

BELIEVING IN THINGS

During the last five decades the number of men of solid reputation and standing (including some speaking for commercial and scientific institutions) who are willing to be at least open-minded about the sea serpent has steadily grown. And it is very important to fix in one's mind that these men use the term "sea serpent" with great reluctance and merely as a label, since this happens to be the established name. None of them is willing to believe in a real "serpent," that is, in a large marine snake (beyond those sea snakes of the Indian Ocean which are in zoology books and aquaria). They all use "sea serpent" to mean something in the seas which is in all probability a large animal, undiscovered and unknown, and probably even of mammalian nature.

Willy Ley, *The Lungfish, the Dodo, and the Unicorn*, pp. 99-100
New York: The Viking Press, 1948.

1. Introduction

Ontological debates can be characterized as disagreements about what we should believe in or as disagreements about what we should believe to exist. On the standard picture these characterizations are equivalent: to believe in sea serpents is nothing more or less than to believe that such creatures exist. My goal is to challenge the standard picture. I will argue that for some predicates *F*, a fully rational and reflective person might believe *that Fs exist* without at the same time believing *in Fs*. The distinction is a subtle one, and the bulk of the paper will be devoted to its explication and defense. The pay-off for making the distinction is considerable; it opens up a way of expressing ontological reservations about certain sorts of entities—without thereby denying that there *are* such things. This in turn provides a new way of understanding central debates in ontology, including debates about the existence of numbers, material objects, or mental states.

The tendency to straightforwardly equate the question of what we should believe in with the question of what we should believe exists can be traced to Quine, whose contention that in ontological matters it is the existential sentences that must take center

stage has gone largely unchallenged. Although Quine initially characterizes the ontological problem as a question about which entities we should ‘accept’, ‘acknowledge’, ‘admit’, ‘assume’, ‘countenance’, ‘hypostatize’, ‘posit’, ‘presuppose’, ‘reify’, ‘reckon’ or ‘believe in’, the question is quickly transformed into the question of what to believe there is, and then to the question of which existential sentences we are to accept as true.¹ It is unclear exactly how much Quine thinks this transformation preserves. He writes:²

The assuming of objects is a mental act, and mental acts are notoriously difficult to pin down. Little can be done in the way of tracking thought processes except when we can put words to them. For something objective that we can get our teeth into we must go after words [...] If we turn our attention to the words, then what had been a question of assuming objects becomes a question of verbal *reference* to objects.

One way of reading this passage suggests that Quine thinks we should ask what referring to objects consists in *instead* of asking what it is to assume them; another suggests that we should ask what referring to objects consists in because that is just a better way of *formulating* the original question we were interested in. I suspect that Quine’s actual intent lies somewhere between the two: the assuming of certain objects may well be something different from referring to them, but even so, a serious and clearheaded philosopher can safely ignore the difference. It is my aim here to show that this is not the case.

I will be using ‘believing in’ as a term of art, but in a way that roughly corresponds to one of its natural English uses — that which places it into the loose class of ontologically-committal terms such as ‘accept’ or ‘acknowledge’. The advantage of

¹ For Quine’s uses of ‘believe in,’ cf. Quine (1951) p. 44 and Quine (1981) p. 21; for the other terms, cf. Quine (1951) *passim* and Quine (1981) *passim*.

² Quine (1981) p. 2.

employing this terminology will become clear in section 4, but it is important that the reader not be misled by other uses of the expression.

First, when we say things like ‘Granny firmly believes in two cups of tea after dinner’ and ‘Surprisingly, Granny still believes in Bill Clinton’, we do not report the positing of something by Granny. The sense of ‘believe in’ here (sometimes called the ‘Pricean’ sense of the expression³) is different from the one employed in the discussions of ontology with which I will be concerned in this paper.

Second, I will be concerned exclusively with locutions where the grammatical object of ‘believe in’ is a *bare plural noun phrase*, as in ‘believes in green aliens’, ‘believes in numbers’, or ‘believes in transcendent universals’. An adequate semantic theory would have to account for much more, including phrases like ‘believes in Alpha Centauri’, ‘believes in a solution to Goldbach’s conjecture’, and ‘believes in the four riders of the Apocalypse’. However, a complete and adequate semantics for an *intensional transitive verb* like ‘believe in’ is hard to come by and its details are bound to be excessively controversial.⁴ For the purposes of the ontological issues with which I am here concerned, an elucidation of the meaning of sentences of the form ‘*x* believes in *Fs*’ will be sufficient.⁵ (This restriction will be important in section 3.)

³ For Price’s distinction, see Price (1969) Book II Chapter 9. There are cases when it is not quite clear whether ‘believe in’ is used in its ontologically relevant sense or not. E.g. ‘I believe in justice’ may mean that I posit the abstract entity justice, but it more likely means that I have a pro attitude towards justice. In the philosophy of religion, there had been discussion whether believing in God is the same as believing that God exists. Arguments against the identification are sometimes based on the claim that believing in God requires an element of trust whereas believing that God exists does not. Cf. Hick (1957) and Swinburne (1981). This argument seems to me to exploit the ontologically irrelevant sense of ‘believing in God’.

⁴ As it will be clear in section 4, I think none of the current semantic theories are fully adequate in accounting for the meaning of ‘*x* believes in *Fs*.’

⁵ Perhaps occurrences of proper names and quantified noun phrases in the grammatical object position of ‘believe in’ can be paraphrased away: instead of saying that someone believes in Alpha Centauri, we may say somewhat clumsily that he believes in things identical to Alpha Centauri, instead of saying that someone believes in the four riders of Apocalypse, we may say that he believes in riders of Apocalypse

Third, believing in things, like any belief, can be conscious or tacit; I can have an occurrent belief in birds, or a non-occurrent tacit belief. Tacit believings-in, like other tacit beliefs, generally involve dispositions to form occurrent or conscious beliefs. Though there may be exceptions (for instance, tacit beliefs that are manifest only through behavior, or after long years of therapy), I will set them aside for now. When I analyze sentences of the form ‘*x* believes in *Fs*’, I will exclusively concentrate on beliefs which involve a straightforward disposition to be manifested in a conscious way. (This restriction will be important in sections 4 .)

With these preliminary caveats in place, I can now describe the general plan of the paper. In section 2, I provide some motivation for rethinking the relationship between belief-in and belief-that. Certain “cheap” arguments seem to establish all too easily the existence of any manner of controversial entity, and none of the responses available on the standard picture is fully satisfying. Endorsing a distinction between believing that *Fs* exist and believing in *Fs*, however, provides a means for evading this predicament, and thus give initial impetus to the proposal. But it is not yet clear how the two beliefs could come apart, even in principle. In section 3, I begin the task of distinguishing between them by giving an example of a rational person and a meaningful predicate ‘*F*’ such that the person believes that *Fs* exist but does not believe in *Fs*. Although this shows that one cannot in full generality equate belief in *Fs* and belief that *Fs* exist, the example might be dismissed as peripheral. A proponent of the standard picture could still hold that in the

whose number is four. I am not convinced that these paraphrases preserve truth-conditions. Regarding the former one might object that the truth of ‘*a* believes in Alpha Centauri’ is compatible with treating ‘Alpha Centauri’ as a mass noun, but the truth of ‘*a* believes in things identical to Alpha Centauri’ is not. Regarding the latter one might argue that if *a* believes in riders of the Apocalypse whose number is four *a* must also believe that the number four exists, but not so if he only believes in the four riders of the Apocalypse.

philosophically interesting cases there is no significant distinction to be drawn. So, I need to go beyond mere examples.

The central argument of the paper begins in section 4. There I argue that the proper analysis of consciously believing in *Fs* requires thinking of *Fs* and a commitment that this thought is representationally correct. So if thinking of *Fs* is not reducible to propositional thinking, we should expect that believing in *Fs* is similarly not reducible to propositional belief. I also argue that the antecedent holds: thinking of *Fs* is non-propositional. But what, then, does it consist in? In section 5, I argue that thinking of *Fs* is to stand in a certain cognitive relation to a *term* — the term expressed by '*Fs*' — and I provide an account of conscious belief in *Fs* on this basis. In the final section, I discuss the implications of this view for current ontological debates.

My aim in this paper is not to defend any particular ontological position; it is rather to argue for the conceptual possibility of ontological views of a certain kind. The ontological views in question accommodate one's doubts regarding *Fs* without eschewing the belief that there *are Fs*. Someone who holds such a view with respect to a certain putative entities is committed to those in one sense, but not in another.⁶ So, the attempt to defend the coherence of such views falls squarely into the tradition of trying to have one's ontological cake and eat it too.

⁶ Hodes (1990) has defended the view that we should distinguish between two sorts of ontological commitment, thin and thick: we bear thin ontological commitment towards things our theories say exist and thick ontological commitment towards things that must exist for our theories to be true. Ultimately this distinction derives from another: Hodes argues that the semantic job of certain singular terms (among them the ones we use to talk about numbers and sets) consists in something other than designation, and that consequently these terms refer only in a less than fully robust sense. I find the idea of two kinds of reference suspect; I prefer to ground the distinction between two sorts of commitment in two sorts of belief.

2. Cheap Arguments

Certain platitudes seem to yield apparently sound but unpersuasive arguments for the existence of just about anything philosophers would care to argue about⁷. Here are some familiar examples:⁸

There are primes larger than 100.
Primes are numbers.
Therefore, numbers exist.

Here is a hand and here is another.
Hands are physical objects.
Therefore, physical objects exist.

I am thinking of Paris.
Thinking of Paris is a mental state.
Therefore, mental states exist.

The first sentence of *Alice in Wonderland* says something.
What sentences say are propositions.
Therefore, propositions exist.

If ontological debates are debates about what we should believe exists, then a cheap argument confronts us with three options⁹:

- (I) We can accept it as sound and conclude that the relevant ontological question is thereby settled.
- (II) We can reject the first or second premise as false.
- (III) We can reject the validity of the argument on the grounds that it equivocates.

⁷ A number of philosophers have recently emphasized the importance of such cheap arguments; cf. Wright (1983), esp. pp. 25-36, Field (1984), Hale (1987), esp. pp. 15-45, Horwich (1990), pp. 91-3, Schiffer (1996), Yablo (1998). All cheap arguments proceed from apparently uncontroversial existence claims to apparently weighty ontological theses. But not all such arguments are of the same form. For example, the arguments Wright and Hale focus on include ‘semantic ascent’: they draw the ontological conclusion from the additional premise that the apparently singular terms appearing in these arguments are genuine singular terms and that the sole semantic function of genuine singular terms is reference.

⁸ Arguments of this sort presuppose the synonymy of ‘there are’ and ‘there exist’ — an equivalence that the Meinongian rejects. (I briefly consider this move in footnote 12 below.) Additional regimentation is obviously required to render the arguments transparently valid.

⁹ Of course, different arguments may require different reactions. Note, however, that option (III) appears to be applicable universally or not at all: either arguments of this type equivocate or they don’t.

All of these options, I will suggest, bear high costs: the first renders ontological questions trivial, the second threatens to undercut the common ground necessary for debate even to begin, and the third attributes to speakers an implausible degree of ignorance concerning their own utterances. That each of the options seems unsatisfactory is, of course, not decisive evidence for the falsity of their shared presupposition (namely, that ontological debates are primarily concerned with what we should believe exists.) But the residual uneasiness that each leaves us shows that something further may be at stake.

The problem with (I) is that if ontological debates can be so readily resolved, then they seem to be unsuitable for serious philosophical inquiry¹⁰. To maintain that philosophers have somehow missed the fact that trivial arguments take care of practically all ontological problems strikes me as implausible. It is not *irrational* to take a skeptical or outright eliminativist stance towards any of these putative entities, even if it is in the end *incorrect* to do so.

The worry about (II) is that by following it we run the risk of losing our grip on the subject matter of our disagreements. This may be more easily granted with regard to the second premises than with regard to the first. After all, the second premises are good candidates for analyticity. Surely, if primes are not numbers, hands are not physical objects, thinking of Paris is not a mental state, and what sentences say are not

¹⁰ Two remarks: Although accepting the soundness of the cheap arguments brings one quite close to what Lewis calls ‘allism’ (cf. Lewis (1990)), one might still face difficulties in generating premises concerning, for instance, Pegasus or the round square. Second, thinking that there are no interesting ontological questions is not the same as thinking that metaphysics is empty. Quite the contrary, one *might* think that the very point of eliminating ontological debates is to make room for serious discussion about the nature of qualia, numbers and the rest. For example, one might want to argue that *because* the existence of these entities can be so easily established, we should say that they are, in a sense, dependent on our own linguistic or cognitive abilities. For a recent discussion of what sort of dependence might be at issue, see Schiffer (1996).

propositions, then it's a bit unclear what is at issue when we are arguing whether there *are* such things. By contrast, the first premises make claims about what there is, so one may reasonably deny that acceptance of these claims is constitutive of one's understanding of the terms 'prime', 'hand', 'thinking' or 'saying'. But even granting that the first premises are not *analytic*, it is hard to deny that they are *prima facie* utterly *obvious*. In ordinary non-philosophical contexts we do utter such sentences seriously and without the slightest indication that what we are doing is anything but a straightforward commitment to their truth. Philosophy can be reversionary, it can lead us to reject platitudes. Nevertheless, we should be cautious in faulting the beliefs we treat ordinarily as extremely secure.

There are, of course, sophisticated moves defenders of (I) or (II) might make in response to these difficulties. But faced with the prospect of undergoing such contortions, there is a temptation to retreat to (III), a rather complicated explanation of the first premise's ontological innocence.

The usual diagnosis of equivocation goes roughly as follows¹¹: In a "loose and common" ontologically innocent sense, the first premise of the argument is true, as is the second, from which the conclusion follows. But *that* sense of 'there exist' and 'there are' was not what we were concerned with when we set out to do ontology. What we care about as far as the conclusion goes is existence in the "strict and philosophical" sense. So those who are persuaded by such arguments have been bamboozled; they have construed the first premise loosely, and the conclusion strictly. Once they realize that there are two

¹¹ For versions of this move, see almost any philosopher with a surprising ontological view. For a clear, detailed exposition, see Section 10 of van Inwagen (1990). Note that one may wish to locate the source of the equivocation not in 'exist', but in some other term used in the arguments. I don't think this effects the general concern I raise about (III).

ways of understanding the first premise — an ontologically innocent sense according to which it is true, and an ontologically committal sense according to which it is false — and once they realize that the conclusion requires the second sense, the argument will be seen to be invalid.

The problem is how to reconcile this analysis with a serious account of the semantics and pragmatics of existential sentences. There are three standard strategies for explaining how apparently assertoric utterances of existential sentences could lack existential force¹²: (i) claiming that such sentences can be paraphrased by sentences that obviously lack such force; (ii) claiming that in the relevant contexts such sentences express non-standard (e.g. substitutional) quantification; (iii) claiming that in the relevant contexts such sentences are not to be taken literally. The common worry that confronts these proposals is that even if one of them is true, it is hard to believe that competent speakers of English must *know* that it is. But if we accept that competent speakers lack such knowledge, then all three boil down to the suggestion that there are certain truths about the way we *should* interpret ordinary utterances that are hidden from linguistically unsophisticated but otherwise able native speakers. In other words, interpretation — the process whereby a competent hearer determines what a particular utterance of the speaker is supposed to convey — is a radically *non-transparent* matter. We need philosophers to tell us what we mean.

¹² There is a famous fourth, the Meinongian thesis, which says that there is a sense of ‘there are’ according to which there are objects which don’t exist. (Note that someone who believes this doesn’t *have to* also believe that in that sense of ‘there are’ there are unicorns and round squares, i.e. one doesn’t have to be a full-blown Meinongian to embrace the Meinongian thesis. For a recent modest version of the doctrine of non-existents, see Azzouni (1997).) I will follow Quine and many others in assuming that this is a dead end: there simply are no non-existent objects. For arguments that seem to me to be decisive, see Lewis (1990).

In sum, all of the obvious options for dealing with the cheap arguments push us in unpleasant directions: (I) towards the view that ontology is vacuous, (II) towards the view that ontological debate is futile, and (III) towards the view that ontological talk is obscure. This is an unattractive trilemma. However, if we reject the equation of believing that *Fs* exists with believing in *Fs*, a fourth option for dealing with a cheap argument becomes available:

- (IV) We can accept the argument as sound *without* regarding the relevant ontological question thereby settled.

Distinguishing what we should believe in from what we should believe exists makes it possible to maintain that ontological inquiry is a serious matter. Such an inquiry aims at answering the question whether we should believe in *Fs*, rather than the admittedly often trivial question whether we should believe that *Fs* exist. This would be good news indeed.

Of course, there is a great deal of work to be done in showing that the distinction can be made and sustained. In the next section, I will take the first steps towards doing so.

3. What Horatio doesn't believe in

I do not claim omniscience. So when I consider my ontology, I am firmly convinced that it lacks certain things which in fact exist. In this regard, I am like Horatio, of whom Hamlet rightly said: "There are more things in heaven and earth, Horatio, Than are

dreamt of in your philosophy”¹³. If he is reasonable, then, Horatio believes that there are things that he doesn’t believe in. And if believing that there are *F*s is the same thing as believing in *F*s, then Horatio should believe in things he does not believe in. But while (1) seems true, (2) is apparently false¹⁴:

- (1) Horatio believes that things Horatio doesn’t believe in exist.
- (2) Horatio believes in things Horatio doesn’t believe in.

And if (2) is false while (1) is true, then the predicate ‘things Horatio doesn’t believe in’ yields a counterexample to the thesis that belief in *F*s is just belief that *F*s exist.

It is important that the counterexample does not rest on the peculiarities of the English expression ‘believe in’. As I mentioned in Section 1, I intend to use ‘believe in’ in the way Quine used his numerous intensional verbs for ontological commitment, such as ‘assume’ or ‘admit’. ‘Believe in’ could be replaced by one of these and the contrast would remain. We would not say that Horatio assumes things he does not assume or acknowledges things he does not acknowledge. At the same time, he *does* assume that things he does not assume exist and he *does* acknowledge that things he does not acknowledge exist. Whatever accounts for the perceived divergence of the truth-values of (1) and (2), it must be something that all these intensional transitive verbs have in common.

¹³ The relevant line in the Folio reads ‘our philosophy’, which makes the point even better.

¹⁴ It is not entirely clear how to characterize the incoherence involved in believing in things one does not believe in. One possibility is to rely on the following principle: If one believes in *F*s and if one reflects on this belief, one cannot but believe in *F*s one believes in. Assuming that believing in *F*s one believes in is just believing in *F*s which are such that one believes in them, we get that if Horatio believes in things Horatio does not believe in, and if he reflects on this belief, he must also come to believe in things Horatio does not believe in which are such that Horatio believes in them. This latter belief is clearly contradictory.

Now, I don't think it can be plausibly denied that (1) is true and (2) is false on their most natural readings.¹⁵ Still, the conclusion that this shows the need to distinguish between 'believing-in' and 'believing-that' can be resisted. Perhaps there are different ways to construe these sentences and *both* sentences are ambiguous in exactly the same way. Our intuitions that (1) is true and (2) is false would be explained by the fact that the true reading is more natural for (1) and the false reading is more natural for (2). It must be conceded that the suggestion is *prima facie* implausible: to utter (1) is not to say or imply that Horatio is confused, to utter (2) is not to ascribe to him a perfectly innocent belief. But perhaps we can find some reason to believe that these undetected readings are real.

When we want to argue that a sentence is ambiguous despite the fact that it appears to have uniform truth-conditions across contexts of use, we need to bring in considerations of systematicity. For example, the sentence 'There is a car parked in front of every house on this street' would be regarded by semanticists as allowing for a wide scope existential reading despite the fact that it would normally not be used that way. (How could there be the same car parked in front of all the houses on a street?) This is because the sentence 'There is an architect who designed every house on this street'

¹⁵ I have encountered the objection that since there are obvious similarities between believing that there are things one does not believe in and believing that there are mistakes in a book one wrote, (1) is false if Horatio is really rational and reflective. Including the sentence 'Mistakes in this book exist' in the preface of a book renders it impossible to coherently accept all of the book's sentences as true. Better to write 'There may well be mistakes in this book' and in this way to avoid the paradox. Similarly, continues the objection, if Horatio wishes to express modesty concerning his ontology, he need only accept 'Things Horatio doesn't believe in may well exist.' This latter sentence is of course true; the illusion that 'Things Horatio does not believe in exist' is also true is the result of confusion. But the analogy between Horatio's paradox and the paradox of the preface is unmotivated: there is no threat of paradox in Horatio's saying 'Things Horatio does not believe in exist.' (The sentence he *couldn't* coherently write down or utter is 'Things Horatio disbelieves in exist' — but this is a good deal stronger claim). So there is no reason the reflective Horatio should reject that there are things he does not believe in.

obviously allows for a wide scope existential reading. Given the structural similarity between the two sentences, we expect that neither or both would have such a reading, and the second of these alternatives poses by far the smaller explanatory challenge.

A similar line of reasoning might be used to argue for the ambiguity of (1) and (2): ‘Believe in’ is an intensional transitive verb, like ‘admire’, ‘look for’, or ‘want’. When such expressions take singular indefinite complements, they display a familiar sort of ambiguity. Consider (3):

(3) Horatio is looking for a unicorn.

This sentence has a *notional* reading, which can be true if Horatio is uninformed, and a *relational* one (paraphrasable as ‘Some unicorn is such that Horatio is looking for it’), which due to the non-existence of unicorns is false no matter what Horatio thinks. We find similar ambiguities when we replace ‘a unicorn’ in (3) with ‘two unicorns’, ‘many unicorns’, or ‘all unicorns’. So, it seems plausible to suggest that intensional transitive verbs in general permit notional and relational readings. If so, we can say that (2) has a notional reading, which ascribes an innocent belief to Horatio, and a relational reading, (roughly: ‘Things Horatio does not believe in are such that Horatio believes in them.’) which accuses him of an absurd belief. And a similar ambiguity can be found in (1). The only difference between (1) and (2) is which of these readings is more naturally elicited.¹⁶

¹⁶ Note that this proposal is worse off than the claim that ‘There is a car parked in front of every house on this street’ has a hidden wide scope existential reading. We have a clear sense why the wide scope existential reading is hidden: it is hard to imagine a situation when a single car would be parked in front of every house on a street. There is no comparably convincing explanation why (2) is interpreted as ascribing an absurd belief to Horatio if the sentence also has a reading that ascribes a perfectly innocent belief to him. After all, such an interpretation flies in the face of the principle of charity.

But there is a problem with this proposal. Although it is plausible to say that (3) has a relational reading, the same does not hold for (4):

(4) Horatio is looking for unicorns.

There is no way to read (4) as entailing the existence of unicorns. Of course, things would be different if instead of the bare plural noun phrase, we had a plural indefinite:

(4') Horatio is looking for some unicorns.

(4') does have a reading where Horatio is looking for some *specific* unicorns, a reading that perhaps is correctly paraphrased as 'There are some unicorns Horatio is looking for.' But this is just the way (4) and (4') differ.

In fact, this phenomenon is fairly general: intensional transitive verbs whose grammatical objects are bare plural noun phrases typically lack relational readings.¹⁷ No reading of 'Horatio fears/needs/wants/admires/worships/thinks of unicorns' commits us to the existence of unicorns. (Would you ever say 'No basketball team wants 10-foot-tall players. After all, there are no 10-foot-tall players'?) And the same holds, I contend, for 'Horatio believes in unicorns.' And if this is so, it is hard to see how replacing 'unicorns' with another predicate, i.e. 'things Horatio does not believe in' could change the situation.

In sum, there appears to be no good reason to suppose that (2) has a reading that ascribes an innocent belief to Horatio. We can say without equivocating that Horatio, if he is sufficiently reflective, does believe that there are things he does not believe in, but he nevertheless fails to believe in such things.

¹⁷ The observation is due to Carlson (1977), pp. 14 – 7. Carlson argues for a more sweeping claim: he thinks that bare plurals in general do not receive a wide scope existential reading when they occur as

However, the *significance* of this result is far from obvious. Even if Horatio's case shows that belief in *Fs* and belief that *Fs* exist do not fully coincide, a defender of the orthodoxy might maintain that the example is of peripheral interest. Surely, she might insist, we still have ample reason to think that for predicates that feature in genuine ontological debates, these two beliefs go hand in hand: someone who believes that sets, numbers or possible worlds exist thereby believes in sets, numbers, or possible worlds, respectively. Still, once we have a counterexample, however peripheral it may seem, we should be worried about the central cases as well. To refute or substantiate these worries we need a substantive account of what belief in *Fs* amounts to.

4. Thinking of things

Even if the standard view that identifies belief in *Fs* with belief that *Fs* exist is incorrect, as the Horatio example suggests, it is still true that in saying that someone believes in *Fs* we ascribe to this person a *belief*. This has two important consequences.

First, belief-in, like belief-that, is a mental state with representational content. To believe in spotted frogs is to represent the world as being in some way, roughly, as containing spotted frogs. Like all representations, beliefs can be correct or incorrect. In the case of believing-that, the content is a proposition and representational correctness depends on the truth or falsity of this proposition. Whether the content of believing-in is also a proposition should not be prejudged at this point. But whatever the content of a

complements. This claim has been objected to in Kratzer (1980) and is still the subject to fierce debate within linguistic semantics. My argument does not rely on the strong claim.

belief in spotted frogs might be, it must account for representational correctness or incorrectness of such a belief.

Second, beliefs can be conscious or not, and when they are conscious, one must actually think what one believes. When one is aware of one's belief that Tashkent is in Uzbekistan, one must be thinking that (in the sense of 'entertaining'¹⁸) Tashkent is in Uzbekistan. Similarly, when one is aware of one's belief in spotted frogs, one must be thinking of (in the sense of 'considering') spotted frogs. In the former case what one thinks and what one believes are the proposition that Tashkent is in Uzbekistan. Again, what the content of one's belief in spotted frogs is remains to be seen. But whatever it is, it is the same as the content of one's thinking of spotted frogs.

The standard analysis of conscious belief-that is that it involves a commitment to the truth of the proposition one entertains:

(CB-that) *a* consciously believes that *S* iff *a* thinks that *S* and is committed to the truth of this thought

We can discern a perfectly general core in this analysis: conscious belief involves thinking a certain content and being committed to the representational correctness of this content. In the case of consciously believing that *S*, one is committed to the representational correctness (i.e. truth) of one's thought that *S*; in the case of conscious belief in *Fs*, one is committed to the representational correctness of one's thought of *Fs*.

(CB-in) *a* consciously believes in *Fs* iff *a* thinks of *Fs* and is committed to the representational correctness of this thought

¹⁸ 'Thinking-that' is uncontroversially ambiguous, one of its senses being roughly synonymous with 'believing-that', the other with 'entertaining-that'. Throughout the paper, I use the term only in the latter sense.

This analysis is less informative than (CB-that). We don't have a very good grasp of what it is to think of *F*s. It is not clear what the content of such a thought is and even less clear what would be for such a content to be representationally correct. But at least we know what to look for. If we can answer these questions, we will have an account of conscious belief-in. Believing in *F*s can then be regarded as a disposition to consciously believe in *F*s (or perhaps as the categorical basis for such a disposition).¹⁹ An account of thinking-of holds the key to an account of believing-in.²⁰

There are two very natural suggestions concerning the nature of the mental state of thinking of *F*s. One proposal is that a subject is thinking of *F*s just in case she stands in a certain cognitive relation to certain things that are *F*s; call this the *objectual view*. The other is that a subject is thinking of *F*s just in case she stands in a certain cognitive relation to a proposition about *F*s; call this the *propositional view*. I have no knock-down objection against either of these, but I think there are good reasons to suspect that both are mistaken. After discussing these reasons, in the next section I will present my alternative.

The problems that confront the objectual view stem from the fact that it has difficulty accounting for cases where we take ourselves to be thinking of things that do not, as a matter of fact, exist. This general problem manifests itself in two related ways: first, the objectual view is committed to the claim that being wrong about the content of one's own thoughts is a perfectly ordinary matter; second, the view has difficulties accounting for parallels between thinking-of and believing-in.

¹⁹ As I mentioned in section 1, I am neglecting the complication that some beliefs (e.g. beliefs constituting our knowledge of grammar) do not involve dispositions to be manifested explicitly.

Suppose, for instance, that the following archaeological hypothesis is true: the builders of the Egyptian pyramids were not slaves but paid workers. Suppose further that I am ignorant of this hypothesis and consequently still believe what I learned in school: that slaves built the pyramids. What should we say when I claim that I am thinking of slaves who built the pyramids? If thinking of slaves who built the pyramids requires that I stand in a certain cognitive relation to slaves who built the pyramids, then I must be mistaken about what I am thinking — by hypothesis there *are* no such things, so I cannot stand in any cognitive relation to them. According to the defender of the objectual view, either (i) I am not thinking anything, or (ii) I am thinking a thought with no content, or (iii) I am thinking a thought whose content is different from what I think it is. And whenever I am apparently thinking of things that I mistakenly believe exist, I will be faced with this trio of options.

Initially it might seem that the trichotomy is not so bad; after all, it is certainly possible for us to be wrong about what mental state we are in. If I travel to El Gîza with insufficient water and upon arrival claim to be *seeing* slaves building the pyramids, it may well be correct to say that I am not seeing anything at all, or at least that I am not seeing anything with the content that I take my seeing to have; I am simply *hallucinating*. But while hallucinating may resemble seeing from a first-person perspective, there is a fundamental difference between them: when I see, my visual system functions normally; when I hallucinate, it does not. This seems enough to justify the claim that a hallucinating subject is wrong about the content of his own mental state. But thinking of things that do

²⁰ Note that those who identify believing in *F*s with believing that *F*s exist need not take issue with (CB-in). They could simply say that thinking of *F*s is thinking that *F*s exist. I discuss this option later in this section.

not exist cannot be construed in the same way. If nothing is wrong with my mental functioning, then thinking of slaves who built the pyramids seems to be something that I can do — regardless of whether there are such slaves.

These considerations give rise to a related problem: on the objectual view, the connection between thinking-of and believing-in is a mystery. I said in the previous section that consciously believing a certain content requires thinking that content and judging it to be representationally correct. But this cannot be right if the objectual view is true. For even if staunch defenders of the objectual view deny that we can think of non-existents, they would not deny that we can (mistakenly) believe in non-existents. So according to proponents of the objectual view, those who believe in ghosts or Martians must believe in things they cannot think of. I am not sure what to make of this idea. In the end, giving up the thesis that one cannot believe in what one cannot think of seems to me to be an excessively high price for securing the initially appealing intuition that the *Fs* themselves must comprise the content of one's thought when one is thinking of *Fs*.

The problems the objectual attitude view has with thought about the non-existent are strikingly similar to the problems we encounter if we want to say that the content of our thinking that snow is white is the *fact* that snow is white. For, on such a view, there is nothing obvious to serve as the content of the thought that snow is green. As a result, we face the familiar trio of unappealing alternatives: that we cannot think that snow is green, that in thinking that snow is green we have a contentless thought, or that the content of this thought is something quite different from what it initially seems to be (the fact that snow is white? or perhaps the fact that grass is green?). Instead of taking any of these

routes, most philosophers have accepted that the contents of thinking-that are not facts but propositions.

If propositions can serve as contents for thinking-that, perhaps they can serve as contents for thinking-of as well. Thinking-of would then be a *propositional attitude*, perhaps a special case of thinking-that. If we take this course, we would say that thinking of *Fs* is just thinking some proposition about *Fs*. There is a *prima facie* implausibility here; if I say that I am thinking of Martians, it seems out of place for you to reply: “What you think is false.” By contrast, such a reply seems all right if I say that I am thinking that Martians are about to invade us. Nevertheless, I don’t think we should put too much weight on this sort of evidence: perhaps there is some perfectly ordinary linguistic explanation why your use of the expression ‘what you think’ can pick out the proposition I am thinking in the second case, but not in the first.

In any case, a deeper cluster of problems confronts the propositional view, all arising from the fact that there seems to be no plausible way of specifying *which* proposition one is entertaining when one is thinking of *Fs*: in every case, either the propositional paraphrase seems to allow too much leeway, or it seems to allow too little. The inadequacy of all such candidates suggests that there is something wrong with the proposal at its base — thinking-of is not, after all, a propositional attitude.

Take, for instance, the liberal view that thinking of *Fs* is just thinking some proposition or other about *Fs*. According to such a proposal, two people could both think of spotted frogs without entertaining the same content: the first could be thinking that spotted frogs are slimy while the second that spotted frogs are loud. So on such a view, simply saying that one is thinking of spotted frogs will not convey the content of one’s

thought — a rather high price to pay.²¹ At the same time, the view seems in another way to require too much specificity, for it seems that one can think *of* things without thinking *about* those things. If I say ‘I am thinking about spotted frogs’, the question ‘What are you thinking about them?’ seems like a request for further elaboration of the content of my thought; if I say ‘I am thinking of spotted frogs’, the question ‘What are you thinking of them?’ sounds much more like a request for reporting the content of some *other* thought.

Given the implausibility of the liberal view, the alternative seems to be to suggest that there is a *specific* proposition that is the content of one’s thinking of *Fs*. Clearly, the proposition in question cannot be very informative. It would be wrong to say that to think of spotted frogs is to think that spotted frogs are slimy or that spotted frogs are loud: it is possible for one to think of spotted frogs and then imaginatively ascribe roughness or lack of voice to them without thereby coming to have an incoherent thought. What about the candidates that ascribe only universally held properties? Thinking of spotted frogs could be, for example, thinking that spotted frogs are self-identical, that spotted frogs are loud or not loud, that spotted frogs have all the attributes of spotted frogs, etc. But again, these seem not to capture the content of my thought: when I am thinking of spotted frogs, it doesn’t seem that I am thinking anything as complicated as these. A slightly different problem confronts the natural proposal that thinking of *Fs* is thinking that *Fs* are some

²¹ The proposal that all intensional transitive verbs should be given a clausal analysis is offered in den Dikken, Larson and Ludlow (1996) and considerably refined in Larson, den Dikken and Ludlow (1998). In the latter paper, the authors argue that the logical form of the sentence ‘Max imagined a new car’ contains a concealed predicate, and so the sentence can be paraphrased as, say, ‘Max imagined a new car in the driveway.’ One can certainly conceive of a context where it is clear to the interpreter that Max has imaginatively placed the new car in the driveway, as opposed to, say, the lawn in front of his window. But usually this is not the case. So it seems that this sort of analysis predicts that ordinarily if all Max tells us is

way: namely that sentences of the form ‘*a* thinks that *Fs* in some way’ are ambiguous in a way that sentences of the form ‘*a* thinks of *Fs*’ are not.²² Each of the paraphrases seems inadequate; the proposed propositional contents fail to capture what thinking of *Fs* amounts to.

There is, however, one further candidate that seems less likely to under- or out-run its target in these ways: to think of *Fs* is to think that *Fs* exist.²³ This paraphrase does not raise obvious problems with content— it seems plausible, as Hume pointed out, that “to reflect on any thing simply, and to reflect on it as existent, are nothing different from each other.”²⁴ Although I think this is the best propositional account of the content of thinking-of, it still has serious problems with things we cannot think of.

It seems that we are able to make judgments about the truth or falsity of propositions about the existence of entities we cannot think of. We can, for instance, judge that it is false that round squares exist; we do so by thinking (entertaining) that round squares exist, and judging that content to be false. But if thinking of *Fs* were in general the same thing as thinking that *Fs* exist, then on account of our ability to think (entertain) that round squares exist, we should also be able to think of (consider) round squares. It seems, however, that we cannot think of round squares. I don’t have an interesting theory to offer as to *why* this is so, but the difficulty seems to arise from the manifest incoherence in the predicates we use to describe such putative things.

that he imagined a new car, we will remain in the dark not only about what exactly he imagined but also about what exactly he said. This result strikes me as unintuitive.

²² According to one reading *a* thinks that there is some way such that *Fs* are that way, according to the other *a* thinks that *Fs* are one way or another – different *Fs* perhaps in different ways. No such ambiguity seems available for sentences of the form ‘*a* thinks of *Fs*.’ Cf. Forbes (1998).

²³ This proposal is made explicitly in Parsons (1997).

²⁴ Hume, *Treatise* 1.2.6.

The problem does not disappear if we insist that the intuition that we cannot think of round squares is incorrect. Even if for each meaningful predicate '*F*' we can, in principle, think of *F*s, thinking of *F*s cannot be the same as thinking that *F*s exist. Consider again our epistemically cautious Horatio, who presumably believes that things he will never think of exist. When he is aware of this belief, he thinks the apparently non-problematic proposition that things he will never think of exist. But if thinking that *F*s exist and thinking of *F*s are the same thing, then this is the same as Horatio's thinking of things he will never think of. But I don't think Horatio can think of things he will never think of, especially not simply by virtue of consciously believing that there are such things.

In fact, we don't even have to consider cases involving reflexivity in order to dispute the identification of thinking of *F*s with thinking that *F*s exist. Suppose someone tells you that on Mondays the Dalai Lama is thinking of certain things, but he does not tell you what those things are. Can you think of things the Dalai Lama is thinking of on Mondays? The request sounds absurd: of course, you cannot. But defenders of the version of the propositional attitude view under consideration must insist that you *can*, after all, think of things the Dalai Lama is thinking of on Mondays. If thinking of *F*s is thinking that *F*s exist, then by substituting for '*F*' the predicate 'things the Dalai Lama is thinking of on Mondays' we get that thinking of things the Dalai Lama is thinking of on Mondays is nothing over and above thinking that things the Dalai Lama is thinking of on Mondays exist. But thinking (entertaining) the proposition that things the Dalai Lama is thinking of on Mondays exist is surely something you can do! So, you can, after all, think

of (consider) things the Dalai Lama is thinking of on Monday. This, I suggest, is an unacceptable consequence.²⁵

In sum, neither the objectual nor the propositional account of thinking-of seems properly to capture what thinking of amounts to: neither *Fs* themselves nor some proposition about *Fs* seem to be what we are cognitively related to when we think of *Fs*. If this is correct, then thinking of *Fs* is neither *de re* (since one can think of *Fs* without there being *Fs*) nor *de dicto* (since one can think that there are *Fs* without thinking of *Fs*).

Of course, one *could* appeal to ambiguity here. A defender of the objectual view might say that in one sense we can think of slaves who built the pyramids, in another we cannot; a defender of the propositional view might say that in one sense we can think of things someone else is thinking of, in another we cannot.²⁶ But these suggestions are *ad hoc*; barring some powerful argument, we are entitled to regard ‘thinking of *Fs*’ as unambiguous. In the next section, I will propose an account of the content and correctness of thinking-of that postulates no ambiguity.

5. Terms and conceptions

I suggest that the content of one’s thinking of *Fs* is a *plural term*. By ‘term’, I mean whatever it is that a noun phrase contributes to propositions expressed by sentences in which the noun phrase occurs; by ‘plural term’ I mean a term expressed by a bare plural noun phrase. This, of course, is only a schematic characterization; one cannot say much

²⁵ In response to who hold that ‘I am thinking of things the Dalai Lama is thinking of on Mondays’ has a true reading, I offer the discussion of the Horatio example in section 3. Analogous points can be made here.

more without saying what propositions are. If propositions are sentences in the language of thought, then terms are Mentalese phrases. If propositions are functions from possible worlds to truth-values, then terms are functions from possible worlds to whatever one takes noun phrase denotations to be. If propositions are structured entities ultimately made up of objects, properties and relations, then terms are some of their components, also ultimately made up of objects, properties and relations. If propositions are the interpreted logical forms of sentences expressing them, then terms are appropriate subtrees of those interpreted logical forms. And so on, for any reasonable conception of propositions one might suggest. As long as we concede that noun phrases systematically contribute *something* to the propositions expressed by the sentences in which they occur, we can call these contributions terms.²⁷

Let me introduce a notional convention. I will use square brackets to talk about the term a noun phrase expresses, and to emphasize the connection between terms and propositions, I will use the same device to talk about propositions. Using this notation, my claim entails that ‘spotted frogs’ contributes [spotted frogs] to [Spotted frogs like to sleep when it is hot]. To think that spotted frogs like to sleep when it is hot is, I suggest, to stand in a certain relation, say T_p , to the proposition [Spotted frogs like to sleep when it is hot]; to think of spotted frogs is to stand in a certain relation, say T_t , to the term [spotted frogs].

²⁶ Prior (1971) p. 114 explicitly advocates the view that in one sense we can think of x only if we infallibly know that x exists and in another sense we can think of anything whatsoever.

²⁷ I am aware of the fact that my terminology is non-standard here. Most philosophers would reserve the term ‘term’ for linguistic expressions, not for their semantic values. But I think the words ‘proposition’ and ‘term’ should go hand in hand: since we no longer use the former to refer to linguistic expressions, we should not use the latter that way either.

I would like to say that both T_p and T_t are both the relation expressed by the English verb ‘think’. But I cannot quite say that. The uniformity of notation cannot disguise the fact that T_p and T_t differ in that they take different kinds of entities as their objects: the former is a relation between believing subjects and propositions, while the latter is a relation between believing subjects and plural terms. Still, there is enough similarity here to justify calling the two cognitive relations two kinds of thought.

Adopting this view about thinking-of makes it possible for us to say that we can think of Martians, even though Martians do not exist. To think of them is to stand in the T_t relation to the term [Martians]. Of course, we cannot then identify [Martians] with an entity whose existence depends on the existence of inhabitants of Mars, but this is nothing more than a sensible constraint on any account of the nature of this term. The intuition that we cannot think of round squares can also be accommodated; all we need to say is that standing in the T_t relation to [round squares] is not a prerequisite for standing in the T_p relation to any proposition which contains [round square] as a constituent. Again, this seems right: in order to think that round squares are beautiful I don’t have to think of round squares.²⁸

The idea that T_t is a relation between individuals and terms is reminiscent of a Montague-style analysis of intensional verbs.²⁹ According to such an analysis, when John seeks a unicorn, he stands in a certain relation — call it S_t — to the intension of the indefinite noun phrase ‘a unicorn’. Montague himself was quite specific about what this intension is: it is a function from possible worlds to the set of those properties that are

²⁸ As I mentioned in section 5, I am inclined to say that thinking about round squares is just thinking some proposition or other that is about round squares. Consequently, the claim that thinking of round squares is

had by at least one unicorn in those worlds.³⁰ Whether this is the right intension is a subject of debate within linguistic semantics; it has, for example, been suggested that the intension of ‘a unicorn’ should be simply the property of being a unicorn.³¹ But the core of the approach is only the thesis that the entity we stand in the S_t relation to the term [a unicorn], whatever exactly this entity is supposed to be.

Many philosophers object to Montague-style approaches to the semantics of intensional verbs and the same objection applies to my proposal as well. It just does not seem right to say that *what* one seeks when one seeks a unicorn is a term. What I seek when I seek a unicorn is an *animal* of some sort, and terms — whatever they might be — are certainly not animals. Plausible as it first sounds, when scrutinized, this objection turns out to be rather weak. When I seek a unicorn, what I seek does not exist, and hence, what I seek is not a term — or an animal. Just as we reject the inference from ‘I seek a unicorn’ to ‘There is something I seek’, so too must we reject the inference from ‘I seek a unicorn’ to ‘What I seek is a unicorn’. And so the objection doesn’t get off the ground. What a Montague-style analysis says is not that in seeking a unicorn we seek a term; rather, that to seek a unicorn is to stand in a certain relation (expressed by the intensional transitive verb ‘seek’) to a term (expressed by ‘a unicorn’).³²

not a prerequisite for thinking any proposition about round squares can be restated as the claim that thinking of round squares is not a prerequisite for thinking about round squares.

²⁹ The *locus classicus* is Montague (1974).

³⁰ I am simplifying and abbreviating. I have dropped indices other than those standing for possible worlds, and I have let ‘set of properties’ stand proxy for a function from properties to truth-values and ‘property’ for a function from possible worlds (and other indices) to sets of individuals.

³¹ Cf. Zimmermann (1992). For arguments that such a semantics gives empirically adequate results for some but not all intensional verbs, see Moltmann (1997).

³² There is another argument against the Montague analysis. Suppose Kripke is right and unicorns as well as centaurs necessarily fail to exist. Then, given Montague’s account of terms, [a unicorn] = [a centaur]. If seeking a unicorn is to stand in a certain relation to [a unicorn] then whoever seeks a unicorn would also seek a centaur, which is clearly false. Cf. Forbes (2000). But all this shows is that Montague was mistaken

Of course, instead of an argument one may appeal directly to intuition in trying to support the contention that thinking of things has nothing to do with mysterious and most likely abstract entities, like terms. After all, to say that in thinking of unicorns we stand in a relation to a term sounds like a category mistake. The problem with such intuitions is that they cut equally against the claim that mysterious and most likely abstract entities, like propositions, have something to do with thinking that something is the case. And I suspect the considerations that convinced many of us that we should bracket such intuitions in the latter case carry over to the former as well.³³

But there is an important residual worry here. Saying that the object of one's thinking that Tashkent is in Uzbekistan is a proposition will not raise (many) eyebrows despite the fact that there is little agreement about the nature of propositions. But that is presumably because there is agreement about what it is for a proposition to be *representationally correct*. Propositions are the bearers of truth-value and what makes for the representational correctness of a proposition is that it has the right truth-value, namely, the truth. So the propositional T-schema provides us with a guide to understanding what representational correctness of a proposition consists in:

(T) [*S*] is representationally correct (i.e. true) iff *S*

in his views about the identity conditions of terms, not that Montague-style approaches to intensional transitive verbs are fatally flawed.

³³ There is one respect in which the claim that belief-in is a relation between believers and term fares worse than the claim that belief-that is a relation between believers and propositions. 'John believes that *S*' is logically equivalent to 'John believes the proposition that *S*' but 'John believes in *Fs*' is not logically equivalent 'John believes the term *Fs*.' Two comments. First, notice that for some propositional attitude verbs other than 'believe' we don't get the logical equivalence in the propositional case either: cf. 'John fears/remembers/expects that *S*' vs. 'John fears/remembers/expects the proposition that *S*.' (This observation was made in Prior (1971).) Second, in light of such difficulties, I would suggest that *normally* one cannot substitute 'the proposition that *S*' for '*S*' within propositional attitude contexts *salva veritate*. The logical equivalence of 'John believes that *S*' and 'John believes the proposition that *S*' is a parochial fact about the word 'believe' which does not carry over for other intensional transitive verbs. (The

(Here, ‘*S*’ is a schematic letter whose permissible substitution instances are sentences expressing a proposition.) Without a comparable account of what it is for a term to be representationally correct, the claim that thinking-of is a term attitude remains obscure.

The obvious suggestion is that representational correctness of a plural term be spelled out via the following principle:

(E) [*Fs*] is representationally correct iff *Fs* exist

(Here, ‘*Fs*’ is a schematic letter whose permissible substitution instances are plural noun phrases expressing plural terms.) This proposal has the obvious consequence that although one may well think of non-existent things, one’s thought will not be representationally correct (just as one may well think a false proposition, but then one’s thought will not be representationally correct). This is just what we want from an adequate notion of representational correctness. What is wrong with the proposal is that it entails the converse as well, i.e. that if [*Fs*] is such that *Fs* exist, then one’s thought with that term as content would thereby be representationally correct. This seems too strong. As the following example will illustrate, there are other ways for one’s thinking of things to be representationally incorrect.

Imagine that a historian makes the following stunning discovery: Attila was not the ruler of the Huns, but a rebellious Roman general from the eastern provinces of the Empire who masked his own troops as Huns as he ravaged through Central Europe. The Huns were actually peaceful Asian nomads who lived outside the borders of the Empire and knew nothing of Attila’s scheme. If things are as imagined, practically nothing we believe about the Huns would be true of them. Nevertheless, our word ‘Huns’ would still

parochial fact might be that ‘John believes the proposition that *S*’ is naturally understood as elliptical for

refer to the Huns: in saying ‘Huns ravaged a great part of Europe in the 4th century’ we would say something false about Huns and not something true about rebellious Roman soldiers. And the point concerns thought as much as it concerns language. Whenever I sincerely and reflectively utter ‘Huns ravaged a great part of Europe in the 4th century’, I have a thought with the propositional content that Huns ravaged a great part of Europe in the 4th century. If Attila was an impostor and his troops were Roman, my thought is false. But although we can refer to them and have thoughts about them even if they did nothing we believe they did, we need not conclude that under the imagined circumstances our term [Huns] would correctly represent Huns. Intuitively, it would not.³⁴

How can this intuition be cashed out? The rough idea is this. Part of what we learned from Kripke and Putnam is that referring to and thinking about Huns are *easy*: no substantive knowledge about Huns is required. Perhaps all I believe about Huns is that they are a people frequently referred to as ‘Huns’ in history books; I may still be able to talk and think about them. I would not, however, be regarded as an *expert* user of the expression and the associated term. To have expert competence in this regard one needs to know something more, say, that that Huns ravaged a great part of Europe in the 4th century. Now, if Huns did nothing of the sort, then expert competence regarding the expression ‘Huns’ and the associated term [Huns] is bogus: expert users of the expression and the term are *mistaken on account of their very competence*. But beliefs that are required for expert competence with a term are crucial for the term’s representational

‘John believes that the proposition that *S* is true’.)

³⁴ The case is analogous to Kripke’s Gödel/Schmidt case, except that it concerns a plural noun phrase, rather than a proper name.

character. This, I suggest, is the source of the intuition that if Huns were a peaceful people, [Huns] misrepresents them.³⁵

Let us refer collectively to the beliefs that are constitutive of expert competence regarding the term [*Fs*] within a certain community as the *conception* of *Fs* within that community. It may well be a matter of disagreement whether some particular beliefs most of us share about *Fs* are in fact part of our conception of *Fs*. But there are fairly clear cases. For example, I take it that the claim that it is part of our current conception of Huns that they ravaged a great part of Europe in the 4th century is uncontroversial. Since those who use a term with expert competence must possess the conception associated with the term, whenever the conception is false the experts are mistaken due to their very competence. This is a sort of representational inadequacy in the term. I suggest that a term [*Fs*] may fail to be correct not only because *Fs* fail to exist, but also because the conception of *Fs* is false. In other words, I propose that instead of (E), we opt for the following schema:

(E') [*Fs*] is representationally correct iff *Fs* exist and the conception of *Fs* is true

Are there real life examples of false conceptions? Most likely there are. But it would be hard to give examples of *current* false conceptions. If we learned that Huns never ravaged Europe, we would immediately revise our conception of them, and *then* it would no longer be the case that in order to be competent with [Huns] one has to believe that Huns ravaged a great part of Europe in the 4th century. To find convincing cases of

³⁵ Putnam has reminded us that the situation with [cats] might be as bad as the situation with [Huns]. Suppose the creatures we took to be cats are nothing like what we thought: they are self-propagating robots sent to earth millions of years ago to gather information about our planet for aliens plotting an invasion. Then our ordinary and expert beliefs regarding these creatures would be fundamentally mistaken. Still, if these robots had been here all along, if it is about them that we developed our fundamentally mistaken

terms that misrepresent their referents, we need to look at past conceptions. Here are some examples. To be competent with the term [stars], one once had to believe that all shiny heavenly bodies except for the Sun, the Moon and the planets are stars. But of course, some are entire galaxies. To be competent with the term [windows made of glass], one once had to believe that at normal temperature such windows are not liquid. But of course, they are. To be competent with the term [people suffering from hysteria], one once had to believe that they had a mental condition caused by the motion of their wombs. But of course, they did not. In fact, a good case can be made that conceptions once associated with such fundamental terms as ‘minds’, ‘time intervals’, ‘space regions’, ‘mass points’, ‘causes’, etc. were all false.

Where does this leave us? I argued in section 4 that to consciously believe a content is to think that content and to be committed to the representational correctness of this thought. Adding to this the results of this section regarding of the content of belief-in yields the following:

(CB-in') *a* consciously believes in *Fs* iff *a* thinks the content [*Fs*] and is committed to the representational correctness of [*Fs*].

According to (E'), the representational correctness of [*Fs*] entails that *Fs* exist and that the conception of *Fs* is true. This means that the commitment involved in consciously believing in *Fs* goes beyond what is involved in a conscious belief that *Fs* exist, a commitment that although we might be massively wrong about what *Fs* are, we are not wrong on account of our expert competence.³⁶

beliefs; then they *are* cats. Cats exist, but again, our term [cats] is not correct. If it turns out that cats are robots, we must conclude that [cats] misrepresents cats on account of our very competence.

³⁶ How does this account fare with Horatio's case? Clearly, Horatio can think [things Horatio doesn't believe in]. But Horatio is not committed to the representational correctness of this thought. (Why? Perhaps for reasons mentioned in footnote 14.) So at no time will he consciously believe in things Horatio

It is important that although $[Fs]$ is representationally correct just in case Fs exist and the conception of Fs is true, being committed to the representational correctness of $[Fs]$ is *different* from being committed to the truth of the proposition that Fs exist and the conception of Fs is true. Somebody might be committed to the representational correctness of a term without knowing what representational correctness of a term amounts to, in particular, without knowing that the representational correctness of a term depends on the truth or falsity of beliefs which constitute expert competence with the term. An analogy might help to illuminate this point: x is divisible by 9 just in case the sum of x 's digits in decimal notation is divisible by 9, nevertheless being committed to the divisibility of x by 9 is clearly different from being committed that the sum of x 's digits in decimal notation is divisible by 9. Just as a conscious belief that 27 is divisible by 9 does not require that one entertain the proposition that the sum of 2 and 7 is divisible by 9, a conscious belief in spotted frogs does not require that one entertain the proposition that that spotted frogs exist and the conception of spotted frogs is true.

The main features of this account of conscious belief in Fs are as follows. First, consciously believing in Fs is not a propositional attitude – its content is a term, not a proposition. Second, consciously believing in Fs involves commitment that the content of the belief is representationally correct. Third, although whether a belief in Fs is representationally correct depends on the truth or falsity of the conception of Fs , the belief is about the content $[Fs]$ and not about the associated conception.

6. Back to ontology

doesn't believe in, which in turn gives us good reason to contend that he does not believe in things Horatio

Let us take stock now. In section 4, I argued that to consciously believe a content is to be committed to the representational correctness of that thought. I also accepted the standard account of thinking that *S*, namely, that its content is the proposition [*S*] and that [*S*] is representationally correct just in case *S*. After arguing against two alternative views, I argued in section 5 that the content of thinking of *F*s is [*F*s], and that [*F*s] is representationally correct just in case *F*s exist and the conception of *F*s is true. Putting these things together yields the following result: if *F*s exist but the conception of [*F*s] is false, then someone who believes that *F*s exist would be right while someone who believes in *F*s would be wrong.

So, it looks as if there is a way one might express ontological reservations about *F*s without denying that there *are* such things. It goes like this: “I have reasons to think that our term is representationally incorrect: there is nothing that fits our ordinary conception of *F*s. Because of this I don’t believe in *F*s. Nevertheless, I do not doubt that there are plenty of true propositions about *F*s, and that these entail the proposition that there are *F*s. So, I believe that there are *F*s. My beliefs are coherent because I don’t assume that our conception of *F*s applies to *F*s.” The honorable gentlemen of the opening quotation who believe that there is something out there on the sea that bears the established name “sea serpent” but who also believe that nothing even approximately fits the seamen’s reports could say precisely this.

To have a better sense of what this sort of view would amount to, consider the case of numbers. Nominalists argue that numbers, if there are any, would have to be

doesn’t believe in.

causally inert, existing outside of space and time in some sort of Platonic realm. Why do nominalists think that numbers must be such entities or not be at all? Arguably because this is what our conception of numbers demands. Someone who thought that numbers themselves can effect changes in the physical world or thought that they exist at some particular place and time could be plausibly regarded as lacking expert competence with the term [numbers]. Nominalists have all sorts of arguments to the effect that the ordinary conception of numbers is false: if there were things which fit this conception, we couldn't refer to them, we couldn't have justified and/or reliable beliefs about them, etc. Suppose one of the nominalist arguments is sound. Still, we need not jump to the conclusion that there are no numbers. Certainly, we would be entitled to say that nothing fits our conception of numbers — but perhaps numbers themselves don't fit that conception either. Given the strength of our convictions that the proposition that $2+4=4$ is true and that its truth entails that there are numbers, this seems preferable to the nominalist's view.

One might object that the beliefs that numbers are not in space-time and that they are causally inert are not constitutive of our expert competence with [numbers]. Perhaps, all one needs for competent thinking and talking about numbers is some sort of tacit knowledge of the Peano-axioms, and hence, as long as there is *some* ω -sequence, our conception of numbers is true. But is this really plausible? Suppose we learn one day that there is an infinite collection of stars that form an ω -sequence with a certain spatial relation as 'successor'. I think that we would still insist that these stars are *not* the numbers. Why not? Well, they are not the right sort of things to be numbers. Compared to the natural numbers, stars are fleeting entities: after a few billion years, they will no longer be around. That numbers are eternal does not follow from the Peano axioms (or

any other purely mathematical axioms one might suggest) but it still seems to be something all of us who have expert competence with [numbers] must believe.³⁷

I am not saying that someone who takes herself to have good reason to regard [numbers] as a term which misrepresents numbers should go on and declare that numbers are, after all, causally efficacious and situated in space-time.³⁸ For it may well be that the source of the error in our conception of numbers lies in our conceptions of causality, space and time. Those with ontological doubts about numbers may not be in a position to propose a new and improved conception of numbers, for such a proposal may presuppose a complicated overhaul of many of our fundamental conceptions. The inability to replace the false conceptions with theoretically useful new ones should not be taken as decisive evidence that the considerations which fuel the ontological doubts are misguided.

It is easy to see what it would take to generalize this line of reasoning about numbers to other controversial entities. To articulate ontological doubts about physical objects, mental states, universals, etc. one needs to establish that our conception of these entities is richer than what is revealed by their established theories, and so, that there is the possibility of accepting those theories (and hence believing that the entities in question exist) without accepting the conceptions (and hence believing in those entities). But this is not a trivial matter. For example, it would be very hard to argue that our conception of quarks outruns what physics tells us about these entities, and so, there may

³⁷ In a way, I am simply restating Frege's Julius Caesar problem. Something in our conception of numbers tells us that the number 2 is not Julius Caesar, and this something is certainly not laid down in the Peano axioms or in any standard axiomatic characterization of the natural numbers. So one might accept the standard axiomatic characterizations as true and still wonder about our conception of natural numbers.

³⁸ Although this sort of view had been defended with regard to certain mathematical entities in Bigelow (1988) and Maddy (1990).

well not be any space for ontological doubts about quarks that is compatible with the belief that contemporary physics is by and large true.

So there is no direct conflict between ontological doubts and the acceptance of cheap arguments: one might embrace the Moorean facts and still suspend belief in the problematic entities. But the fact that there is conceptual space for such a view does not mean that it is a position one can easily occupy. If one has good reasons to think that the conception of *Fs* is false, one has *prima facie* reasons to believe that there are no *Fs*, and the other way around; if one has good reasons to believe that there are *Fs*, one has *prima facie* reasons to think that the conception of *Fs* is true. After all, what a term [*Fs*] applies to is to a large extent — albeit not entirely — determined by what speakers with expert competence think it applies to. If the beliefs of such speakers about what the term applies to are false, chances are the term won't apply to anything whatsoever, and if the term does apply to certain things, chances are that it applies to things which fit our conception. It is only when we have very strong reasons pulling us in opposite directions that we should be inclined to suspend belief in things we think exist.

There are two prominent styles of thinking about ontology among analytic philosophers: one originating with Carnap, the other originating with Quine. On the Carnapian view, ontological questions are conceptually *prior* to scientific ones. In order to conduct a disciplined inquiry, we must settle the meaning of the key theoretical terms and fix some rules and procedures we will follow in investigating our subject matter. This is what Carnap called choosing a *linguistic framework*. On the Quinean view, the idea that we can settle on a framework prior to and independently of the considerations we normally employ in conducting our inquiries is a fantasy. There is just one unifying,

all-encompassing framework — *the web of our beliefs* — and if we recognize that the framework doesn't fit the observational data, we must be ready to readjust it wherever it can be done most efficiently. So ontological questions are conceptually *posterior* to theory-building: instead of worrying about what really exists, we should find the overall best theory and then read off what we ended up committing ourselves to.

I have tried to walk a narrow path between these two styles of thinking. I am with Carnap in thinking that ontological commitment cannot be simply read off the theories one accepts: one may think that some of the crucial terms of a true theory misrepresent what they are true of, and hence, that one should not believe in some of the entities the theory is existentially committed to. But I am with Quine in insisting that ontological commitment is not simply a matter of framework choice: deciding whether our conceptions are true is not in principle different than deciding whether a theory is true.*

Zoltán Gendler Szabó
Cornell University

* For comments and discussion I thank Richard Boyd, Charles Brittain, Gail Fine, Tamar Szabó Gendler, John Hawthorne, Benj Hellie, Sydney Shoemaker, Ted Sider, Jason Stanley, Steven Yablo and an anonymous referee for the *Philosophy and Phenomenological Research*. I am grateful for the opportunity to present parts of this paper at Johns Hopkins University, at Eötvös Loránd University and at the conference *Language, Mind and World* in Tlaxcala, Mexico. I thank the audiences for their questions and objections. Special thanks to Harold Hodes, whose writings started me thinking about this problem and whose comments improved the paper in many ways.

References

- Azzouni, J. (1997) 'Applied Mathematics, Existential Commitment and the Quine-Putnam Indispensability Thesis', *Philosophia Mathematica* **5**, 193-209.
- Bigelow, J. (1988) *The Reality of Numbers*. Oxford: Clarendon Press.
- Carlson, Gregory (1977) *Reference to Kinds in English*. Ph.D. Diss., Umass, Amherst.
- Den Dikken, M., R. Larson and P. Ludlow (1997) 'Intensional "Transitive" Verbs and Concealed Complement Clauses' in P. Ludlow ed., *Readings in the Philosophy of Language*. Cambridge, MA: MIT Press.
- Field, H. (1984) 'Platonism for cheap? Crispin Wright on Frege's Context Principle', reprinted in *Realism, Mathematics and Modality*. Oxford: Basil Blackwell.
- Forbes, G. (1998) 'Intensional Transitive Verbs: The Limitations of Clausal Analysis' Unpublished ms., www.tulane.edu/~forbes/preprints.html.
- Forbes, G. (2000) 'Objectual Attitudes' *Linguistics and Philosophy* **23**, 141-83.
- Hale, B. (1987) *Abstract Objects*. Oxford: Basil Blackwell.
- Hick, J. (1957) *Faith and Knowledge*. London: Macmillan.
- Hodes, H. (1990) 'Ontological Commitment: Thick and Thin', in G. Boolos ed., *Meaning and Method: Essays in Honor of Hilary Putnam*. Cambridge: Cambridge University Press.
- Horwich, P. (1990) *Truth*. Oxford: Basil Blackwell.
- Hume, David (1740) *A Treatise of Human Nature*. Edited by L. A. Selby-Bigge. Oxford: Clarendon Press, 1978.
- Kratzer, Angelika (1980) 'Die Analyse des blossen Plurals bei Gregory Carlson.' *Linguistische Berichte* **70/80**, 47 – 50.
- Larson, R., M. den Dikken and P. Ludlow (1998) 'Intensional Transitive Verbs and Abstract Clausal Complementations' ms.
- Lewis, D. (1990) 'Noneism or Allism?' *Mind* **99**, 23-31.
- Maddy, P. (1990) *Realism in Mathematics*. Oxford: Clarendon Press.
- Moltmann, F. (1997) 'Intensional Verbs and Quantifiers', *Natural Language Semantics* **5**, 1-52.

- Montague, R. (1974) 'The Proper Treatment of Quantification in Ordinary English', reprinted in R. Thomason ed., *Formal Philosophy: Selected Papers of Richard Montague*. New Haven: Yale University Press.
- Parsons, T. (1997) 'Meaning Sensitivity and Grammatical Structure', in M. L. Dalla Chiara et al. eds., *Structures and Norms in Science*. Dordrecht: Kluwer Academic Publishers.
- Price, H. H. (1969) *Belief*. Bristol: Thommes Press, 1996.
- Prior, A. (1971) *Objects of Thought*. Oxford: Clarendon Press.
- Quine, W. V. O. (1951) 'Two Dogmas of Empiricism', reprinted in *From a Logical Point of View*. Cambridge, MA: Harvard University Press, 1953.
- Quine, W. V. O. (1981) 'Things and their Place in Theories', in *Theories and Things*. Cambridge, MA: Harvard University Press.
- Schiffer, S. (1996) 'Language Created, Language Independent Entities', *Philosophical Topics* **24**, 149-67.
- Swinburne, R. (1981) *Faith and Reason*. Oxford: Oxford University Press.
- Van Inwagen, P. (1990) *Material Beings*. Ithaca, NY: Cornell University Press.
- Wright, C. (1983) *Frege's Conception of Numbers as Objects*. Aberdeen: Aberdeen University Press.
- Yablo, S. (1998) 'Does Ontology Rest on a Mistake?' in *Proceedings of the Aristotelian Society*, supp. vol. 72, 229-61.
- Zimmerman, T. (1993) 'On the Proper Treatment of Opacity in Certain Verbs', *Natural Language Semantics* **1**, 149-79.