</u> (though they didn't use name the 'Venus', and were unaware they were observing the same thing, morning and evening).
- 40. The ancients said, and believed, when they saw Venus in the morning, that <u>Venus</u> was larger than <u>Mars</u> and all of the moons of <u>Mars</u> combined, but they said and believed, when they saw Venus in the evening, that <u>Venus</u> was smaller that <u>Mars</u> and each of the moons of <u>Mars</u> (though they didn't use name the 'Venus', and were unaware they were observing the same thing, morning and evening).
- 41. The ancients said, and believed, when they saw Venus in the morning, that <u>Venus</u> was a planet and Mars was smaller than <u>Venus</u>, but they said and believed, when they saw Venus in the evening, that <u>Venus</u> was a planet and Mars was larger than <u>Venus</u> (though they didn't use name the 'Venus', and were unaware they were observing the same thing, morning and evening).

To get the desired results in these cases, semantic relationism must, of course, treat the attitude verbs occurring in these sentences as carrying their pure *de re* readings. Because of this is the ancients' morning beliefs (and assertions) are not required to be coordinated with their evening beliefs (and assertions), which is all to the good. What is not all to the good is that neither their

morning beliefs (and assertions), nor their evening beliefs (and assertions), are required to be internally coordinated (even though the propositions semantically expressed by the content clauses of our attitude reports are, according to the theory, coordinated). This is a problem, since (39a) could be used to assert or convey the information that the ancients morning thought and talk about Venus represented it as *being twice the size its nearest heavenly neighbor*, while their evening thought and talk represented it as being three times the size of its nearest heavenly *neighbor*, making clear that the ancients were in no position to notice the conflict. Similarly, (40) could be used to assert or convey that the ancients morning thought and talk about Venus represented it as being larger that Mars and all of its moons combined, while their evening thought and talk represented Venus as being smaller that Mars and each of its moons, explaining again why the ancients didn't notice the conflict. Finally, (41) could be used to assert or convey that their morning thought and talk about Venus represented it as being a planet larger than Mars, while their evening thought and talk represented it as being a planet smaller than Mars. Since the propositional content of this asserted or conveyed information is richer than the semantic contents of the "pure de re readings" of (39-41) a gap is opened up between the meaning of the sentence uttered and the propositional content it is used to assert or convey.

Nothing could be more familiar to the non-relational Millian, who faces the same problems in these cases that the semantic relationist does. The point is better put the other way around, though. Here, relational Millianism inherits some of the standard problems facing nonrelational Millianism. However, the positions of the two theories are not symmetrical. Whereas non-relational Millianism has identified and articulated a variety of extra-semantic factors -including guises, ways of entertaining a proposition, pragmatic enrichment, the distinction between semantic and assertive content, the multiple assertion theory, and the least common denominator conception of meaning – to deal with this, and related cases involving the austere semantics and rich pragmatics of sentences containing Millian terms, non-relational Millianism arises from the, I believe incorrect, conviction that these factors are incapable of solving the problems.<sup>23</sup> This leaves the relationist in an unenviable position. If, as he maintains, the non-relational story won't work, then he has no way of dealing with the problems illustrated by (39-41). This is no a minor matter, since *all the problems posed by the attitudes for non-relational Millianism – including those that motivated relationism in the first place -- can be recreated within the relational framework, by examples that force pure de re "readings."* So, either non-relational Millianism is roughly correct (or capable of being made so), in which case relational Millianism – a.k.a. semantic relationism -- is not needed, or non-relational Millianism is incorrect (and irredeemable), in which case it is hard to avoid the conclusion that relational Millianism is too.

<sup>&</sup>lt;sup>23</sup>The problem posed by examples like (39-41) is due to the fact that different contributions can be made, to the assertive or conversational contents of utterances of attitude ascriptions, by occurrences of different but coreferential Millian terms (and in some cases by different occurrences of the same term) in the content clauses of such ascriptions. Depending on the conversational context and the presuppositions of speaker-hearers, some such occurrence contributions may be limited to the referents of the terms, while others may involve a mix of referential and partially descriptive content. For example, in some contexts that which is asserted or communicated by an utterance of (39) is something along the lines of (i) (plus obvious and relevant consequences of it).

<sup>(</sup>i) The ancients said, and believed, when they saw Venus in the morning, that the body Venus they saw in the morning was (exactly) twice the size of the heavenly body nearest to the body Venus they saw in the morning, but they said and believed, when they saw Venus in the evening, that the body Venus they saw in the evening was (exactly) three times the size of the heavenly body nearest to the body Venus they saw in the evening (though they didn't use name the 'Venus', and were unaware they were observing the same thing, morning and evening).

Semantic relationism cannot, on its own, get this result because its only means of doing so – by invoking pure *de re* readings of the attitude verbs – has the same effect on coordination involving all terms appearing in the content clauses of those verbs, indiscriminately rendering all such coordination as not required.