

WHY HOBBITS CANNOT EXIST

Ben Kotzee and J.P. Smit

Kotzee and Smit explain why, if unicorns don't exist, then they could not possibly have existed. In fact, even if horned horses were discovered somewhere, they would not necessarily be unicorns. The key to understanding why this is so lies in understanding how so-called natural kind terms function.

Philosophers like imaginary objects. The present king of France, the golden mountain, Sherlock Holmes and unicorns have all played starring roles in the philosophy of the last century. Journalists, again, like funny articles about science. Few newspapers are complete without a page-filler here and there about improbable research into the tensile strength of biscuits, the sex-lives of bonobos or headaches in woodpeckers. Sometimes, the two worlds cry out to meet. This is not to say that journalists could fill many column inches with philosophy, but that newspapers often get carried away with a certain *kind* of science story that philosophers can shed helpful light on.

In 2003, the discovery of the 18,000 year-old skeleton of a small hominid on the Indonesian island of Flores attracted scientific controversy. The puzzle for scientists centred on whether the skeleton was of a previously undiscovered species (*Homo floresiensis*) or whether it was a (probably microcephalic) modern human. The skeleton's discoverers, Richard Roberts and Mike Morwood, nicknamed the hominid 'the hobbit' and journalists around the world were quick to imply that far from having been purely fictional creatures, hobbits actually existed on Flores, with headlines like 'Did Bilbo Really Exist?' (*SkyNews*) and 'Hobbits Like Humans Shows Indonesia Was 'Middle

Earth” (the *Northern Daily Leader* in Tamworth, New South Wales). Tantalisingly, it was suggested the creatures might still exist, with *Daily Telegraph* readers discovering that local myth talks of the ebu gogo, a small, hairy people the locals say lived in the jungle and ate everything raw (including, once, a baby – ebu gogo means ‘grandmother who eats everything’).

Might the ebu gogo that the locals speak of and that Roberts and Morwood named ‘hobbit’ be the same? And might they still live deep in the woods of Flores? No matter what science will eventually show about it, Roberts and Morwood’s discovery seems to feed a peculiar instinct amongst science journalists to suggest that there is really something *behind* all of those creatures of myth – that we may find confirmation one day that the mythical creatures that interest us so (if not hobbits, then Bigfoot or the Loch Ness monster) is (or was) really real. Amongst journalists, the instinct seems pretty universal, with even *Nature* getting carried away with this story, outrageously suggesting that ‘[t]he discovery of *Homo floresiensis* raises hopes for yeti hunters...’ Or take the following story (reported in *The Guardian* of June 11th 2008):

Unicorn Found in Tuscany Wildlife Park

An animal expert in Italy is claiming to have found proof of the existence of unicorns after he stumbled upon a young roe deer with a single horn growing from the centre of its forehead.

‘It’s proof that the mythical unicorn celebrated in iconography and legends was probably not just a fantastic creature but a real animal: a deer or other species with an anomaly similar to that of our deer’, said the centre’s director Gilberto Tozzi.

Is what this story so excitedly claims possible? Can it be that unicorns (or hobbits, or the yeti), commonly thought to be creatures of myth alone, actually existed?

In *Naming and Necessity*, Saul Kripke contends that it is not. In one of the most influential books in the philosophy of language, Kripke considers what natural kinds are and how kind terms succeed in referring to kinds of things. Kripke asks when kinds of things (like 'fruit', 'bread', 'lions', 'water', 'gold' and so-on) really form a class that belong together naturally as opposed to when objects are just lumped together more or less arbitrarily by people (as in 'couch'). Kripke claims that natural kinds like gold, water and lions are individuated in terms of their underlying structure, which ultimately is the structure uncovered by science. So what ultimately makes something water is that it has a molecular structure containing hydrogen and oxygen combined in a certain way and what makes a lion a lion is that it has a certain genetic make-up, etc. This is what distinguishes natural kind terms from 'artifact terms' (like 'couch'). Artifacts like couches, tables and paintings have no underlying structure that determines whether two things are the same *kind* of thing. It would be insane to saw open a couch to see whether it really *is* a couch. But how, Kripke asks, does it come about that our words 'gold', 'water' and 'lion' pick out (or refer to) just those things in the world that are actually gold, water and lions?

Kripke's story about how we refer to lions and gold goes something like this. A long time ago, before humanity had any conception of science, or any developed notion of kinds, someone saw a group of fierce-looking, four-legged, yellowish beasts and coined a term equivalent to the English 'lion' to denote this group. This sounds obvious, but Kripke adds a subtle point. Despite the fact that the first person who called a lion a 'lion' (in his language) did not know everything there is to know about lion-biology (or anything at all about it, for that matter), he still succeeded in making the term 'lion' (in his language) applicable to lions and only to lions.

According to Kripke, people invent terms referring to things like lions guided by a suspicion that these animals are fundamentally the same in some sense even though

they do not know everything there is to know about that creature. Crucially, when people invent a natural kind term, the natural kind term will *mean* the things referred to. It does not just mean that it is equivalent to a certain description. Take 'lion'. For Kripke, the term means all and only those creatures that really *are* lions; it does not mean 'a fierce-looking, toothy, four-legged, yellowish beast'. In taking this position, Kripke criticises that tradition in the philosophy of language known as 'descriptivism': he holds that the meaning of a term is the things that that term is about, it is not just an abbreviated description. While we may use the appearances of a thing to explain what we are talking about, the appearances do not amount to the meaning of the term, they're just a way of pointing at those kinds of things. We can show this by considering what we say when appearances turn out to be deceptive. Imagine what would happen if we find a three-legged lion. Is it still a lion? Of course. Is a lion that is not fierce-looking still a lion? Obviously. What if it turns out that lions aren't even yellowish? Say some scientist discovers that looking at a lion inspires such naked fear in us that our whole perceptual system goes haywire and we suddenly see yellow where there really is red and white candy stripes. Would we now say that lions are *defined* as yellowish creatures, and hence that these red and white candy striped creatures are not lions? That in such a case, lions do not exist? Of course not, we would just say that lions *turned out* to be red and white.

We could even think of the opposite case, where something has all the apparent qualities of the kind in question, but lacks the structure. This does occasionally happen. Think of the case of 'fool's gold'. Fools gold – that looks very much like gold, but is actually the iron sulfide *pyrite* – has many of the apparent qualities of real gold. It is a yellow metal that cannot be distinguished from gold, except by an expert. How does an expert do this? Well, the expert knows that real gold has a certain atomic structure that makes it what it is, and has the atomic number 79. Fools

gold looks like gold, but it is not gold. It is a natural kind and natural kinds are individuated in terms of their chemical structure, not appearance. Hence we can have something like fool's gold that shares the appearance of gold, but is not gold. The situation would be similar if we were to discover animals that are fierce-looking, yellowish, four-legged beasts that do not share the genetic make-up of real lions. These lions would be 'fool's lions'.

The moral of the above is that natural kinds are individuated by their underlying structure. Crucially, this is true even for language-users who *do not know this structure*. If we keep this in mind it is easy to see why Kripke would think it impossible for hobbits to exist. Hobbits, as we know, are not real; they were made up (by J.R.R. Tolkien in his books *The Hobbit* and *The Lord of the Rings*). The term 'hobbit' is a *fictional* natural kind term; it does not pick out something in reality, but purports to pick out something that exists in a fictional reality. As we saw above, the objects referred to by natural kind terms are individuated by their structure, and so, in order to decide what would count as hobbits existing, we need to know their underlying structure. But here we have a problem. While Tolkien, presumably, vaguely supposed that all hobbits have the same underlying physical/chemical structure, what this structure is is never mentioned. The upshot of this is that we do not have any way of saying what would have to be the case in order for these things to exist. The situation is a bit like one where I say: 'You have the same colour eyes as Hamlet.' Is this true? Well, Shakespeare never tells us what the colour of Hamlet's eyes are supposed to be, and quite possibly never had any reason to decide on a specific colour. So there simply is no fact of the matter as to Hamlet's eyes. This also applies when wondering what Hamlet's first words were as a child, or what he had for breakfast on his twelfth birthday. Any claim that my favourite type of vegetable is the same as that of Hamlet is not so much false as it is just completely empty. The same is the case with claiming hobbits exist. Saying that amounts to saying that

an animal with the same genetic structure as hobbits has been discovered. This, for the same reason, is not really saying anything.

There is another problem associated with anyone claiming to have discovered a hobbit. Kripke's theory of how natural kind terms refer shows that our use of a natural kind term like gold is only *about* gold because, at some point in the past, someone was in contact with actual gold (the term refers, as we saw above, because someone saw gold and meant for the term 'gold' to apply to that and only that sort of material). But, if hobbits were made up, there was never a time when a person was in contact with a hobbit and meant for the kind term 'hobbit' to apply to things like that (and only like that). So even if we find creatures that are remarkably similar to hobbits and even if we can somehow ignore the above problem, we *still* have not found hobbits. The Flores hominids, of course, could not have looked very much like hobbits, except in the matter of size. But even if we discover a creature somewhere that is 1 m tall, fattish in the stomach, with pointy ears and fur on the feet we would not have found a hobbit. Whatever creatures we find unexpectedly, Tolkien did not write about *these creatures*, and so the term 'hobbit' cannot refer to them. Rather what we would have in such a case is the fantastic coincidence that creatures that look just like hobbits *but are not hobbits* ('fool's hobbits', perhaps?) were discovered. Exactly the same would go for other fictional creatures like orcs, wookies, minotaurs and so on.

Hobbits (and orcs, wookies and minotaurs) are creatures of fiction. Creatures of *myth* are a slightly different kettle of fish (though how different is hard to say). 'Yeti' and 'ebu gogo' seem to be of this variety because people claim that yetis and ebu gogos once were seen (and potentially can still be seen). The people who use these terms generally view them as perfectly normal natural kind terms, on a par with 'lion', 'dolphin' and the like; 'yeti' picks out yetis and only yetis, 'ebu gogo' ebu gogos and so-on. It seems to be in principle possible that someone at some point saw a yeti

and baptised it and its kind 'yeti' and that today's users of the word 'yeti' (whether or not they've seen a yeti) still refer by this word to yetis. (This is another part of Kripke's theory. Once someone applies a natural kind term to a natural kind, the term keeps on referring to just that natural kind for subsequent users of the term. Kripke does acknowledge exceptions to this rule, but the normal case is that such reference is retained. Generally, it is because our ancestors called the dodo 'dodo' that our word 'dodo' refers to dodos even though none of us has ever beheld a dodo.)

We have already established that we cannot say that the ebu gogo are hobbits, for we are making no real claim when using the word 'hobbits' in this context. But surely we can potentially discover that ebu gogos (or yetis and other mythical creatures potentially) exist or existed?

This is possible, but one needs to be careful. Of course we may discover strange creatures we never knew about. But are these creatures the very creatures that myth speaks of? Not necessarily. The assumption that is all too often made seems to be something like this: (1) the locals of some area speak of a strange creature that no-one ever sees (in this case the ebu gogo) (2) scientists discover evidence of a strange creature in just about the same place that is somewhat similar to the creature spoken about (the Flores skeleton) (3) therefore what scientists discovered and what the locals speak of is the same thing (i.e. the ebu gogo exists!).

The problem is with the 'therefore'. We can't assume it. If the Flores locals actually named just this creature that Roberts and Morwood have discovered 'ebu gogo' long long ago, well then 'ebu gogo' seems to refer and we can say that the scientists truly discovered the ebu gogo. However, the ebu gogo may just have been a myth all along and it may be that the scientists *just by coincidence* discovered a strange creature just where there was always also a myth. Then the word won't have referred all along and the scientists won't really have discovered the ebu gogo, they would have discovered something else.

The moral of the story is this: whether the ebu gogo or the yeti can be discovered depends not just on what the scientists find *but also on linguistic evidence*, that is evidence as to how the meaning of a specific term was established. It would be good for scientists (and science journalists!) also to pay attention to finding that evidence, but unfortunately this sort of evidence is very hard to get at. It will be very hard to know whether the local people of ancient times actually named that little creature the little skeleton of which Roberts and Morwood discovered (and others like it) 'ebu gogo' or whether it is just a coincidence that a myth and a little hominid popped up in the same place.

Kripke's ideas regarding how natural kind terms refer have been the subject of great debate and frequent controversy. Very few philosophers would say that he got it completely right, but a large majority does think that there is something fundamentally right, or at least important, about the above ideas. Sadly, it does mean that the creatures of fiction are forever confined to fiction, and will never grace reality with their presence. The creatures of myth, also, are likely to remain just myths. But all of this reveals some truly surprising, and *actually existing*, facts about our language and how it works. (We leave it to the reader to decide whether Gilberto Tozzi discovered a unicorn.)

Ben Kotzee is lecturer in the School of Continuing Education, Birkbeck College, University of London. J.P. Smit is lecturer in philosophy at Stellenbosch University.

Further Reading

Nature's flores Man pages are at: <http://www.nature.com/nature/focus/flores/>

Saul Kripke, *Naming and Necessity* (Cambridge, Mass., Harvard University Press, 1980).