man Jonah really existed. This was one of the legendary accounts (unfortunately the real historical ones have not survived) about a genuinely existing Hebrew prophet.\textsuperscript{27}

Since I am over time, I will stop here. I should mention that it is in the analysis of this very case that I think the Frege-Russell theory goes even more wrong—in the counterfactual situation. I will deal with that next time, not today as expected.

I have argued (a) that the Frege-Russell theory is not demanded by the existence of fictional works—in fact no particular theory is demanded—and (b) that, as it is stated, it solves the problems that it raises about these works incorrectly. I think that it even incorrectly applies itself to these works: one shouldn’t say that one uses the predicates in the story; one should just say that it is part of the pretense of the story that there are such properties that pick the objects out, known to the narrator. Of course, to say these things is not to give a positive and correct account, since we haven’t dealt with the problems about the existential statements and so on. And that, of course, will be the next important task.

\textsuperscript{27} See \textit{NeN} (Kripke 1972/1980: 67, note 18). But maybe this wasn’t the “scholarly consensus” I thought it was. I have since seen writers others than the one I quote state the contrary. It doesn’t matter, since as I said, the view could be true, whether or not there was evidence for it.

Also, even at the time I gave the present lectures, though maybe I didn’t know it then, I could have used Moses instead as an example. The famous biblical scholar Martin Noth thought that Moses was a historical figure, but (contrary to the impression one would get from Wittgenstein’s discussion) that he had little to do with the exodus from Egypt, or most of the best-known things related about him in the Pentateuchal account. (The true core about him is “guidance into the arable land.”)

Perhaps I should add that since then, I have read authors even more unfavorable to the historicity of the exodus. But these are questions not to be discussed here.

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\textbf{Lecture II}

\textbf{November 6, 1973}

Last time I argued that the types of names which occur in fictional discourse are, so to speak, “pretended names,” part of the pretense of the fiction. The propositions in which they occur are pretended propositions rather than real propositions; or rather, as we might put it, the sentences pretend to express a proposition rather than really doing so.

I also argued that, even if one reserved the term “proper name” for those which Russell would recognize as \textit{logically} proper names (genuine as opposed to ordinary names), the same phenomenon would arise: in such a case there would also be a category of pretended names which occur in fiction, where I fancy or pretend that I name a Russellian sense-datum, or visual impression, or what have you. It is true that in the Russelian case the speaker of the language could regard these names as a separate semantical category, open to her own inspection, as long as the language is confined to herself. Then the speaker of the language can always tell whether she has genuinely named an object with which she is acquainted, or is simply pretending to do so. Nevertheless, there is this semantical category of pretended names. It would not be reducible to the category of definite descriptions according to any simple paradigm as the one Russell suggests, ‘the thing satisfying most of the properties in the story.’ One would be able to make statements such as ‘Matilda does not exist, but Aloysius does;’ using a pretended name ‘Matilda’ and a genuine logically proper name ‘Aloysius’ to make the contrast.
The problem of their analysis would be quite similar to that in the ordinary case where one admits that people, planets, ships, shoes, and sealing wax can be named. So why not try the same thing in the general case as one would in the Russellian special case?

One reason perhaps has been that people have assumed that what semantical category a term belongs to should be open to introspection by any user of the sentence. If one regards pretended names or fictive names as a semantical category separate from ordinary names, then the present account depends on denying this assumption. For in the case of ordinary fiction which is communicated to others, though it will be true perhaps that the author knows whether she is using a pretended name or really denoting an object—whether she is spinning fiction or telling the truth—her hearers may be under the wrong impression, or may be uncertain what is going on. And even the author herself may at an appropriate later time forget what she was doing. If so, then the hearer, or the author at a later date, will be under the mistaken impression that something is a name when in fact it is not; it is merely a pretended name.

So we also have to allow a category of mistakes that such and such is a name, and a category of mistakes that such and such a sentence genuinely expresses a proposition. This can happen not only when one is reading a work which one thinks not to be fiction when it is, or when one is unsure whether it is fiction or not: it can also happen in other ways as well. An example would be the naming by some astronomers of a hypothetical planet 'Vulcan' which was thought to cause certain perturbations in Mercury. It was later discovered that no such planet did cause these perturbations, and this paved the way for the general theory of relativity. Here the astronomers were, on my view, under a mistaken impression that they had named a planet when they introduced the name; and when they uttered sentences containing the name 'Vulcan' it was a mistake to suppose that they expressed propositions, rather than a case of pretense. And most of what I say about pretense, though not perhaps all (you can check it out for yourselves), will apply mutatis mutandis with the term 'mistake' in place of 'pretense.'

Last time I talked about what a bad analysis I thought the Frege-Russell view gave of our assertions that Moses does exist or that Sherlock Holmes does not. I said that their analysis of these statements, when they are asserted, as 'some unique person, who has most of the properties in such and such a story, exists' fails to take account of the correct logical properties involved. In fact, I argued that even if their theory of how reference was determined were correct they should not assume that to say that Sherlock Holmes existed would be to say that the properties in the story were satisfied. They should rather have the author pretend that there exist definite descriptions which determine the referent, though these descriptions need not be given in the story itself: the story may not specify anything which is even putatively uniquely identifying.

I want also to say how this view goes over for modal properties. How does the Frege-Russell analysis work here? I have argued in N&W, and would reiterate here, that in modal contexts the analysis comes off even worse. Frege and Russell (and Wittgenstein, who dealt with this particular example, as quoted in Lecture I) wish to hold that 'Moses exists' is to be analyzed as 'some one unique person led the Israelites out of Egypt' and so on—whatever else the Bible says. Let's just suppose for brevity that it is just leading the Israelites out of Egypt which is in question. Now how does this work out hypothetically, or rather, counterfactually? It seems to me that it works out especially badly in this case. For Moses could have existed even though no one led the Israelites out of Egypt. He
himself might have existed and simply failed to do so, for whatever reason.¹ The converse fails also, of course. Some unique person might have led the Israelites out of Egypt, even if Moses had never been born. Someone else might have done so in his place. There might indeed be a view of history that one unique person is uniquely called forth by some kind of metaphysical principle to perform a destined task. One should not however attempt to prove this view simply by an analysis of proper names, and their connection with existence statements. But the analysis supposed here would do so.

I should mention in this connection a kind of reply that has naturally suggested itself to readers, and is in fact mentioned in NE/N, but apparently not answered, or at any rate not answered to everyone's satisfaction, since I have gotten this reply in spite of its earlier mention. I sometimes use modal arguments to argue that, for example, 'Moses' cannot mean 'the man who led the Israelites out of Egypt' because, after all, it might have been the case, as I just said, that Moses didn't lead the Israelites out of Egypt.

Now one reply to this has been in terms of the Russelian notion of the scope of a description. Suppose the term 'Moses' did abbreviate 'the man x who Led the Israelites Out of Egypt':

1. \( M = \forall x \text{LIOE}(x) \)

Now I can argue that 'Moses' doesn't mean this by saying that it is possible that Moses didn't lead the Israelites out of Egypt:

2. \( \Box \neg \text{LIOE}(M) \)

Whereas it couldn't be possible that 'the man who led the Israelites out of Egypt' didn't lead the Israelites out of Egypt:

3. \( \Box \neg \text{LIOE}(\forall x \text{LIOE}(x)) \)

It can easily be pointed out that under Russell's theory of descriptions the statement represented by (2) has two interpretations, owing to Russell's notion of scope.² One interpretation says that it is possible that there is a man such that he was the only man who led the Israelites out of Egypt, and didn't do so:

4. \( \Box(\exists x)(\text{LIOE}(x) \land \neg \text{LIOE}(x)) \)

(The exclamation mark here is my own notation and means that x, and only x, led the Israelites out of Egypt.)³ That is certainly a contradiction.

But there is another interpretation which would give the description the large scope: 'there is an x such that x in fact led the Israelites out of Egypt uniquely, and it is possible that he didn't':

5. \( (\exists x)(\text{LIOE}(x) \land \Box \neg \text{LIOE}(x)) \)

And that is not a contradiction. (4) says that it is possible that someone both led the Israelites out of Egypt and didn't: that is a contradiction. But it is not a contradiction to say that there is someone who led the Israelites uniquely out of Egypt and it is possible that he might not have.

In this case anyway, I don't in fact think this objection is correct if one goes through the details of my argument.⁴ But I will leave it there.

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¹ But see the views about the historical Moses mentioned in Lecture 1, note 27. Here I can be taken to be assuming that the Pentateuchal account of Moses's role is substantially correct, at least enough of it to satisfy the conditions in the passage I cite from Wittgenstein.

² For a more elaborate discussion of this notion see now Kripke (2005).

³ The exclamation point after a predicate has a different meaning in Principia Mathematica. (\( \exists x \)) is often used to mean "there is a unique x," and this usage motivated the present notation, which is needed here.

⁴ In fact, as I have argued in the preface to NE/N, the argument really applies to simple sentences, without modal operators. For more on this, see the preface to NE/N (Kripke 1972/1980: 6–16).
REFERENCE AND EXISTENCE

Let me just speak of how it might apply to our special case, because here it seems to me to be especially weak as a defense of a descriptivist analysis of proper names. Suppose it was not 'Moses did not lead the Israelites out of Egypt' which was in question but 'Moses does not exist':

6. $\neg \exists x \text{LE}(x)$

And now we want to speak of the possibility of this in modal contexts. For example, we might, superficially, write 'It might have been the case that Moses would not have existed,' as this:

7. $\exists x (\text{LE}(x))

That is, he wouldn't have existed under certain circumstances. (I really should always be careful to use the subjunctive here, because that is what I mean. If you use the indicative you are generally speaking epistemically rather than counterfactually.) It is possible, then, that Moses wouldn't have existed under certain circumstances: Moses might not have existed.

Now, can we here use the Frege-Russell analysis of 'Moses' as the description 'the man who led the Israelites out of Egypt uniquely' to analyze (?7)? If one runs it the way I want, one gets according to me the wrong analysis. The analysis that I was suggesting was that (?) would mean 'It is possible that there was not a unique person who led the Israelites out of Egypt':

8. $\exists x (\text{LE}(x) \land \neg \exists y (\text{LE}(y))$

And this seems to me not to be an analysis of the original. But the alternative would be, if one tried to do it parallel to this case, to say 'There is a man who, in fact, uniquely led the Israelites out of Egypt, and it is possible that that person wouldn't have existed under certain circumstances':

9. $(\exists x (\text{LE}(x) \land \neg \exists y (\text{LE}(y)))$

That is, there is in fact someone who led the Israelites out of Egypt, and he might not have existed, say if his mother hadn't given birth to him, even if someone else did lead the Israelites out of Egypt.

The trouble with trying the same scope device here is that it violates the basic principle of Frege and Russell that existence is not a predicate of individuals, that it is a second-level rather than a first-level concept. Because of that, this analysis, at least, is ruled out. One can't say 'there is someone whom I identify as the unique person who led the Israelites out of Egypt and he might not have existed,' because 'he might not have existed' here makes no sense by itself. There may be some way out of this, but it is not straightforward.

And this is aside from any objections that might be raised to this argument in the general case. One might think that the difficulty here is very special to the case of existence. I don't think it is particularly. I think it suggests that this is not the reply in the general case either, but rather that the term 'Moses,' as I argued, should be regarded not as abbreviating a description which can designate different objects in different possible worlds, but as rigidly designating a certain man of whom we then say that he might not have led the Israelites out of Egypt under certain circumstances, that he might not have existed under certain circumstances, and so on. So the Frege-Russell analysis is especially difficult to maintain in this particular case.\footnote{Again, see the relevant pages in the preface to N\&N.}

\footnote{Many have connected Russell's analysis with the Kantian doctrine that existence is not a predicate, and have even asserted that Russell gave a precise formulation of the doctrine (see, for example, Quine 1940: 151). I don't really wish to go into heavy Kantian exegesis, in which I am hardly competent---and maybe not even light Kantian exegesis. But I do want to say this. Kant also talks about the feeling that if existence were a predicate it would seem to apply analytically, whereas in fact assertions of existence are synthetic. But whatever his position is (and it is somewhat obscure) it doesn't seem to me, as far as I am able to read him, to be identifiable with that of Frege and Russell.}

Kant says that existence is a \textit{logical predicate} but not a \textit{real predicate}, that when we deny existence of a subject we don't deny a predicate of it, but rather reject the subject together.
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So my view is that it is perfectly legitimate to attribute existence to individuals, whether Russellian sense-data or anything else. Moore already argued even in connection with Russellian sense-data—which, as we have seen in Lecture I, he regarded as the only proper particulars that can have logically proper names—that Russell was wrong in concluding that no meaning could be given to existence as a predicate of individuals, since “it would be impossible for it not to apply, and this is the characteristic of a mistake.” Moore says:

[1]n the case of every sense-datum which anyone ever perceives, the person in question could always say with truth of the sense-datum in question “This might not have existed”; and I cannot see how this could be true, unless the proposition ‘This does in fact exist’ is also true, and therefore the words ‘This exists’ significant.

(1939b: 126)

Here I am in agreement with Moore’s argument, as opposed to Russell and Frege. It must be perfectly legitimate to attribute existence to individuals, because one can intelligibly say that they might not have existed. I myself do not restrict the point to Russellian sense-data, though Moore did so because he wished to follow Russell in thinking of these as the only genuine individuals. But for me the point can be more general. Though this particular piece of chalk in fact exists, it might not have, as Moore argued against Russell even in the case of sense-data.8

Russell argues that if existence applied to individuals, it would be absolutely impossible for the property not to apply, and that this is characteristic of a mistake. Moore’s argument would appear to show that something is wrong here. Now, in the Frege-Russellian apparatus of quantification theory itself there would seem to be a natural definition of saying that x exists:

10. E(x)

Namely that there is a y which is x:

11. (3y)(y = x)

(where x and y are both variables ranging over objects). So it is hard for me to see that they can consistently maintain that existence is only a second-level concept (in the Fregean terminology) and does not apply to individuals.

But what about the argument that it is “absolutely impossible for it not to apply”? Of course, it is the case that for every x there is a y such that y = x:

12. (x)(3y)(y = x)

In other words, ‘for every x, x exists’ will be a theorem of quantification theory, and so it will presumably be necessary. At any rate, I agree with Russell that it couldn’t have been the case that “something” didn’t exist. Things are not of two kinds, existers and nonexistents.

(12) is thus a necessary truth. The necessity of (12) can be written as:

13. □ (x)E(x)

7. Notice that the argument that even pretended names for sense-data must be allowable, as described in Lecture I, can be used to supplement Moore’s argument about sense-data. See note 11 and accompanying text.

8. If one thought that some objects (say, numbers) did have necessary existence, this would be a significant fact about each such object and should imply a fortiori that the object exists.
However, this should not be confused with 'everything has necessary existence.'

14. (x) □E(x)

Of course it is this second step that Moore denies when he points out that under certain circumstances this piece of chalk, say, or even this Russelian sense-datum, wouldn't have existed. Thus, existence should not be confused with such a predicate as self-identity, where not only the analogue of (13), but the analogue of (14) does hold. (Here I assume that something is self-identical even with respect to counterfactual situations where it would not exist.)

There are, however, modal systems proposed in the literature, in which one could deduce (14) from (13), indeed could deduce (x) □P(x) from □(x)P(x). Actually, there are some in which the two statements can be shown to be equivalent, that is, that the converse holds.9 I discussed in Kripke (1963) what I believe here to be the fallacy in any such derivation; I won't discuss it again here. Another source of confusion may lie in the following observation. Suppose that, to follow the line we have been taking, to express a proposition about Moses, and to use the name 'Moses' as a name, there has got to be an object referred to, namely, Moses. Then how could 'Moses does not exist' ever have been true? For if there hadn't been a Moses, we wouldn't have been able to use this name; we wouldn't have been able to say so; and perhaps even the proposition that Moses doesn't exist itself wouldn't have existed. To take the other line is to say that it would have been around, but inexpressible by or inaccessible to us.10

Let's suppose that if there had been no way to speak of Moses in that way, one couldn't have said that Moses did not exist, or even that the proposition wouldn't have existed. So how could it be true of any possible world that Moses wouldn't have existed in it? We couldn't have said so if he didn't. This, it seems to me, is a fundamental confusion. One should not identify what people would have been able to say in hypothetical circumstances, if they had obtained, with what we can say, of these circumstances, perhaps knowing that they don't obtain. It is the latter which is the case here. We do have the name 'Moses,' and it is part of our language, whether it would have been part of our language in other circumstances or not. And we can say, of certain hypothetical circumstances, that in those circumstances Moses wouldn't have existed; and that our statement 'Moses exists' is false of those circumstances, even though we might go on to say that under some such circumstances, had they obtained, one would not have been able to say what we can say of those circumstances. (Perhaps, if one wishes to take this view of propositions, the proposition wouldn't have existed to be expressed, let alone that we couldn't have expressed it.) Still, we do have this form of language and we do have this proposition. In just the same way we can say, of certain hypothetical circumstances, that life might not have existed in the

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9. Prior (1956) showed that this inference holds in S5. Applied to existence, this would imply that only a constant domain semantics is possible in quantified S5, which seems to me not to be true, though I myself was taken in by this view in my first paper on quantified modal logic (Kripke 1959).

10. I was assuming here that what does not exist (ever) cannot be named. So, had Moses never existed, he couldn't have been named. But perhaps this isn't always so, if the hypothetical nonexistent entity could be specified. Perhaps the person that would have existed, had a particular sperm united with a particular egg and had there been normal development (no splitting into two identical twins, or damage to the union, enough to say one doesn't have the same person), is completely specified and could be given a name, even if the union did not actually occur. Similarly, one might speak of the statue that would have, but in fact was not, formed from particular clay in a particular way. Maybe this entity could be named also. (Here I am supposing that the sperm and the egg, or the lump of clay, actually exist.)
REFERENCE AND EXISTENCE

universe, and so there would have been no one to express anything. As for the question which propositions would have existed under these circumstances, I might leave this here for someone else to answer.

Anyway, one should not identify what people would have said in certain circumstances, had those circumstances obtained, with what we would say of certain circumstances, knowing or believing that these circumstances don’t obtain. The two are different. So one shouldn’t think that if instead of a universally quantified variable as in (14), one had used a name such as ‘Moses,’ then ‘Moses exists’ has got to be necessary, because of some such consideration. (This would get something close to (14) back, by a different confusion.)

Perhaps more interesting is the question of modal statements using names from fiction, such as ‘Is it possible that Sherlock Holmes would have existed?’ For example, one modal logician, talking about this very question while setting up his apparatus, speaks of the problem that though Sherlock Holmes does not exist, in other states of affairs he would have existed, and then talks about the problems of modal logic which thus arise.

My present position, of course, must be in disagreement with any such view of fictional names. The modal logician was trying to make the point that there might have been objects other than the ones which actually exist, but he shouldn’t, in my opinion, have made it this way, though the point is otherwise, of course, correct. I mean, is it correct to say there might have been a Sherlock Holmes? Of course, there might have been a great detective who did exploits precisely as described. That is true. Of course, on my view, if statements containing ‘Sherlock Holmes’ express pretended propositions—or rather, pretend to express propositions—one can’t speak of a pretended proposition as possible.

But why shouldn’t one say that such a situation is a situation in which Sherlock Holmes would have existed? I mean, someone might have performed these exploits, and Conan Doyle might have written of him. So why not suppose, as is being done by the modal logician, that Sherlock Holmes is some possible but not actual entity?

Certainly someone might have done the deeds ascribed to Holmes in the stories. Indeed, many actual people in the appropriate time period (late nineteenth century to early twentieth century) might have done them. But none of these people would have been Sherlock Holmes.

The fact is that in introducing the name we make ‘Sherlock Holmes’ name a particular man who would have done certain things, not just any old man who did these things. It will be part of this story of Sherlock Holmes that, of course, he may not be uniquely called forth to do these things. Holmes might remark to Watson that, had he not been such a great detective, his brother Mycroft would have been equally good, but not wishing to be a rival, he went into another field. So ‘Sherlock Holmes’ doesn’t designate the person—any old person—who did these things: it is supposed to be a name of a unique man. And there is no unique man being named, nor is there any possible man being named here.

Part of the source of confusion lies in what I have inveighed against in \( \text{N&N}\): the identification of metaphysics with epistemology. Here I am talking about what we would say of various counterfactual situations. A source of the belief that Sherlock Holmes might have existed might be that after all it could turn out that Sherlock Homes really does exist. Well, it could turn out: that is an epistemic question. If it turns out that Sherlock Holmes really exists, then my supposition that the name is fictional is wrong. Maybe Doyle was writing newspaper or magazine articles or a series of
historical reports\(^2\) and didn’t at all realize that anyone would take him to be writing stories. If so, I am wrong, and I am under a mistaken impression that there are no such genuine propositions as that Sherlock Holmes lived on Baker Street. I am simply mistaken about this. It may turn out for all I know that I have made such a mistake. But if I am not mistaken as to the status of these alleged propositions—and I don’t think there are any such propositions—then I am also not mistaken in saying that one cannot say that they would have been true of a certain hypothetical world: for there are no propositions to be true of this hypothetical world. There is only, in place of the possibility of such propositions, the possibility of the existentially quantified story—the possibility that there should have been a person \(x\) who did these things. This, however, is not the possibility that Sherlock Holmes existed. So, at any rate, my view goes.

I didn’t give the reference to the modal logician with whom I usually agree (and I should say in fairness that the point he wished to make could have been made without using a name from fiction). The logician was Saul Kripke, in “Semantical Considerations on Modal Logic” (Kripke 1963). He does inform me that he was skeptical of this particular statement even when he read the printer’s proof, but thought there would have to be too many changes made in proof to take it out.\(^3\)

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\(^2\) Better, his friend or acquaintance, Dr. Watson, gave them to him to be published. (According to Wikipedia, not quite all Holmes stories are narrated by Watson. Although narration by Watson is the typical case, there is some first-person narration by Holmes himself, and some third-person narration, including some longer works unknown to even Holmes or Watson.)

\(^3\) What he (I) wanted to say was simply that there might have been things other than what actually exist. Also, some of the things that actually exist might not have. And the same thing applies to all possible worlds. So a “variable domain” semantics for modal logic is required. The point about Sherlock Holmes and my real intent is mentioned in \(N\&N\) (Kripke 1975/1980: 158).

More surprisingly, I wish to apply this to certain predicates also. Especially prominent in discourse about non-existence, and supposedly unproblematic in the way that the case of naming was not, is the case of various empty predicates, of which a very common example is ‘unicorn.’ Other ones are ‘dragon,’ ‘chimera’ and so on—various mythical types of species. It is commonly supposed, and not even argued, that though there are in fact no unicorns, first, it could of course turn out that there are unicorns, that we are mistaken; I agree with that, though not on the picture usually supposed; second, that it is possible that there should have been unicorns: under certain definitely specifiable circumstances there \(would\) have been unicorns. This I reject: that there should have been unicorns, on my doctrine, does not describe any definite possibility.

There are two things to sort out here. First, the epistemic question, under what circumstances it would turn out that, contrary to what we think, there are unicorns. Second, given that we are right in our supposition that there are no unicorns, \(could\) there have been unicorns? Under what circumstances \(would\) there have been unicorns? And here I reject the common doctrine just as I did in the case of Sherlock Holmes.

Is it possible that there should have been unicorns? The conventional picture, usually presupposed rather than stated, is this. Let’s suppose that in the myth all we are told about unicorns is that they look like white horses and they have a certain horn sticking out in a certain way. I guess we are told a few other things too, but it would be sufficient to leave out the extra things: it wouldn’t really change the picture. Let’s also suppose, as is presumably the case, that there never have been any unicorns. Then at first it might appear that there would have been unicorns, counterfactually, precisely if there would have been animals which look like a horse and have one horn.
Now, remember here we are supposing that there are no unicorns. What is the role of the term 'unicorn' in the legend of the unicorn? First, the important thing to note is that unicorns are a kind of animal—a hypothetical, mythical species. It would then be, by the Pretense Principle, part at least of the pretense of the myth, that there is a species which I can describe and identify as looking just so.

The logic of such a species term can perhaps be derived by comparison with the logic of the name of an appropriate actual species. One might similarly identify a tiger as "a large carnivorous quadrupedal cat-like animal, tawny-yellow in color with blackish transverse stripes and light belly" (The Shorter Oxford English Dictionary). Here let's take 'cat-like' to mean just 'looking like a big cat' rather than actually 'feline,' or in the cat family, because it certainly wasn't part of the original definition of 'tiger' anyway that it belongs to any particular biological family; the biologists had to investigate whether it really belongs to the family it looks like: they couldn't just do this by ratiocination. One might suppose, as Mill seemed to do, that a tiger can be defined simply as any animal satisfying these criteria. Well, it can't. Why?

First, it is not necessarily the case that any animal that looks like this is a tiger. On the contrary, if there were a reptile which looked just like this, but had a different internal structure (in fact, David Lewis told me that there is something called a marsupial tiger), the animals of the species would not be tigers no matter how good they were as dead ringers for tigers, just as fool's gold, no matter how much it looks like gold, is not gold, because it has a different internal structure. Tigers are a natural kind, and to be a tiger one must be of that natural kind. So it is not the case that any animal looking like this need be a tiger by definition. Of course, we may hope or believe that no such perfect ringers exist. The less they do, the easier it is to identify species by their appearances. But there is no logical requirement that this be the case—certainly if only surface appearance is in question.

Second, it is not the case that it is part of the definition of the term 'tiger' that tigers have got to look like that. By this I don't mean merely that there can be freakish tigers which have only three legs. I mean also that—though the discovery would no doubt be bizarre and unexpected—we could discover that we were wrong about the surface characteristics which we thought identified tigers. Perhaps in the regions of the world where tigers exist there is a curious kind of refraction or reflection, or something or other in the air—of course, it is very unlikely, and hard to flesh out in realistic, scientific terms—which makes us see their legs double, so they may have only two legs rather than four. If so, we would not have discovered that there were in fact no tigers, but rather that, contrary to what we thought, tigers were bipeds, not quadrupeds. Similarly, if we discovered that there were some optical illusion prevailing and gold were really green rather than yellow—it just looked yellow in the regions in which it was found—we would not conclude that there was no gold: we would rather conclude that, contrary to what we thought, gold was not characteristically yellow, but rather characteristically green. 13

These considerations have led me to conclude that a natural kind term in ordinary discourse has some function like that of a proper name—that it refers to the things of the same substance or species or whatever is in question, as 'the kind of animal given by this original sample.' One does have certain surface characteristics

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13. I recall reading a couple of references that attribute to Putnam the idea that only impurities in the gold around use produce the apparent yellow color, and that chemically pure gold would not be yellow. Epistemically, this is certainly a possibility, and an elegant way of bringing out the point that 'gold is yellow' is not a priori certain. However, as far as I have been able to ascertain, chemically pure gold is in fact yellow.
which one will believe that, in the absence of further investigation, will identify further instances of the kind. However, (a) one may turn out to be wrong about which surface characteristics are really relevant. (There may be boundary conditions here. It may be that if we are very far wrong one shouldn’t say ‘Tigers have turned out to be chemical elements rather than animals’ but rather ‘Tigers don’t really exist.’ There are other conditions too, but one certainly can be wrong in very important and gross ways.) (b) Any animals which aren’t of the same kind—that is, don’t resemble, say in internal structure, the things in this original sample—are not tigers no matter how much they resemble tigers, and no matter how difficult it was, when one originally saw tigers, to distinguish them from these other animals. It is true that we wouldn’t know what the internal structure was; so we can’t say that the term ‘tiger’ means ‘having such and such biological structure on the inside,’ because we don’t know it. That is a matter for biological investigation. But we can say that to be a tiger you have to be the same kind of animal as this. That is briefly and very roughly stated.\(^{14}\)

The term ‘unicorn’ or ‘dragon,’ being a pretended name of a species, should, I think, presumably have the very same logic. Only one is here pretending that a species has been identified rather than actually identifying it. Given that this is so, first, let’s suppose that I am right in my supposition that both the term ‘unicorn’ and the term ‘dragon’ are mythical, that a species has not been genuinely identified. If so, can one say that under certain circumstances there might have been unicorns? Well, of course there might have been animals that \textit{looked} like white horses and had one horn. But that isn’t sufficient. Take the case of tigers. ‘Might there have been tigers in the Antarctic?’ A situation in which there are animals \textit{looking} like tigers in the Antarctic is not necessarily a situation in which there would have been \textit{tigers} in the Antarctic. There has got to be another condition that these hypothetical animals must satisfy to be tigers, that is, that they are of the same species, have the same internal structure. Now one would like to add the same condition here: not only should they look like unicorns but they should be unicorns, have the same internal structure. Unfortunately, the story just doesn’t tell us what the internal structure of a unicorn is supposed to be, and therefore it hasn’t told us which hypothetical animal to look for in another possible world. Many hypothetical beasts might have satisfied all the descriptions in the story that unicorns or dragons satisfy. Dragons are perhaps an even clearer case than unicorns: one wouldn’t suppose them to have any particular internal structure, though one might attribute the internal structure of a horse to a unicorn. One can’t say that \textit{all} the various hypothetical species that resemble dragons are dragons, because dragons are supposed to be a single natural kind—this I am supposing is part of the story. (And so are unicorns.) Yet, we are not told which. Therefore, one cannot say of any particular possible world that it would have contained dragons.\(^{15}\)

It might even be part of the story that there are animals which look just like unicorns—‘fool’s unicorns’ they are called—and are often taken for them. Certainly, that could be consistently added to the story. As far as I am aware, it is not part of the story that there is only one species which looks like this. Certainly it need not be.

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\(^{14}\) Since I gave these lectures it has been pointed out to me that the males of some (unusual) species may resemble the females very little, so this might have to be taken into account. Considerations of evolutionary ancestry may also be relevant. No doubt the situation is simpler with chemical natural kinds than is the biological case. (In the latter case, I also use the term ‘species’ rather loosely.) There is a parallel discussion of this topic in \textit{N\&N}, Lecture III.

\(^{15}\) I should not be taken to be saying that it is impossible that there should have been dragons or that there should have been unicorns (like composite primes, or, according to me, water, that is not \(H_2O\)). Rather, that the counterfactual possibility is ill-defined, given that there are no dragons or unicorns.
REFERENCE AND EXISTENCE

Second, what about the epistemic situation? Of course, it could turn out that there actually were unicorns, but under what circumstances would this be so? One might say, 'Well, look, as long as there turned out to be animals that look like this, that is when it would turn out that there would be unicorns.' Well, notice what I said about the parallel case of Sherlock Holmes: that though there might be a great detective who did all the things in the story, that would not prove that the story was true reportage rather than fiction. On the contrary, the saying 'The characters in this story are fictional and any resemblance to persons living or dead is purely coincidental' may be true. Similarly, one may say here, if the term 'unicorn' has a logic similar to that of 'tiger' except that it occurs in fiction, that 'The species in this myth is fictional and any resemblance to actual species extant or extinct is purely coincidental.' The clause would make just as much sense here as in the case of a particular. If it had been the case that someone invented the story of the unicorn and simply spun it out of his head with no connection to any actual species, one could not say—even though his mythical animal precisely matched something in the real world—that he was talking about that kind of animal, any more than one could make the analogous claim in the case of Sherlock Holmes. This would be even more clear if he had gone on to talk about fool's unicorns, for then the actual animal would match both the unicorns and the fool's unicorns, and one couldn't say which of the two animals he was in fact talking about.

One could, of course, introduce a term, say 'schmunicorn,' just to be a predicate meaning 'member of the species of animals, if there is in fact a unique one, which is identified by the following surface characteristics: having one horn and looking like a white horse.' If so, then something is a schmunicorn if, and only if, a species with these surface characteristics exists. But I think that this is probably not even the way the term 'unicorn' was used by the medievals, who took the term seriously. They probably did believe that there was only one species that looked like this. But I think they wouldn't have held this to be analytic of the term 'unicorn' in the sense that it could not turn out that there was some species other than the unicorn which looked just like this. On the contrary, suppose (I don't know if this is part of any myth) that Sir Galahad is supposed to have met a unicorn, and they really believed that this happened. A medieval would, I think, agree that if somewhere in some part of the world there is a species of animals other than that of which a specimen was met by Sir Galahad, but which looked like it, they would not be unicorns. If they would agree to that, this shows that they would not mean by the term 'unicorn' simply 'a member of a species which looks like this,' because they would acknowledge the epistemic possibility that it should turn out that there was another species, not the unicorn, which did have these surface characteristics.

They would also, I think, acknowledge that they could turn out to be mistaken in supposing that unicorns had only one horn. Perhaps it could turn out, I think they should acknowledge, that it has two horns, but the other one is so tiny and buried under the principal one that it wasn't noticed by any knight. And I think they should also acknowledge that in this case, even though there was another species of animal unknown to them in darkest Africa, which did have only one horn and looked like a horse (at least looked as much like a horse as a unicorn does), those were not unicorns. It turns out that the description that they applied to unicorns applies more accurately to these other animals, but these were not the animals with whom they thought the knights had all these famous encounters, even though they misdescribed them in a significant detail.17

16. Or shouldn't, given that they thought that unicorns were a natural kind.
17. Although I ascribe the belief in unicorns to medieval times, it may have been even older and persisted longer.
If these are epistemic possibilities which could be acknowledged by the medievals, then the medieval does not mean by the term ‘unicorn’ the unique species identified by such and such surface characteristics. He uses it, as he uses the term ‘tiger,’ with respect to a hypothetical sample that people have met, which they have taken to be identifiable by such and such surface characteristics. But the possibility of mistake exists in both directions, both in the possibility of ringers, fool’s unicorns, and in the possibility that we’ve made some mistake in our description of the species itself.

If so, then, one cannot just say that any species which looks like this, if it exists, is the species of unicorns. Rather, if one wishes to use the term ‘unicorn’ as those who used it in the middle ages did—as those who spun the legends did—one must acknowledge that to prove that unicorns could have existed one must prove that this species that looks like the unicorn has some historical connection with the myth as we have found it. Of course, we might find it convenient to call such a species ‘unicorns.’ If we synthesized them in the laboratory we might call them ‘unicorns’; but we shouldn’t say that we have now made the very same animals that the medievals were talking about. We haven’t.  

There are two things at issue here. First, given that there are no unicorns, that it is a myth, could there have been other circumstances under which there would have been? I argue no. Second, epistemically speaking, I of course acknowledge that it might turn out that there really are unicorns, but one shouldn’t regard this question as simply a question about whether there is an animal matching the description in the myth. That is not a sufficient condition even for there actually being unicorns.

Here one is tempted to say ‘Look, you can’t say, “Given that there are no unicorns, you can’t say that there might have been unicorns”—you’ve just acknowledged that there might have turned out to be unicorns! And we know that there are no unicorns, so what possibility are we excluding here?’ I won’t answer this now. It is the same kind of question as the analogous question about Sherlock Holmes. If you say Sherlock Holmes does not exist, then if you are not excluding a possibility, what are you saying; what are you excluding here? But I will say this: one would be much less tempted to think that there might have been bandersnatches than that there might have been unicorns. For what are we told about bandersnatches? Here we are not told any surface characteristics, other than that the bandersnatch is framous; and apparently a framous animal is a very dangerous one, or anyway it should be shunned. That is all the poem has told us about them. Here one doesn’t think that there is any hypothetical animal: ‘Given that there are no bandersnatches, under what circumstances would there have been bandersnatches?’ It is altogether unclear because nothing has been said about what a bandersnatch would be. If it doesn’t describe a species, one simply rejects the term altogether, rather than thinking that it could apply in various hypothetical circumstances. An important difference is that here one doesn’t know what such a thing would even have looked like. It usually is a pretty good guide to being in a species, how something appears: if one is shown a picture of a tiger one thinks one can recognize them. That is because dead ringers are in fact very unlikely; and the better picture one has got the less likely one is going to be confused by a ringer. But other than that the

18. However, if the story of the unicorns were historically connected to some genuine and ordinary kind of animal (even one known to us today), and the mythical traits attributed to it gradually evolved, we would probably not say that it turned out that unicorns really existed after all. There are borderline cases, so one cannot give a hard-and-fast rule. But in the strong circumstances mentioned in the first sentence of this note, one would probably indeed deny that unicorns had really turned out to exist.

19. The reference is of course to Lewis Carroll’s poem ‘Jabberwocky.’
situation is really not so different. Here too it could turn out that,
contrary to what we thought, there really were bandersnatches. I
once read a hypothetical story about Lewis Carroll in which it
turned out that that was the case. Contrary to what we thought, he
was writing a straightforward report about bandersnatches. (Actually
I didn’t read a story; it was a comic strip.) At any rate this could
turn out to have been the case. Suppose we had asked him and he
said he was quite surprised that people thought he was talking about
imaginary animals here; why, he himself used to be warned to avoid
them when he walked through the park as a child, and that is what
they were always called in his little region, though apparently the
term has passed out of usage.

So one could discover that, contrary to what we thought, band-
ersnatches are real. And of course we express the fact that such a dis-
covey hasn’t occurred by saying that bandersnatches aren’t real, that
there are no bandersnatches, and so on. That is not to say, given that
there are no bandersnatches—that the bandersnatch is imaginary—
that we can then speak of the circumstances under which there would
have been bandersnatches. The term ‘bandersnatch’ is just a pre-
tended name of a species; it doesn’t really designate a species, and
once one knows that this is the case, one cannot say under what cir-
sumstances there would have been bandersnatches.

I think that the case of such a term as ‘dragon’ or ‘unicorn’ is no
different, though we are told something more about them, some-
thing which would perhaps be enough to identify them uniquely if
there were such. Because there will be no actual ringers around, we
can then investigate their internal structure to distinguish them
from hypothetical ringers that might have existed in other possible
worlds. But if this trail of investigation leads to the conclusion that
the term ‘unicorn’ or ‘dragon’ is merely pretense, then no hypothet-
ical species has been named. And the status of the predicate ‘is a

unicorn’ should be precisely analogous to that of the hypothetical
proper name ‘Sherlock Holmes’ in the detective story case, or
(Perhaps an example which might not be clear) to that of a hypo-
thetical color, ‘plagenta’ say, which none of us has seen—and it is
indescribable—but which occurs in such and such a story. Given
that the storyteller is talking about nothing, one can’t say under
what circumstances something would have been colored plagenta.
All these things are mere pretenses.

This being the time limit, as usual I have not said everything I
should like to say. In fact, the main thing I thought I was going to
talk about I didn’t get to; I will get to it next time. I will introduce it
now.

Before talking about the negative existential any further, there
are various senses, I think at least two, in which it is true to say that
Sherlock Holmes exists. And before talking about any way in which
Sherlock Holmes doesn’t exist, I should talk about the senses in
which he does, the senses in which the statement ‘There really is a
Sherlock Holmes’ is true.