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## Mythical Objects (2002)

### NOTIONAL AND RELATIONAL

It is widely recognized that a sentence like

- (1) Ralph wants a sloop

is subject to a nonlexical ambiguity not duplicated in, for example,

- (2) Ralph owns a sloop.

(1) may indeed be read analogously with (2): There is a sloop that Ralph wants/owns. This is what W. V. Quine calls the *relational* reading. On this reading, (1) is like (2) in logically entailing the existence of at least one sloop, and the author of (1), like that of (2), is thus ontologically committed to sloops. But (1) may be read instead as indicating an aimless desire on Ralph's part for the very state of affairs described by (2): Ralph's relief from slooplessness. Quine calls this the *notional* reading. Here (1) asserts not that a relation obtains between Ralph and a sloop, but that one obtains between Ralph and the generalized, nonspecific concept of *some sloop or other* (or some counterpart of this concept, like the property of being a class that includes some sloop or other among its elements). No sloop in particular need be the object of Ralph's desire; for that matter, all sloops everywhere may be destroyed. Ralph can still notionally want one. There is no analogous reading for (2). Sloop ownership is as commonplace as sloops. Whatever it would be to stand in the ownership relation to a concept, it is clear that (2) does not attribute such a state to Ralph.

The same asymmetry arises in connection with the following pair:

- (3) Ralph believes a spy has stolen his documents.
- (4) A spy has stolen Ralph's documents.

On its relational reading (3) asserts that there is a spy whom Ralph suspects of having stolen his documents—just as (4) asserts that there is a spy who has indeed taken the missing documents. This is the so-called *de re* reading of (3), what Russell (1905)

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calls the *primary occurrence* reading.<sup>1</sup> On this reading, some spy is under suspicion, and the speaker is logically committed to there being at least that one spy, in just the same way that the author of (4) is committed to the existence of at least one spy. On its notional reading, (3) reports Ralph's more generalized belief of the very proposition contained in (4): that some spy or other has made off with the documents. No one in particular need be under suspicion. There need not even be any spies anywhere, as long as Ralph believes otherwise. This is the *de dicto* reading, what Russell calls the *secondary occurrence* reading. It asserts a relation not between Ralph and a spy, but one between Ralph and the concepts of *some spy or other* and *stealing documents*. There is no analogous reading for (4). Concepts are not thieves, nor does (4) make any accusation against any concept. Underlying the relational/notional dichotomy in (1) and (3) is the pertinent fact that wanting and believing are psychological states that may be directed equally toward concepts or objects (or concepts that involve objects, or propositions that involve objects, etc.). Ownership and theft are not states of this sort.

Care must be taken not to confuse the notional/relational distinction with various alternative distinctions. One such alternative concerns different uses that a speaker might make of an indefinite descriptive phrase. Though 'a sloop' expresses the indefinite concept *some sloop or other*, there is no bar against using the phrase with reference to a particular sloop (as, for example, in 'I was in a sloop yesterday. Was it yours?'). Such a use flies in the face of the indefinite character of the concept semantically expressed by the phrase. We say something nonspecific and mean something specific; in effect, we say 'some sloop' but mean 'that sloop.' And yet life goes on relatively unperturbed. Keith Donnellan famously pointed out (as did some others independently) that definite descriptions are likewise used sometimes with a particular object in mind ('referential use'), sometimes not ('attributive'). Let us call a use of a definite or indefinite description in uttering a sentence *directed* when there is a particular object to which the use is relevantly connected (e.g., the speaker intends a specific object or person) and the speaker may be regarded as thereby asserting (or asking) something specific directly about that object, and let us call a use of a description *undirected* when the speaker instead merely intends something general to the effect that whatever (whoever) is the only such-and-such/at least one such-and-such or other.<sup>2</sup>

The distinction between directed and undirected uses is clearly genuine; of that there can be no legitimate doubt. What is subject to serious dispute is whether the

<sup>1</sup> W. V. Quine, 'Quantifiers and Propositional Attitudes.' *Journal of Philosophy* 53. Reprinted in Quine's *The Ways of Paradox* (New York: Random House, 1966), 183–94. B. Russell, 'On Denoting.' *Mind* 14 (1905), pp. 479–93. Russell would extend his primary/secondary occurrence distinction to (1) by rewriting it in sentential-operator form, for example, as 'Ralph desires that (2)'.<sup>1</sup>

<sup>2</sup> K. Donnellan, 'Reference and Definite Descriptions.' *The Philosophical Review* 75 (1966), pp. 281–304. Donnellan's referential/attributive distinction for definite descriptions is a special case of the directed/undirected distinction, which also covers indefinite descriptions. A use of 'some atheist' in uttering 'Some atheist is a spy' may be undirected even if the speaker is regarded as thereby designating a higher-order entity relevantly connected to that same use (for example, the function from functions-from-individuals-to-truth-values that assigns *truth* to any function assigning *truth* to at least one atheist and otherwise assigns *falsity*).

distinction has a direct bearing on the semantics of descriptive phrases. In particular, is (2) literally true, even if only by dumb luck, when ‘a sloop’ is used directedly for a sloop Ralph does not in fact own, if Ralph nevertheless owns a sloop? Intuition strongly favors an affirmative response. Russell recognized the point, and urged it in favor of his theory (now generally taken for granted) that indefinite descriptions function univocally as existential quantifiers:

What do I really assert when I assert ‘I met a man’? Let us assume, for the moment, that my assertion is true, and that in fact I met Jones. It is clear that what I assert is *not* ‘I met Jones.’ I may say ‘I met a man, but it was not Jones’; in that case, though I lie, I do not contradict myself, as I should do if when I say I met a man I really mean that I met Jones. It is clear also that the person to whom I am speaking can understand what I say, even if he is a foreigner and has never heard of Jones.

But we may go further: not only Jones, but no actual man, enters into my statement. This becomes obvious when the statement is false, since then there is no more reason why Jones should be supposed to enter into the proposition than why anyone else should. . . . Thus it is only what we may call the concept that enters into the proposition.

More systematic considerations can also be brought to bear, discrediting the thesis that the directed/undirected distinction is relevantly relevant.<sup>3</sup> Still some remain unconvinced. Joseph Almog (pp. 77–81) has claimed that the distinction (or one like it in all relevant respects) is not only semantically significant, but indeed provides the basis for the notional/relational distinction.<sup>4</sup> The relational reading of (1), Almog contends, is generated by a directed use of the relevant indefinite description, the notional reading by an undirected use (1998, 79–81; Almog speaks of ‘readings’ rather than ‘uses’). The account extends the notional/relational distinction to (2), portraying the undirected use of the indefinite as generating a notional reading. In fact, Almog explains the notional reading of (1) as the exact analog of the reading generated by an undirected use of (2).

The fact that the directed/undirected distinction applies to sentences like (2) and (4), not just (1) and (3), is in itself reason for suspicion of the proposal. Almog’s account gets things exactly reversed with the facts. It is the relational reading of (1), not the notional, that arises by reading it on the model of (2): There is some sloop or other that Ralph owns/wants. A genuinely notional reading of (2) should depict Ralph as somehow standing in the ownership relation to a nonspecific concept!

<sup>3</sup> Kripke, S. See, ‘Speaker’s Reference and Semantic Reference.’ In P. French, T. Uehling, and H. Wettstein (eds.), *Contemporary Perspectives in the Philosophy of Language* (Minneapolis: University of Minnesota Press, 1977).

<sup>4</sup> J. Almog, ‘The Subject Verb Object Class.’ In J. Tomberlin (ed.), *Philosophical Perspectives 12: Language, Mind, and Ontology* (Cambridge, Mass.: Blackwell, 1998). Others who also maintain that the directed/undirected distinction is semantically relevant include Barbara Partee (‘Opacity, Coreference, and Pronouns.’ In D. Davidson and G. Harman (eds.), *Semantics of Natural Language* (Boston: D. Reidel, 1972). Almog follows Partee in confusing relational/notional with directed/undirected), Jon Barwise and John Perry (J. Barwise, and J. Perry). *Situations and Attitudes* (Cambridge, Mass.: MIT Press, 1983), and Howard Wettstein (‘Demonstrative Reference and Definite Descriptions.’ *Philosophical Studies* 40 (1981), pp. 241–57. ‘The Semantic Significance of the Referential-Attributive Distinction.’ *Philosophical Studies* 44 (1983), pp. 187–96). I challenge Wettstein’s account in Salmon. ‘The Pragmatic Fallacy.’ *Philosophical Studies* (1991), pp. 83–97).

Likewise, it is the relational reading of (3), not the notional, that arises by reading it on the model of (4): There is some spy or other who has stolen Ralph's documents—or whom Ralph believes has stolen them.<sup>5</sup>

The explanation for the collapse of the notional/relational distinction on Almog's account is straightforward. Consider the relational reading of (1): A sloop is such that Ralph specifically wants it. Whereas 'a sloop' may be used directedly, there is nothing to prevent the speaker from instead using the indefinite phrase undirectedly, and to mean by (1), understood relationally, that Ralph's desire is focused on some sloop or other: There is a very particular sloop—which sloop is not here specified—that Ralph has his heart set on. (I maintain that this accords with the literal meaning of (1), read relationally, regardless of whether the indefinite is used directedly or undirectedly, whereas the specific thought that Ralph wants *that sloop I have in mind* provides more information than is semantically encoded into the relational reading.) Exactly similarly for (3): There is a very particular spy—which spy is not here specified—to whom Ralph's finger of blame is pointed in a most *de re*, accusatory way. In neither case does an undirected use preclude the relational reading; read relationally, the indefinite may be used either directedly or undirectedly.

Ironically, an undirected use in fact evidently precludes the notional reading. If (1) is read notionally, the description 'a sloop' functions not to *express* the generalized concept of some sloop or other, but to *refer to* it, in order for (1) to

<sup>5</sup> Almog explains the notional reading of 'Madonna seeks a man' (misidentified with its undirected use) by saying that it is true if and only if Madonna seeks at least one instance of the kind *Man* ('Subject Verb Object,' pp. 57, 80). This is at best a tortured expression of Madonna's objective ('Mankind, schmankind. I'm just looking for a man.'). Worse, the formulation leaves the notional/relational ambiguity unresolved. In seeking at least one instance of mankind, is there anyone in particular who is the object of Madonna's desire, or is she merely seeking relief from her unbearable loneliness? Almog disambiguates in exactly the wrong direction, saying: (i) "Madonna met a man" . . . is true on this parsing [its undirected use] . . . iff Madonna met at least one man'; furthermore, (ii) 'no special treatment accrues intensional verbs. Thus to get the truth conditions of the [notional] reading of "Madonna seeks a man", simply substitute "seek" [in (i)]' (p. 80). Substitution of *seeking* for *having met* in Madonna's having met at least one man (or in Madonna's standing to mankind in the relative product, *x* met at least one instance of *y*) directly results in a targeted search by the diva.

Almog denies (pp. 53–54) that (2) logically entails (2') 'There is a sloop that Ralph owns', on the grounds that (1), which has the same logical form as (2), can be true without (1') 'There is a sloop that Ralph wants'—while conceding that it is nevertheless necessary and knowable *a priori* that if Ralph owns a sloop then there is a sloop that he owns. This argument carries no conviction. Logic can no more tolerate a divergence in truth value between 'Ralph owns at least one sloop' and 'At least one sloop is such that Ralph owns it' than it can between 'The number of planets is such as to be not even' and 'It is not the case that: the number of planets is even'. The second pair are equivalent despite the fact that substitution of 'possibly' for 'not' yields a falsehood and a truth, respectively. There is a reading of (1) on which it evidently entails (1')—viz., the relational reading. In any event, on this reading (1) yields (1') with the same sort of modality as between (2) and (2')—whether the connection is deemed logical or only necessary, *a priori*, intuitive, conceptual, true by virtue of meaning, and whatever else (knowable by reason alone?). The relational/notional distinction may even be defined or characterized by contrasting the reading of (1) on which it yields (1') *via* the same sort of modality as between (2) and (2'), with that on which it instead attributes a desire for slooplessness relief compatible with (1')'s denial. Owning and finding provide a template for wanting and seeking, but only for wanting and seeking in the relational senses. The desire for mere relief from slooplessness provides a new paradigm (familiarity of grammatical form notwithstanding).

express that Ralph stands to this very concept in the specified relation.<sup>6</sup> Analogously, on the notional reading of (3), the complement clause functions not to express the proposition that some spy or other has stolen Ralph's documents but to refer to the proposition, enabling the sentence to express that Ralph believes it. As Frege noted, in such cases the indefinite phrase does not have its customary content or reference, i.e., its customary *Sinn* or *Bedeutung*. Instead it is in *ungerade* ('oblique') mode. Insofar as the phrase is used to refer to a generalized concept, it is naturally used directedly for that very concept. The notional reading is thus generally accompanied by a directed use by the speaker (albeit an *ungerade* use), not an undirected one. Here again, Almog's account has matters exactly reversed with the facts.<sup>7</sup>

Taking (2) as a model for the notional reading of (1) inevitably yields exactly the wrong results. In effect, Almog attempts to capture the relational/notional distinction by contrasting directed and undirected uses of the relational reading, missing the notional reading altogether. The failure of the directed/undirected distinction as an analysis of the notional/relational is confirmed by Russell's insight that the latter distinction replicates itself in increasingly complex constructions. This is Russell's notion of scope. Thus the sentence.

Quine doubts that Ralph wants a sloop

yields not merely two, but three distinct readings: There is a sloop that Quine specifically doubts Ralph wants (*wide scope*); Quine doubts that there is any sloop that Ralph wants (*intermediate*); Quine doubts that Ralph seeks relief from slooplessness (*narrow*). The intermediate-scope reading is notional with respect to Quine and relational with respect to Ralph; the narrow-scope reading is doubly notional. The intermediate- and narrow-scope readings report Quine's doubt of the relational and notional readings, respectively, of (1). The wide-scope reading is the next generation of readings. Prefixing further operators introduces successive generations ('You understand that Salmon reports that Quine doubts...'). By contrast, the directed/undirected distinction does not reproduce with operators. The distinction naturally arises in the wide-scope reading, which is neutral between a directed and an undirected use of 'a sloop'. Each is permissible. ('A sloop [*that sloop I have in mind*

<sup>6</sup> This is not to say that Ralph wants to own a concept. There is no sloop or concept that Ralph specifically wants in virtue of wanting relief from slooplessness. Rather, Ralph stands in a certain relation to the generalized concept, *some sloop or other*. The relation is expressed in some English constructions by 'wants'. To say that Ralph notionally wants a concept is to assert that this same relation obtains between Ralph and a concept of a concept. Cf. Alonzo Church (A. Church, *Introduction to Mathematical Logic I* (Princeton: Princeton University Press, 1956), p. 8n20).

<sup>7</sup> Almog depicts (2) on an undirected use as expressing (or at least as true exactly on the condition) that Ralph stands to the kind *Sloop* in the relative product,  $x$  owns at least one instance of  $y$ . This would suggest that, in such a use, the word 'sloop' refers to, and is directed toward, the kind *Sloop* while the words 'owns a' express the relative product (p. 79). Similarly for the analogous use of (1), yielding its relational reading (directly contrary to Almog's stated purpose; see note 5 above). The phrase 'a sloop' (as opposed to the word 'sloop' occurring therein) on such a use would refer neither to the kind nor to the relative product, nor to anything else. In effect, it is contextually defined away. (Alternatively, it might be taken as referring to a higher-order entity, e.g.,  $(\lambda F)[(\exists z)(z$  is an instance of the kind *Sloop* &  $Fz)]$ ; Cf. note 2 above. But Almog eschews such entities in his semantic analysis.) By contrast, 'a sloop' on the notional reading of (1) refers to, and its use is directed toward, the concept, *some sloop or other* (or if one prefers, *at least one instance of Sloop*).

vs. *some sloop or other*] is such that Quine specifically doubts that Ralph wants *it*.) In both the intermediate-and narrow-scope readings, ‘a sloop’ is in *ungerade* mode, and hence, insofar as it is used directedly or undirectedly, is presumably directed.<sup>8</sup>

### GEACH’S PUZZLE

The notional/relational distinction may be tested by anaphoric links to a descriptive phrase. Consider:

Ralph wants a sloop, but it is a lemon

Ralph believes a female spy has stolen his documents; she also tampered with the computer.

These sentences strongly favor a relational reading. Appropriately understood, each evidently entails the relational reading of its first conjunct, even if the first conjunct itself is (somewhat perversely) read notionally. If, as alleged, it is a lemon, then there must be an *it* that is a lemon, and that *it* must be a sloop that Ralph wants. Similarly, if she tampered with the computer, then there must be a *she* who is a spy and whom Ralph suspects of the theft.

<sup>8</sup> The various considerations demonstrating the failure of the directed/undirected analysis of relational/notional are well known in connection with definite descriptions. Cf. Kripke (*Contemporary Respectives*, p. 9–10). Analogous considerations are at least as forceful with regard to indefinite descriptions. In responding to Kripke’s arguments against the alleged semantic significance of the directed/undirected distinction, Almog (‘Subject Verb Object,’ pp. 91–98) barely acknowledges these more decisive—and more fundamental—considerations against his proposal. Almog’s defense of the semantic-significance thesis suffers furthermore from the confusions limned above, including, for example, the false premise that the notional reading of (1) asserts that one sloop or other has the property of being wanted by Ralph (something in fact entailed by the relational reading). Michael McGlone has pointed out (in conversation) that Almog might restrict his directed/undirected account of relational/notional to constructions like (1), not extending it to (3). (Cf. Almog ‘Subject Verb Object,’ pp. 104n20.) Such a restriction would be both *ad hoc* and irrelevant. (The scope considerations apply equally to ‘Diogenes wants to seek an honest man’.) The account fails for both sorts of cases, and for the same basic reason: The analogue for (1)/(3) of an undirected use of (2)/(4) is a straightforwardly relational reading, and hence fails as an analysis of the notional reading.

Perhaps Almog will recant and concede that verbs like ‘want’ and ‘seek’ do after all require special treatment to capture the elusive notional readings. On its notional reading, (1) is true iff Ralph is related to the kind *Sloop* by notionally wanting at least one instance of the latter, as opposed to relationally wanting one, as entailed by the discredited account. (See notes 5 and 7 above.) This of itself leaves the former condition unexplained. In particular, appealing to an alleged undirected use of ‘a sloop’ by the reporter yields the wrong reading. But Almog also explicitly rejects the Frege-inspired analysis (which I believe is essentially correct): that certain expressions including ‘seek’ and ‘want’ (not including ‘find’ and ‘own’) are *ungerade* operators, which induce ‘a sloop’ to refer to rather than to express the concept *some sloop or other*, eliciting a directed use by the speaker. (The relational reading of (1) is explicable on this analysis as a matter of wide scope/primary occurrence.)

A case can be made that the relational reading of (1) goes hand in hand with a directed use of ‘a sloop’, or a propensity toward a directed use, *on the part of Ralph* rather than the speaker, and the notional reading correspondingly with an undirected use, or a propensity thereto, by Ralph. A logico-semantic account of relational/notional along these lines, although not as conspicuously flawed as Almog’s, is also significantly wide of the mark. (Suppose Ralph speaks no English. Consider also the Church–Langford translation test.) Almog anyway explicitly rejects the idea (p. 56).

The notional/relational distinction comes under severe strain, however, when confronted with Peter T. Geach's (1967) ingenious Hob/Nob sentence:

- (5) Hob thinks a witch has blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow.<sup>9</sup>

This puzzling sentence seems to resist both a relational and a notional reading. If there is a *she* whom Nob wonders about, then that *she*, it would appear, must be a witch whom Hob suspects of mare blighting. But the sincere utterer of (5) intuitively does not seem committed in this way to the reality of witches. Barring the existence of witches, though (5) may be true, there is no actual witch about whom Hob suspects and Nob wonders. Any account of the notional/relational that depicts (5) as requiring the existence of a witch is *ipso facto* wrong. There is a natural reading of (5) that carries an ontological commitment to witches, viz., the straightforward relational reading. The point is that the intended reading does not.

A tempting response construes (5) as fully notional, along the lines of

- (5<sub>n</sub>) (i) Hob thinks: a witch has blighted Bob's mare; and (ii) Nob wonders whether: the witch that (Hob thinks) blighted Bob's mare also killed Cob's sow.

Yet this will not do; (5) may be neutral concerning whether Nob has a true belief about, let alone shares, Hob's suspicion. Nob's wondering need not take the form 'Did the same witch that (Hob thinks) blighted Bob's mare also kill Cob's sow?' It may be that Hob's thought takes the form 'Maggoty Meg has blighted Bob's mare' while Nob's takes the form 'Did Maggoty Meg kill Cob's sow?' If so, (5) would be true, but no fully notional reading forthcoming.

Worse, Hob's and Nob's thoughts need not involve the same manner of specification. It may be that Hob's thought takes the form 'Maggoty Meg has blighted Bob's mare' while Nob's wondering takes the form 'Did the Wicked Witch of the West kill Cob's sow?' This appears to preclude a neo-Fregean analysis along the lines of the following:

- (F)  $(\exists \alpha)[\alpha$  corepresents for both Hob and Nob & Hob notionally-thinks  $\lceil \alpha$  is a witch who has blighted Bob's mare  $\rceil$  & Nob notionally-thinks  $\lceil \alpha$  is a witch  $\rceil$  and Nob notionally-wonders  $\lceil$ Did  $\alpha$  kill Cob's sow? $\rceil]$ .<sup>10</sup>

Geach himself argues (pp. 148–149) that since (5) does not commit its author to the existence of witches, it must have some purely notional reading or other.

<sup>9</sup> Peter Geach, 'Intentional Identity,' *Journal of Philosophy* 64: 627–32. Reprinted in Geach *Logic Matters* (Oxford: Basil Blackwell, 1972). Though the puzzle has generated a considerable literature, its general importance to the philosophy of logic and language remains insufficiently appreciated. (As will emerge, I believe Geach's moniker for the puzzle as one of 'intentional identity' is a likely misnomer.)

<sup>10</sup> Cf. David Kaplan ('Quantifying In.' In D. Davidson and J. Hintikka (eds.), *Words and Objections: Essays on the Work of W. V. Quine* (Dordrecht: D. Reidel, 1969), pp. 225–31). Contrary to Daniel C. Dennett ('Geach on Intentional Identity,' *Journal of Philosophy* 65 (1968), pp. 335–41), the intelligibility (indeed the fact) of Hob's and Nob's thoughts having a common focus, somehow on the same unreal witch, does not require that they agree on every possible issue regarding the witch in question—which would in any case entail their agreeing on every possible issue.

He suggests an alternative neo-Fregean analysis, evidently along the lines of the following:

- (G)  $(\exists\alpha)(\exists\beta)[\alpha$  is a witch-representation &  $\beta$  is a witch-representation &  $\alpha$  and  $\beta$  corepresent for both Hob and Nob & Hob notionally-thinks  $\lceil\alpha$  has blighted Bob's mare $\rceil$  & Nob notionally-wonders  $\lceil$ Did  $\beta$  kill Cob's sow? $\rceil$ ].<sup>11</sup>

This proposal faces certain serious difficulties, some of which are also problems for (F): The relevant notion of a *witch-representation* must be explained in such a way as to allow that an individual representation  $\alpha$  (e.g., an individual concept) may be a witch-representation without representing any actual witch, and for that matter, without representing anything at all. More important, the relevant notion of *corepresentation* needs to be explained so as to allow the following: that a pair of individual representations  $\alpha$  and  $\beta$  may co-represent for two thinkers without representing anything at all for either thinker. Geach does not explicitly employ the notion of corepresentation. I have included it on his behalf because it, or something like it, is crucial to the proposed analysis. Any analysis, if it is correct, must capture the idea that Hob's and Nob's thoughts have a common focus. Though there is no witch, Hob and Nob are, in some sense, thinking about the *same* witch. It is on this point that notional analyses generally fail. Even something as strong as (5<sub>n</sub>)—already too strong—misses this essential feature of (5). On the other hand, however the notion of vacuously corepresenting witch-representations is ultimately explained, by contrast with (G), (5) evidently commits its author no more to corepresenting witch-representations than to witches. More generally, any analysis along the lines of (F) or (G) cannot forever avoid facing the well-known difficulties with neo-Fregean, notional analyses of relational constructions generally (e.g., the Twin Earth considerations).<sup>12</sup>

An alternative approach accepts the imposingly apparent relational character of (5) at face value, and construes it along the lines of the following:

- (6) There is someone whom: (i) Hob thinks a witch that has blighted Bob's mare; (ii) Nob also thinks is a witch; and (iii) Nob wonders whether she killed Cob's sow.

<sup>11</sup> Peter Geach 'Two Kinds of Intentionality.' *Monist* 59 (1976), pp. 306–20, pp. 314–18.

<sup>12</sup> Stephen Neale (*Descriptions* (Cambridge, Mass.: MIT Press, 1990), p. 221), proposes analyzing the relevant reading of (5) along the lines of: (i) Hob thinks: a witch has blighted Bob's mare; and (ii) Nob wonders whether: the *such-and-such* witch killed Cob's sow, where 'the *such-and-such* witch' is fleshed out by the context, e.g., as 'the local witch'. But (5) evidently does not attribute to Nob the particular thought 'Did *the local witch* kill Cob's sow?' nor any similarly descriptive thought. Worse, Neale's proposal fails to capture the crucial feature of (5) that Nob's wondering allegedly regards the very witch that Hob suspects. Michael McKinsey ('Mental Anaphora.' *Synthese* 66 (1986), pp. 159–75) argues that the only readings of (5) that do not commit its author to the existence of a witch (or to there being some real person whom Hob and Nob relationally suspect of witchcraft) are given by (5<sub>n</sub>) (which he regards as ambiguous). Dennett apparently holds that the only such readings of (5) are either those given by (5<sub>n</sub>) or else something similar to the less specific (F). *Pace* Geach, Dennett, McKinsey, and Neale, (5) is evidently relational yet free of commitment to witches (or to anyone who is a suspect). (Contrary to Dennett, the speaker's basis or justification for uttering (5) is mostly irrelevant.)



This happily avoids commitment to witches. But it does not provide a solution. Hob's and Nob's thoughts need not concern any real person. Maggoty Meg is not a real person, and there may be no one whom either Hob or Nob believe to be the wicked strega herself.

Some proposed solutions to Geach's puzzle make the unpalatable claim that Hob's and Nob's musings concern a Meinongian Object—a particular witch who is both indeterminate and nonexistent.<sup>13</sup> Many proposed solutions instead reinterpret relational attributions of attitude so that they are not really relational, i.e., they do not make genuine reference to the individuals apparently mentioned therein by name or pronoun. These responses inevitably make equally unpalatable claims involving relational constructions—for example, that Nob's wondering literally concerns the very same witch/person as Hob's belief yet neither concerns anyone (or anything) whatsoever, or that relational constructions mention or generalize over speech-act tokens and/or connections among speech-act tokens.<sup>14</sup> It would be more

<sup>13</sup> Cf. Esa Saarinen ('Intentional Identity Interpreted: A Case Study of the Relations Among Quantifiers, Pronouns, and Propositional Attitudes.' *Linguistics and Philosophy* 2 (1978), pp. 151–223). A variant of this approach imputes thoughts to Hob and Nob concerning a particular possible and fully determinate but nonexistent witch. This proposal cannot be summarily dismissed on the ground of an alleged ontological commitment to merely possible witches. The proposed analysis may be understood instead as follows: There *might have existed* (even if there does not exist) a witch such that *actually*: (i) Hob thinks she has blighted Bob's mare; and (ii) Nob wonders whether she killed Cob's sow. Whereas this is in some sense committed to merely possible witches, it avoids commitment to their actual existence. The more serious difficulty is that neither Hob nor Nob (assuming they are real) is connected to any particular possible witch, to the exclusion of other possible witches, in such a manner as to have relational thoughts about her. How could they be? Witches do not exist. Cf. Kripke (*Naming and Necessity* (Cambridge, Mass.: Harvard University Press, 1972), p. 158) '... one cannot say of any possible person that he *would have been* Sherlock Holmes, had he existed. Several distinct possible people, and even actual ones such as Darwin or Jack the Ripper, might have performed the exploits of Holmes, but there is none of whom we can say that he would have *been* Holmes had he performed these exploits. For if so, which one?'

<sup>14</sup> The Hob/Nob sentence (5) is logically consistent with neither Hob nor Nob articulating his musings, explicitly or implicitly. Tyler Burge's ('Russell's Problem and Intentional Identity.' In J. Tomberlin (ed.), *Agent, Language, and the Structure of the World* (Indianapolis: Hackett, 1983), pp. 94–98) analysis seems to be roughly the following:

Hob believes  $\{(\exists x)(x \text{ is a witch who has blighted Bob's mare})\}$  &  $\therefore$  Hob believes  $\{(the_{13} x) (x \text{ is a witch who has blighted Bob's mare}) \text{ exists}\}$  & Nob wonders  $\{y_{13} \text{ killed Cob's sow}\}$ .

Burge stipulates that the recurring subscript 'marks the anaphoric or quasi-anaphoric connection between the terms' (1983, 97), where 'a more explicit way of capturing the point of the subscripts' would explicitly generalize over communication chains, including both Hob's application of 'the<sub>13</sub>' and Nob's application of 'y<sub>13</sub>' (1983, 98).

Burge's apparatus is not explained sufficiently for this to qualify as a proposed solution to the problem. Aside from questions raised by the connective adjoining the first two conjuncts (how does a single statement contain an argument?), the analysis is inadequate on its most natural interpretations. An immediate problem is that (5), as intended, does not entail that Hob notionally thinks only one witch has blighted Bob's mare; the argument of the first two conjuncts is invalid. More problematic, if the special quotation marks indicate ordinary quotation (as seems to conform with Burge's intended interpretation), the analysis miscasts relational constructions as reporting dispositions toward sentences (e.g., purported utterances or implicit utterances) rather than the content of the attitudes thereby expressed and their relation to objects. Assuming instead (apparently contrary to Burge's intent) that the occurrence of 'y<sub>13</sub>' is in bindable position, the variable remains free even assuming that the definite-descriptions operator 'the<sub>13</sub>' is variable binding.

sensible to deny that (5) can be literally true on the relevant reading, given that there are no actual witches.<sup>15</sup> The problem with this denial is that its proponent is clearly in denial. As intended, (5) can clearly be true (assuming Hob and Nob are real) even in the absence of witches. Numerous postmodern solutions jump through technical hoops to allow a pronoun ('she') to be a variable bound by a quantifier within a belief context ('a witch') despite standing outside the belief context, hence also outside the quantifier's scope, and despite standing within an entirely separate belief context. These 'solutions' do not satisfy the inquiring mind as much as boggle it. It is one thing to construct an elaborate system on which (5) may be deemed true without 'There is a witch'. It is quite another to provide a satisfying explanation of the content of Nob's attitude, one for which the constructed system is appropriate. How can Nob wonder about a witch, and a particular witch at that—the very one Hob suspects—when there is no witch and, therefore, no particular witch about whom he is wondering? This is the puzzle in a nutshell. It combines elements of intensionality puzzles with puzzles concerning nonexistence and puzzles concerning identity, and has been deemed likely intractable.<sup>16</sup>

Burge's stipulation suggests the variable is to have a value assigned to it *via* Hob's alleged description 'the witch who has blighted Bob's mare', thus recasting the third conjunct into 'Nob wonders whether she—the witch who has blighted Bob's mare—killed Cob's sow'. (Otherwise, the ' $y_{13}$ ' evidently remains both free and value-less, leaving (5) without propositional content, hence untrue.) This, however, is evidently ambiguous between a reading on which the value-fixing is affected on the part of the author of (5)—call it *primary occurrence*—and a *secondary-occurrence* reading on which the value-fixing is allegedly affected on the part of Nob. (The terminology is intended to recall Russell's distinction. The ambiguity corresponds even more closely to two competing interpretations of David Kaplan's rigidifying operator '*dthat*'.) On the secondary-occurrence reading, the value-fixing description plays a representational role on Nob's behalf. On the primary-occurrence reading, the value-fixing is shielded from the shift-from-customary-mode function of the quotation marks, leaving the pronoun to carry the weight of representing for Nob. The analysis on the secondary-occurrence reading, like (5<sub>n</sub>), commits not only Hob but also Nob to the existence of a witch who has blighted Bob's mare. Worse, the more likely primary-occurrence reading commits (5)'s author to the existence of such a witch. Neither is correct.

A further problem with the proposal is that the truth of (5) does not require that Nob make any pronominal application that is anaphoric on an application by Hob. The two might never communicate. Burge therefore offers something like the following as an alternative analysis ('Russell's Problem,' p. 96):

The community believes  $\{(\exists x)(x \text{ is a witch wreaking havoc})\}$  &  $\therefore$  the community believes  $\{(\text{the}_{13} x)(x \text{ is a witch who is wreaking havoc exists})\}$  & Hob thinks  $\{y_{13} \text{ has blighted Bob's mare}\}$  & Nob wonders  $\{z_{13} \text{ killed Cob's sow}\}$ .

This is subject to some of the same difficulties as the previous analysis and more besides, including some of the same defects as Neale's proposal (see note 12)—as well as some of the defects of the Fregean analyses that Burge eschews. By contrast, for example, (5) makes no claim regarding community-held beliefs, let alone regarding a specific alleged community belief that there is only one witch wreaking havoc.

<sup>15</sup> The account in Almog ('Subject Verb Object,' pp. 68, 75–76, and *passim*), extended to propositional-attitude attributions, apparently depicts (5) as modally equivalent on its intended reading to 'Hob thinks Maggoty Meg has blighted Bob's mare, and Nob wonders whether she killed Cob's sow', and depicts the latter as expressing a necessary falsehood in virtue of the failure of 'Maggoty Meg' to refer.

<sup>16</sup> Michael Clark ('Critical Notice of P. T. Geach, *Logic Matters*.' *Mind* 74 (1975), pp. 122–36, p. 124).

## MYTHS

The solution I shall urge takes (5) at face value, and takes seriously the idea that false theories that have been mistakenly believed—what I call *myths*—give rise to fabricated but genuine entities.<sup>17</sup> These entities include such oddities as: Vulcan, the hypothetical planet proposed by Babinet and which Le Verrier believed caused perturbations in Mercury's solar orbit; the ether, once thought to be the physical medium through which light waves propagate; phlogiston, once thought to be the element (material substance) that causes combustion; the Loch Ness Monster; Santa Claus; and Meinong's Golden Mountain. Such *mythical objects* are real things, though they are neither material objects nor mental objects ('ideas'). They come into being with the belief in the myth. Indeed, they are created by the mistaken theory's inventor, albeit without the theorist's knowledge. But they do not exist in physical space, and are, in that sense, abstract entities. They are an unavoidable by-product of human fallibility.

Vulcan is a mythical planet. This is not to say, as one might be tempted to take it, that Vulcan is a planet but one of a rather funny sort, e.g., a Meinongian Object that exists in myth but not in reality.<sup>18</sup> On the contrary, Vulcan exists in reality, just as robustly as you the reader. But a mythical planet is no more a planet than a toy duck is a duck or a magician is someone who performs feats of magic. A mythical object is an imposter, a pretender, a stage prop. Vulcan is not a real planet, though it is a very real object—not concrete, not in physical space, but real. One might say that the planet Mercury is also a 'mythical object,' in that it too figures in the Vulcan myth, wrongly depicted as being gravitationally influenced by Vulcan. If we choose to speak this way, then it must be said that some 'mythical planets' are real planets, though not really as depicted in the myth. Vulcan, by contrast with the 'mythical' Mercury, is a *wholly mythical* object, not a real planet but an abstract entity inadvertently fabricated by the inventor of the myth. I shall continue to use the simple word 'mythical' as a shorthand for the notion of something wholly mythical.<sup>19</sup>

The existence of fictional objects, in something close to this sense, has been persuasively urged by Peter van Inwagen and Saul Kripke as an ontological commitment of our ordinary discourse about fiction.<sup>20</sup> Their account, however, is significantly

<sup>17</sup> Cf. Salmon. 'Nonexistence.' *Noûs*, 32 (1998), pp. 277–319, pp. 304–5; especially 317n50.

<sup>18</sup> Geach. 1967b. 'The Perils of Pauline.' *Review of Metaphysics* 23. Reprinted in Geach, *Logic Matters*, (Oxford: Basil Blackwell, 1972), 153–65) misconstrues the claim in just this way.

<sup>19</sup> Sachin Pai asks whether there is in addition to Mercury a wholly mythical planet that astronomers like Le Verrier wrongly believed to be Mercury. I leave this as a topic requiring further investigation.

<sup>20</sup> P. van Inwagen, 1977. 'Creatures of Fiction.' *American Philosophical Quarterly* 14 (1977), pp. 299–308; Saul Kripke. 'Reference and Existence: The John Locke Lectures for 1973' (Oxford University Press, 1973, unpublished). Kripke does not himself officially either accept or reject an ontology of mythical objects. My interpretation is based partly on notes I took at Kripke's seminars on the topic of reference and fiction at Princeton University during March–April 1981 and on recordings of his seminars at the University of California, Riverside, in January 1983. Kripke's account of fictional and mythical objects is explicated and criticized, and my alternative theory defended, in Salmon 'Nonexistence,' pp. 293–305.

different from the one I propose. Kripke contends that a mythical-object name like ‘Vulcan’ is ambiguous between two uses, one of which is parasitic on the other. It would be less deceptive to replace the ambiguous name with two univocal names, ‘Vulcan<sub>1</sub>’ and ‘Vulcan<sub>2</sub>’. The name on its primary use, ‘Vulcan<sub>1</sub>’, was introduced into the language, *sans* subscript, by Babinet as a name for an intra-Mercurial planet. Le Verrier used the name in this way in theorizing about Mercury’s perihelion. In this use, the name names nothing; ‘Vulcan<sub>1</sub>’ is entirely vacuous. Giving the name this use, we may say such things as that Le Verrier believed that Vulcan<sub>1</sub> affected Mercury’s perihelion. Le Verrier’s theory is a myth concerning Vulcan<sub>1</sub>. The name on its secondary use, ‘Vulcan<sub>2</sub>’, is introduced into the language (again *sans* subscript) at a later stage, when the myth has finally been exposed, as a name for the mythical planet erroneously postulated, and thereby inadvertently created, by Babinet. Perhaps it would be better to say that a new *use* of the name ‘Vulcan’ is introduced into the language. ‘Vulcan<sub>2</sub>’ is fully referential. Using the name in this way, we say such things as that Vulcan<sub>2</sub> was a mythical intra-Mercurial planet hypothesized by Babinet. The difference between Vulcan<sub>1</sub> and Vulcan<sub>2</sub> could not be more stark. The mistaken astronomical theory believed by Babinet and Le Verrier concerns Vulcan<sub>1</sub>, which does not exist. Vulcan<sub>2</sub>, which does exist, arises from the mistaken theory itself. Vulcan<sub>2</sub> is recognized through reflection not on events in the far-off astronomical heavens but on the more local story of man’s intellectual triumphs and defeats, particularly on the history of science.

Kripke’s account is vulnerable to a familiar family of thorny problems: the classical problem of true negative existentials and the more general problem of the content and truth value of sentences involving vacuous names. Vulcan<sub>1</sub> does not exist. This sentence is true, and seems to say about something (*viz.*, Vulcan<sub>1</sub>) that it fails to exist. Yet the sentence entails that there is nothing for it to attribute non-existence to. Furthermore, on Kripke’s account, Le Verrier believed that Vulcan<sub>1</sub> has an impact on Mercury’s perihelion. What can the content of Le Verrier’s belief be if there is no such thing as Vulcan<sub>1</sub>? Furthermore, is the belief content simply false? If so, then it may be said that Vulcan<sub>1</sub> has no impact on Mercury’s perihelion. Yet this claim too seems to attribute something to Vulcan<sub>1</sub>, and thus seems equally wrong, and for exactly the same reason, with the claim that Vulcan<sub>1</sub> does have such an impact. Kripke is aware of these problems but offers no viable solution.

I submit that Kripke’s alleged primary use of a mythical-object name is itself a myth. To be sure, Babinet believed himself to be naming a real planet in introducing a use of ‘Vulcan’ into the language, and other users like Le Verrier believed themselves to be referring to a real planet. But this linguistic theory of the name ‘Vulcan’ is mistaken, and is in this respect exactly like the astronomical theory that Vulcan is a real planet. The two theories complement each other, and fall together hand in hand. The situation should be viewed instead as follows: Babinet invented the theory—erroneous, as it turns out—that there is an intra-Mercurial planet. In doing this, he inadvertently created Vulcan. Indeed, Babinet even introduced a name for this mythical planet. The name was intended for a real planet, and Babinet believed the name thus referred to a real planet (notionally, not relationally!). But here again, he was simply mistaken. Other astronomers, most notably Le Verrier,

became convinced of Babinet's theory, both as it concerns 'Vulcan' (that it is a very real intra-Mercurial planet) and as it concerns 'Vulcan' (that it names the intra-Mercurial planet). Babinet and Le Verrier both believed, correctly, that the name 'Vulcan', on the relevant use, refers to Vulcan. But they also both believed, mistakenly, that Vulcan is a real planet. They might have expressed the latter belief by means of the French version of the English sentence 'Vulcan is a planet', or other shared beliefs by means of sentences like 'Vulcan's orbit lies closer to the Sun than Mercury's'. These beliefs are mistakes, and the sentences (whether English or French) are false.

Importantly, there is no relevant use of the name 'Vulcan' by Babinet and Le Verrier that is vacuous. So used, the name refers to Vulcan, the mythical planet. Le Verrier did *not* believe that Vulcan<sub>1</sub> is an intra-Mercurial planet—or, to put the point less misleadingly, there is no real use marked by the subscript on 'Vulcan' on which the string of words 'Vulcan<sub>1</sub> is an intra-Mercurial planet' expresses anything for Le Verrier to have believed, disbelieved, or suspended judgment about. To put the matter in terms of Kripke's account, what Le Verrier believed was that Vulcan<sub>2</sub> is a real intra-Mercurial planet. Le Verrier's belief concerns the mythical planet, a very real object that had been inadvertently created, then named 'Vulcan', by Babinet. Their theory about Vulcan was completely wrong. Vulcan is in fact an abstract object, one that is depicted in myth as a massive physical object.

A common reaction is to charge my proposal with miscasting mythical objects as the objects with which myths are concerned. On the contrary, it is objected, if they exist at all, mythical objects enter the intellectual landscape only at a later stage, not in the myth itself but in the subsequent historical account of the myth. A robust sense of reality demands that the myth itself be not about these abstract objects but about *nothing*, or at most about representations of nothing. No one expresses this sentiment more forcefully than Russell (1919):

[Many] logicians have been driven to the conclusion that there are unreal objects . . . In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies. Logic, I should maintain, must no more admit a unicorn than zoology can; for logic is concerned with the real world just as truly as zoology, though with its more abstract and general features. To say that unicorns have an existence in heraldry, or in literature, or in imagination, is a most pitiful and paltry evasion. What exists in heraldry is not an animal, made of flesh and blood, moving and breathing of its own initiative. What exists is a picture, or a description in words. . . . A robust sense of reality is very necessary in framing a correct analysis of propositions about unicorns . . . and other such pseudo-objects.<sup>21</sup>

I heartily applaud Russell's eloquent plea for philosophical sobriety. But his attitude toward 'unreal' objects is fundamentally confused. To repeat, a mythical planet is not a massive physical object but an abstract entity, the product of creative astronomizing. Likewise, a mythical unicorn or a mythical winged horse is not a living creature but a fabricated entity, the likely product of blurred or fuzzy vision, just as mermaids are the likely product of a deprived and overactive imagination under the influence of liquor—creatures not really made of flesh and blood and fur

<sup>21</sup> Bertrand Russell, *Introduction to Mathematical Philosophy* (London: George Allen and Unwin, 1919), chap. 16, 169–70.

or scales, not really moving and breathing of their own initiative, but depicted as such in myth, legend, hallucination, or drunken stupor.

It is frequently objected even by those who countenance mythical objects that the Vulcan theory, for example, is merely the theory that there is an intra-Mercurial planet, not the bizarre hypothesis that the relevant abstract entity is that planet. Babinet and Le Verrier, it is observed, did not believe that an abstract entity is a massive heavenly object. Quite right, but only if meant notionally. Understood relationally—as the claim that, even if there is such an abstract entity as the mythical object that is Vulcan, Babinet and Le Verrier did not believe it to be an intra-Mercurial planet—it turns mythical objects into a philosophical black box. What role are these abstract entities supposed to play, and how exactly are their myth-believers supposed to be related to them in virtue of believing the myth? In fact, this issue provides yet another reason to prefer my account over Kripke's. On my account, in sharp contrast, the role of mythical objects is straightforward: They are the things depicted as such-and-such in myth, the fabrications erroneously believed by wayward believers to be planets or the medium of light-wave propagation or ghosts, the objects the mistaken theory is about when the theory is not about any real planet or any real medium or any real ghost. It is not merely that being depicted as such-and-such is an essential property of a mythical object, a feature the object could not exist without. Rather, being so depicted is the metaphysical function of the mythical object; that is *what* it is, its *raison d'être*. To countenance the existence of Vulcan as a mythical planet while at the same time denying that Babinet and Le Verrier had beliefs about this mythical object, is in a very real sense to miss the point of recognizing Vulcan's existence. It is precisely the astronomers' false beliefs about the mythical planet that makes it a mythical planet; if no one had believed it to be a planet, it would not *be* a mythical planet. Come to that, it would not even exist.<sup>22</sup>

Another important point: I am not *postulating* mythical objects. For example, I am not postulating Vulcan. Even if I wanted to, Babinet beat me to it—though he postulated Vulcan as a real planet, not a mythical one.<sup>23</sup> Mythical objects would exist even if I and everyone else had never countenanced or recognized them, or admitted them into our ontology. Rather, I see myself as uncovering some evidence for their independent and continued existence, in something like the manner of the

<sup>22</sup> Mythical objects are of the same metaphysical/ontological category as fictional characters, and it is an essential property of any such entity that it be of this category. Perhaps a mythical object might instead have been a fictional character, or vice versa, but no mythical or fictional object could have been, say, an even integer. Some philosophers who accept the reality of fictional characters nevertheless reject mythical objects. The usual motivation is the feeling that whereas Sherlock Holmes is a real object, a character created by Sir Arthur Conan Doyle, the Vulcan theory was wrong precisely because Vulcan simply does not exist. This ignores the nearly perfect similarity between fiction and myth. Whatever good reason there is for acknowledging the real existence of Holmes extends to Vulcan. The Vulcan theory is wrong not because there is no such thing as Vulcan, but because there is no such *planet* as Vulcan as it is depicted. Or better put, Vulcan is no such planet. (Likewise, there was no such detective as Holmes, who is a fictional detective and not a real one.) Myths and fictions, are both made up. The principal difference between mythical and fictional objects is that the myth is believed while the fiction is only make-believe. This difference does nothing to obliterate the reality of either fictional or mythical objects.

<sup>23</sup> Cf. Salmon 'Nonexistence,' p. 315n38.

paleontologist who infers dinosaurs from their fossil remains, rather than the theoretical physicist who postulates a new category of physical entity in order to make better sense of things (even if what I am actually doing is in important respects more like the latter).<sup>24</sup>

Perhaps the most important evidence in favor of this theory of mythical objects is its logical entailment by our thoughts and beliefs concerning myths. We are sometimes led to say and think such things as, ‘An intra-Mercurial planet, Vulcan, was hypothesized by Babinet and believed by Le Verrier to affect Mercury’s perihelion, but there has never been a hypothetical planet whose orbit was supposed to lie between Mercury and Venus’ and ‘Some hypothetical species have been hypothesized as linking the evolution of birds from dinosaurs, but no hypothetical species have been postulated to link the evolution of mammals from birds.’ The distinctions drawn cannot be made without a commitment to mythical objects, i.e., without attributing existence, in some manner, to mythical objects. No less significant, beliefs are imputed about the mentioned mythical objects, to the effect that they are not mythical. Being wrongly believed not to be mythical is just what it is to be mythical. Furthermore, beliefs are imputed to distinct believers concerning the very same mythical object.<sup>25</sup>

Further evidence—in fact, evidence of precisely the same sort—is provided by the Hob/Nob sentence. The puzzle is solved by construing (5) on its principal reading,

<sup>24</sup> I am aware some philosophers see no significant difference between the paleontologist and the theoretical physicist. But they are asleep, or blind.

<sup>25</sup> Linguistic evidence tends to support the general claim that if someone believes there is an  $F$  that is such-and-such when in fact there is no such thing, then there is a mythical  $F$  thereby believed to be such-and-such. It does not follow that whenever someone notionally believes an  $F$  is such-and-such, there is always something or someone (either an  $F$  or a mythical  $F$ ) relationally believed to be such-and-such. That the latter is false is demonstrated by the believer who notionally believes some spy is shorter than all others. (Thanks to James Pryor and Robert Stalnaker for pressing me on this point.) If two believers notionally believe there is an  $F$  that is such-and-such when in fact there is no such thing, they may or may not believe in the same mythical  $F$ , depending on their interconnections. (This may help explain why it is more difficult to form beliefs about the shortest spy than about a mythical planet: Le Verrier and we are all *de re* connected to Vulcan.)

Mark Richard (‘Commitment.’ In J. Tomberlin (ed.), *Philosophical Perspectives 12: Language, Mind, and Ontology*. (Cambridge, Mass.: Blackwell, 1998), pp. 262–64, 278–79n16) criticizes my account of mythical objects while defending a version of Kripke’s. Richard objects (279) to the examples given here on the ground that, for example, the first quoted sentence is in fact untrue and is easily confused with a true variant that avoids attributing to Babinet and Le Verrier any ontological commitment to, or beliefs concerning, the mythical planet: ‘It was hypothesized by Babinet that there is an intra-Mercurial planet, Vulcan<sub>1</sub>, and it was believed by Le Verrier that Vulcan<sub>1</sub> affects Mercury’s perihelion, but it has never been hypothesized that there is a planet whose orbit lies between Mercury and Venus’. (Richard denies, with Kripke, that Babinet and Le Verrier have beliefs concerning Vulcan<sub>2</sub>.) Richard explains the alleged confusion as the product of an exportation inference from ‘ $\alpha$  believes that  $\beta$  is an  $F$  that is  $G$ ’ to ‘ $\beta$  is an  $F$  that  $\alpha$  believes is a  $G$ ’, where  $\beta$  is a proper name. Richard says this inference pattern is valid if, but only if, the name  $\beta$ , as used by the referent of  $\alpha$  (e.g., ‘Vulcan’ as used by Babinet and Le Verrier), has a referent. This explanation is dubious. For one thing, the particular exportation-inference pattern is invalid regardless of the logico-grammatical status of  $\beta$ . Moreover, it does not yield the quoted sentence. As will be seen shortly, Geach’s puzzle demonstrates that Richard’s substitute sentence does not do justice to the data. Babinet’s and Le Verrier’s beliefs concern *something*; indeed they each concern the *same* thing.

or at least in one of its principal readings, as fully relational, not in the manner of (6) but along the lines of:

- (7) There is a mythical witch such that (i) Hob thinks: she has blighted Bob's mare; and (ii) Nob wonders whether: she killed Cob's sow.<sup>26</sup>

This has the distinct advantage over (6) that it does not require that both Hob and Nob believe someone to be the witch in question. In fact, it allows that there be no one in particular whom either Hob or Nob believes to be a witch. It does require something not unrelated to this, but no more than is actually required by (5): that there be something that both Hob and Nob believe to be a witch—*something*, not *someone*, not a witch or a person, certainly not an indeterminate Meinongian Object, but a very real entity that Nob thinks a real witch who has blighted Bob's mare. Nob also believes this same mythical witch to be a real witch and wonders about 'her' (really: about *it*) whether she killed Cob's sow. In effect, the proposal substitutes ontological commitment to mythical witches for the ontological commitment to real witches intrinsic to the straightforward relational reading of (5) (obtained from (7) by deleting the word 'mythical'). There are other witch-free readings for (5), but I submit that any intended reading is a variant of (7) that equally commits the author to the existence of a (real or) mythical witch, such as:

- (i) Hob thinks: some witch or other has blighted Bob's mare; and (ii) the (same) mythical witch that Hob thinks has blighted Bob's mare is such that Nob wonders whether: she killed Cob's sow.<sup>27</sup>

Significantly, one who accepts Kripke's account may not avail him/herself of this solution to Geach's puzzle. On Kripke's account it may be observed that

- (i) Hob thinks: Meg<sub>1</sub> has blighted Bob's mare; and (ii) Nob wonders whether: Meg<sub>1</sub> killed Cob's sow.

<sup>26</sup> Quasi-formally:

$(\exists x)(x \text{ is a mythical-witch} \ \& \ \text{Hob thinks } \wedge x \text{ has blighted Bob's mare} \wedge \ \& \ \text{Nob wonders } \wedge x \text{ killed Cob's sow} \wedge)$ ,

where ' $\wedge$ ' serves as a content-quotation mark. Note the quantification into both *ungerade* contexts. (Cf. note 13 above regarding the error of replacing 'mythical' with 'merely possible'.)

<sup>27</sup> This may better capture Geach's intent. The first conjunct is notional. The second is relational, and entails that there is exactly one mythical witch whom Hob relationally thinks has blighted Bob's mare. Quasi-formally:

$\text{Hob thinks } \wedge (\exists x)(x \text{ is a witch} \ \& \ x \text{ has blighted Bob's mare}) \wedge \ \text{and } (\lambda y)[\text{Nob wonders } \wedge y \text{ killed Cob's sow} \wedge]_{(1x)}(x \text{ is a mythical-witch} \ \& \ \text{Hob thinks } \wedge x \text{ has blighted Bob's mare} \wedge)$ .

The principally intended reading of (5) is perhaps best captured by an equivalent formulation:

$\text{Hob thinks } \wedge (\exists x)(x \text{ is a witch} \ \& \ x \text{ has blighted Bob's mare}) \wedge \ \& \ \text{Nob wonders } \wedge \text{dthat}[(\lambda (1x)(x \text{ is a mythical-witch} \ \& \ \text{Hob thinks } \wedge x \text{ has blighted Bob's mare} \wedge)] \text{ killed Cob's sow} \wedge$ ,

interpreting '*dthat*'-terms so that their content is their referent (Cf. note 14 above). Elizabeth Harman has suggested (in conversation) a neutral reading on behalf of the speaker who remains cautiously agnostic on the question of witchcraft: replace '*x* is a mythical-witch' with the disjunction, '*x* is a witch & *x* is a mythical-witch'.



The Hob/Nob sentence (5) is not obtainable by existential generalization on 'Meg<sub>1</sub>', since by Kripke's lights, this name is supposed to be vacuous and to occur in nonextensional ('referentially opaque,' *ungerade*) position. Nor on Kripke's account can 'Meg<sub>2</sub>' be correctly substituted for 'Meg<sub>1</sub>'; Hob's and Nob's theories are supposed to concern the nonexistent witch Meg<sub>1</sub> and not the mythical witch Meg<sub>2</sub>. Kripke might instead accept the following, as a later-stage observation about the Meg<sub>1</sub> theory:

Meg<sub>2</sub> is the mythical witch corresponding to Meg<sub>1</sub>.

Here the relevant notion of *correspondence* places 'Meg<sub>2</sub>' in extensional position. While 'Meg<sub>2</sub>' is thus open to existential generalization, 'Meg<sub>1</sub>' supposedly remains in a nonextensional position where it is not subject to quantification. It is impossible to deduce (5) from any of this. Geach's puzzle does not support Kripke's account. On the contrary, the puzzle poses a serious threat to that account, with its denial that Hob's and Nob's thoughts are, respectively, a suspicion and a wondering regarding Meg<sub>2</sub>.

On my alternative account, we may instead observe that

Maggoty Meg is a mythical witch. Hob thinks she has blighted Bob's mare.

Nob wonders whether she killed Cob's sow.

We may then conjoin and EG to obtain (7). In the end, what makes (7) a plausible analysis is that it (or some variant) spells out in more precise language what (5) literally says to begin with, Babinet and Le Verrier provide a real-life case in which the thoughts of different thinkers converge on a single mythical object: Babinet thought he had seen an intra-Mercurial planet, and Le Verrier believed that it (the same 'planet') impacted Mercury's perihelion. The primary lesson of Geach's puzzle is that when theoretical mistakes are made mythical creatures are conceived, and in acknowledging that misbelievers are sometimes related as Nob to Hob, or as Le Verrier to Babinet, we commit ourselves to their illegitimate progeny.<sup>28</sup>

<sup>28</sup> It can happen that Hob misidentifies Maggoty Meg with, say, her mythical sister. Hob might thus notionally think that only one witch has blighted Bob's mare even though there are two mythical witches each of whom Hob relationally thinks has blighted Bob's mare.

One further note: The present analysis entails that (5) is committed to mythical witches. The analysis is not itself thus committed, and is consistent with the thesis that (5) is untrue precisely because of this commitment. Disbelief in mythical objects is insufficient ground for rejecting the analysis. It is a basis for rejecting the present solution to Geach's puzzle (which takes it that (5), so analyzed, can be true in the absence of witches, assuming Hob and Nob are real), but carries with it the burden of explaining the intuition that (5) can be true *sans* witches—a challenge that might be met by providing a plausible rendering of (5), as intended, that is free of mythical objects. (Good luck.)

