

The End of the Teapot Argument for Atheism (and All Its Tawdry Imitators)

Mark F. Sharlow

Abstract

Atheists sometimes use Bertrand Russell's teapot argument, and its variants with other objects in place of the teapot, to argue for the rationality of atheism. In this paper I show that this use of the teapot argument and its variants is unacceptably circular. The circularity arises because there is indirect evidence against the objects invoked in the arguments.

1. Introduction

Atheistic authors often use Bertrand Russell's teapot argument to build a case for disbelief in God. [1] Here is the argument as Russell originally presented it:

If I were to suggest that between the Earth and Mars there is a china teapot revolving about the sun in an elliptical orbit, nobody would be able to disprove my assertion provided I were careful to add that the teapot is too small to be revealed even by our most powerful telescopes. But if I were to go on to say

that, since my assertion cannot be disproved, it is intolerable presumption on the part of human reason to doubt it, I should rightly be thought to be talking nonsense. [2]

On its face, this argument points to a seemingly reasonable conclusion: one should not feel compelled to believe that God exists unless one has evidence that God exists. However, some atheists use the teapot argument in a substantially different way. They use it to show that if one lacks evidence for God then one should believe that there *is not* a God. According to this line of argument, if you feel there is insufficient evidence for God, the rational course of action is to dismiss the whole idea of God instead of just remaining undecided. In other words, if you don't feel there's convincing evidence for the existence of God, you should be an atheist instead of just being an agnostic.

Today's atheistic authors also use variants of the teapot argument for the same purpose as the original argument. In these variants, the teapot is replaced by other imagined objects: the Invisible Pink Unicorn, the Tooth Fairy, the Flying Spaghetti Monster, leprechauns, and others. [3] These arguments, along with the original teapot argument, will be the main topic of this paper. Another variant, which I will mention only briefly here, frames the argument in terms of the burden of proof. According to this variant, if the theist cannot meet the burden of proof for the existence of God, then we should conclude that there probably is *not* a God – just as we believe there probably is not an orbiting teapot (or leprechaun or whatever). [4] This outcome is different from the *prima facie* more reasonable move of simply refusing to believe there *is* a God. Adding the concept of burden of proof does not change the nature of the argument, but it leaves the argument vulnerable to additional criticisms. Michael Antony has cast doubt on the New Atheists' claim that only the theists, and not the atheists, bear a burden of proof. [5]

In this paper, when I refer to “the teapot argument” I will mean Russell's teapot argument used in support of atheism instead of agnosticism. By “teapot-type arguments” I will mean variants on the teapot argument (as just defined) with other objects replacing the

teapot. I will not have much to say about other uses of Russell's teapot and its variants, though some of what I say might carry over, with suitable changes, to those other uses.

2. Why the Teapot Argument Fails

Unfortunately for the New Atheists, the teapot argument is fallacious. It is a circular argument.

To find out where the circularity comes in, first notice that the imaginary object used in the teapot argument is *intrinsically improbable*. If you replace the orbiting teapot with other objects that are more probable, the argument ceases to be convincing.

The observation that there is something implausible (not just unproven) about Russell's teapot and similar objects is not new. I am not the first to point it out. Michael Antony, in an article critical of the New Atheism, noted that atheists who invoke items like goblins and the Tooth Fairy in teapot-type arguments are "presenting ridiculous examples and ignoring non-ridiculous ones" [6]. Even über-atheist Richard Dawkins, who uses teapot-type arguments, seems to recognize the intrinsic implausibility of the objects invoked in the arguments [7]. (However, Dawkins does not seem to realize that this implausibility undermines the arguments.) In this paper I will elaborate on the differences between the plausible and the implausible objects – or what Antony calls "ridiculous" and "non-ridiculous" examples. Much of what I will say might seem trivial in hindsight, because the items under discussion seem *so very* implausible once we have thought about them for a moment.

First consider the teapot. To understand why the teapot is implausible, consider what would have happened if Russell had used an *oblong rock having two craters* instead of a *teapot*. Then Russell's argument would have been conspicuously wrong. Even if we had never observed an oblong space rock with two craters, our general knowledge about outer

space would give us good reason to believe that there probably is such a rock. We know that there are lots of rocks in space, including meteoroids and asteroids. These rocks come in a wide variety of shapes and sizes. Many of these rocks are oblong, cratered, or both. Therefore, even if we had not observed an oblong two-cratered rock in space, we should be quite surprised if there were no such rocks. There could well be such a rock in an orbit of the general kind that Russell mentioned in his argument. We would know that the existence of such a rock is not implausible, and presumably has a non-negligible probability, *even if we had no direct evidence for such a rock*. Our general knowledge of the materials found in space is enough to make the point.

However, Russell did not use a plain old space rock in his argument. Instead, he used (of all things) a *teapot*. A teapot is an object that is inherently unlikely to occur in space. The china teapot that Russell had in mind could not occur in space unless either (1) humans put one there intentionally or unintentionally, or (2) some freakish natural event threw one into space from Earth. Alternative (1) has not happened as far as we know. Alternative (2) also has not happened as far as we know, and is extremely improbable given the way Earth and its atmosphere work. Of course, someone might want to expand the definition of “teapot” to include objects that could be used as teapots but that are not of intelligent origin. (For example, natural forces might shape a piece of rock accidentally into a form that would make the rock utterly indistinguishable from a teapot, and fully usable as a teapot if we had the rock in our hands.) But even if you count such a naturally occurring “teapot” as a teapot, the existence of Russell’s teapot remains unlikely – because it is unlikely that such an object would happen to form naturally. In any case, the object would not be the *china* teapot that Russell specified.

Now we can see why Russell's teapot argument fails to disprove anything. The argument is circular. Its conclusion is built into its premises. It begins with an object whose existence in outer space is intrinsically unbelievable – and it ends in the conclusion that belief in the object's probable existence is irrational. Belief in the teapot seems silly only because the teapot is an object that is unlikely to exist in outer space. We already know

that the teapot is unlikely even before we read the argument. We might not have direct sensory evidence against Russell's teapot, but we have indirect evidence against it. Russell's teapot example does *not* succeed in showing that *unproven* objects are unbelievable. At most, it succeeds in showing that objects *known to be improbable* are unbelievable.

Viewed this way, the teapot argument doesn't really prove much at all. It only shows that we shouldn't believe an object is probable if we already know the object is improbable. We already knew that.

The teapot argument is not as strong as the New Atheists would like to think it is! Indeed, the teapot argument is shockingly weak. It might be able to tell us that God is improbable, but only if we have independent reasons for thinking that God is improbable – and in that case, it tells us nothing new.

3. Other Teapot-Type Arguments

Now what about the other teapot-like arguments – the Flying Spaghetti Monster argument, or the unobservable pink unicorn argument, or all the trite comparisons of God with tooth fairies, leprechauns, and Santa Claus?

All these arguments have the same flaw as the teapot argument. They ask us to imagine an intrinsically improbable object – one that we know, through indirect evidence, to be improbable. It's true that we should disbelieve in such objects if we lack evidence for them, because we already know that the objects are improbable. However, the usual atheist line of argument suggests that we should disbelieve in these objects *because* we have no evidence for them. That is a different claim – and it is wrong. The reason it is rational to *disbelieve* in these objects (instead of simply reserving judgment about them)

is not that the objects are unproven. The reason is that the objects are improbable in view of the indirect evidence against them.

Now I will discuss a few of these improbable objects and suggest a few reasons why they are improbable. It goes without saying that we already disbelieve in these objects. I am only trying to point out some simple reasons *why* our disbelief is justified. (Any militant atheist who reads this paper, logs on to an internet forum, and writes “This author is trying to disprove leprechauns – he must think they might exist ha ha ha ha ha” will be guilty of the basest intellectual dishonesty.)

Consider the Invisible Pink Unicorn. The case against the existence of this creature is open and shut – and for a reason almost too obvious to mention. How could an object that is completely invisible also be *pink*? If the unicorn reflects the right kind of light to give it a pink color, how can it be invisible too? A permanently invisible pink unicorn would seem to be a logical impossibility – not just a physical or biological impossibility. Also, a unicorn, in the standard sense of that word, would have to be roughly horse-shaped – and one can doubt that a completely undetectable object would have a shape, at least according to the standard meaning of the word "shape." How could we ever tell which points of space the "unicorn" occupies if the animal is completely unobservable? If it's impossible to specify whether this creature occupies a given region of space, then in what sense does it have any shape at all – even the shape of a horselike creature with a horn? There are even more reasons to deem the pink unicorn improbable, but these two reasons seem good enough. The Invisible Pink Unicorn is not believable – not because its existence is unproven, but because there are good reasons to think it *cannot* exist.

Next consider the Tooth Fairy. In this case, we have very good indirect evidence that the alleged entity does not exist: we know the real cause of the phenomenon that the Tooth Fairy supposedly causes. According to the Tooth Fairy folklore, the Tooth Fairy leaves money for children who have lost a tooth. In reality, we know that this money is brought by the child's parents or other responsible humans. This fact excludes the Tooth Fairy as

the literal, causal bringer of the money. Hence the Tooth Fairy, defined in the standard way, is implausible. We don't just lack proof that it exists; we have very good evidence that it does *not* exist. This is similar to the reason we don't believe in Santa Claus. We know that an actual man named Santa Claus, who has the properties attributed to him in the Christmas legends, doesn't exist – because we know where Christmas presents *really* come from.

Next consider leprechauns. We should disbelieve in leprechauns, but if we want to justify our disbelief we need a reason different from the reason for which we disbelieve in the Tooth Fairy. Imagine that leprechauns existed and had the features that the leprechaun folklore says they have. Imagine that leprechauns really interacted with humans as often as the folklore suggests they do – and with just as much gusto. Then they likely would have left behind some decent evidence for their existence. However, we don't have this evidence. This tips the balance in favor of the improbability of leprechauns. The improbability gets worse when we consider the rather *long* time that people have been believing in and talking about leprechauns. All that time to leave some physical traces – and no verifiable physical traces found? On the other hand, if the leprechauns were beings of a kind that would *not* leave significant physical evidence, then they would be quite different from the way the leprechaun folklore says they are, and we would have good reason to doubt that they were the same beings that storytellers traditionally called “leprechauns.” Leprechauns, as described in the folklore, are improbable. We cannot prove with absolute certainty that there are no such beings (there isn't much we can prove with absolute certainty), but we have good reason to believe there are no such beings.

Note that I am not jumping from the premise that we haven't found leprechauns to the conclusion that there aren't any leprechauns. I am only claiming that *if* leprechauns existed, and *if* they fit the relevant descriptions in the folklore, then *probably* they would have left some decent evidence by now. No matter what one thinks of the maxim “absence of evidence is not evidence of absence,” one still must contend with the fact that

some hypothetical entities are likely to reveal their existence if given enough time.

The same argument that I used against leprechauns can be used against other mythical creatures that are alleged in folklore to be fairly common and to have plainly observable effects on humans or the environment. These creatures include fairies, goblins, and all the rest. This argument also can be used against implausible beings of modern invention, such as the Flying Spaghetti Monster. Of course, someone might want to interpret all these imagined entities as purely spiritual beings that don't leave physical traces. However, according to this alternative set of definitions, the entities would lack many of the characteristics with which their legends endow them – so they wouldn't literally be the same beings that the legends describe. In a lesser version of this strategy, one could reinterpret leprechauns or fairies in a diluted way, so that they have very little interaction with humans or with anything else in the physical world. Again, these creatures wouldn't be the ones described in the actual myths about leprechauns and fairies – so the resulting teapot-type arguments would lose force, besides losing almost all of their rhetorical punch.

Atheists have deployed all these implausible beings (in their undiluted forms) in teapot-type arguments. The intent of these arguments – or at least the most important part of the intent – is to show that if you feel you lack evidence for a God, then you should come over to atheism. In other words, you should believe there probably is no God instead of just reserving judgment.

The moment we replace the implausible beings in these arguments with plausible beings, the arguments become ineffective – and we can see where the arguments go wrong. I showed how this works with the original teapot argument. Once we replace the intrinsically improbable object with a less improbable object, the argument loses force. It's reasonable to believe that there *might* be an oblong two-cratered rock in space, and to leave the possibility of such a rock open, even if we have no direct evidence for such a rock.

We can do the same thing with the Flying Spaghetti Monster argument. Try replacing the allegedly impressive Flying Spaghetti Monster with a bird of a rare unknown type, about the size of a sparrow. That's the kind of organism that might well go undetected even if it existed, especially if it lived only in the interior of the Amazon jungle. Would you feel comfortable betting your life that such a bird does not exist? Maybe not! You might not have any evidence for this unknown bird – but still, it's a creature that might well exist undiscovered. Belief in this bird might not be supported by reason, but firm disbelief also is not supported by reason. Agnostic nonbelief in regard to the bird is more reasonable than hard-core disbelief in the bird.

We can make the same move all over again with the Invisible Pink Unicorn argument. Try replacing the undetectable pink unicorn with a horse of some rare breed, still uncatalogued but detectable to the senses just like any other ordinary horse. Once again, the improbability lessens and the ridiculousness goes away. We even can use this same strategy with the leprechaun argument. Try replacing the leprechaun with a monkey of a yet-unknown type, dwelling in the Amazon jungle. In all these cases, the replacement gives an argument that does not clearly give grounds for firm disbelief – though we still shouldn't believe firmly in the object in the absence of evidence. Once we replace the improbable objects with less improbable ones, the most rational position becomes open-minded nonbelief instead of positive disbelief. Is there a yet-unknown species of monkey somewhere in the Amazon jungle? Personally, I don't know of one (it's an *unknown* species after all), but I wouldn't bet my boots that there isn't one! We don't have grounds to believe that there is such a species – but we also don't have rational grounds to believe, strongly and positively, that there is *not* such a species.

Antony, whom I quoted earlier, pointed out that the teapot and other examples like it are “ridiculous examples” instead of “non-ridiculous ones.” Now we can see clearly *why* these examples are ridiculous: we have some indirect evidence against the objects they

invoke. These examples don't tell us much about God unless we already have indirect evidence against God – and in that case, the arguments don't tell us anything we don't already know.

4. An Alternative Reading of the Arguments

There is another reading of the teapot-type arguments that seems, at first, to avoid the above objections. According to this reading, the teapot and its substitutes are good analogs for God precisely *because* we have some evidence against God. An atheist might claim that the Flying Spaghetti Monster is analogous to God because the absence of evidence for design in nature is evidence against God, just as the absence of traces of the Monster is evidence against the Monster. Or an atheist might contend that Russell's teapot is a good analogue for God because the known laws of physics exclude supernatural intervention, just as the known facts of space science practically exclude the teapot.

These alternative readings do not overcome my objection to teapot-type arguments. An atheist who uses these readings is claiming that the teapot-type arguments work *because* there is other, independent evidence against God. In the first example of the preceding paragraph, the atheist holds that the absence of design in nature is evidence against God. In the second example, the atheist holds that the invariability of natural law is evidence against God. In both cases, the atheist is claiming to have independent evidence against God – evidence that does not depend on the teapot-type arguments. This evidence, if it really were evidence, would be enough to count against belief in God, just as if the atheist had never heard of the teapot-type arguments. The teapot-type arguments add absolutely nothing to the case against God. (Of course, this does not mean that the so-called independent evidence against God really is evidence against God. That is a separate topic.)

Just to keep the record straight, I should mention that there are conceptions of God that *do not* imply that God would leave any kind of distinctive physical traces or would violate natural laws. I am referring to the well-thought-out ideas of God proposed by careful thinkers on the subject. Just to name two examples, there are the ideas of God set forth by Charles Hartshorne [8] and by G.H. Howison [9]. Ideas like these are immune to the teapot-type arguments. (New Atheists often ignore these reason-friendly ideas of God and confuse the general idea of God with the crudest and most outdated versions of the God concept.) However, you don't even need to adopt these rational ideas about God to avoid the teapot-type arguments. Even conventional theism is immune to these arguments if God's interventions are sporadic enough. Religious fundamentalism, with its God of massive and often destructive miracles, would still be vulnerable to teapot-type analogies. However, this is not too relevant to our topic, because atheists don't usually present the teapot-type arguments as arguments against *crude forms of theism only*. Instead, they present them as arguments against *belief in God in general*. That is a very different kind of belief, no matter how hard some atheists might try to convince people that these two kinds of belief are the same.

While I am on this topic, I should mention Richard Dawkins' variation of the teapot argument – what he calls the “argument from improbability.” [10] I have rebutted this argument elsewhere [11], so I won't repeat my rebuttal here. The important fact to notice is that the argument from improbability is not a teapot-type argument. Despite its obvious connections to the teapot argument, the argument from improbability is an argument of a different kind. The argument from improbability does not merely liken God to some undiscovered being and ask us to conclude rashly that we should disbelieve in God. Instead, it is an attempt to show specifically that a being like God really is improbable. Thus, Dawkins' improbability argument is not a teapot-type argument. It is a genuine argument for atheism, though not a convincing one.

5. Implausibility and Arbitrariness

Another way to debunk the teapot-type arguments is to notice that the objects they invoke are arbitrary. Russell asked us to think of a china teapot in space – but why couldn't we use a trellis, a seesaw, or a breadbox instead? There is a very large set of possible objects, all foreign to the space environment, that Russell could have used in his example. We have no good reason to prefer any of these objects over any other – or at least no good reason to strongly prefer any of them (there might be differences in probability, but no differences big enough to sway our judgment about their existence). This highlights the fact that none of these objects can be very probable. If we begin by believing that there is an object of exactly one of these kinds, then we have (almost) equally good grounds for believing that there is an object of one of the other kinds instead. Thus, our initial assumption ends up with a much lower probability than we might have expected. If, on the other hand, we believe that there is an object of more than one of these kinds (at least one object per kind), then we would have equally good reason to believe the existence of an object of each kind – so we would be stuck assuming a situation which would leave space rather cluttered, probably detectably so.

The same problem faces other teapot-type arguments. Suppose someone postulates a Flying Spaghetti Monster with spaghetti-like tentacles. Why not postulate a Picture Wire Monster, a Floppy Flower Stem Monster, or a Fiber Optic Cable Monster instead? One can make up a huge set of “possibilities” like these. All of them are just about as probable or improbable as the Flying Spaghetti Monster – and all are just as ridiculous. If we want to postulate one of them, we have an equally good case for postulating any one of the others instead. From this observation alone, we can conclude that none of them, taken separately, is very probable.

Interestingly, this problem with arbitrariness does not seem to hit the idea of God as hard as it hits the ideas of unicorns and the like. According to most conceptions of God, God

has characteristics (great knowledge, great goodness, etc.) that are relevant to the alleged roles of God as source of the universe and/or as perfect or ideal being. If we replace God with some other arbitrarily selected entity, we are not likely to get an entity that is equally able to fill these roles. We cannot conclude that the substitute entity is roughly as probable as God. Of course, this observation is not an argument for or against God. It tells us nothing about whether God exists. It only shows that God, as an alleged entity, does not share the same kind of arbitrariness that afflicts Russell's teapot and its imitators.

6. Concluding Remarks

The main take-home lesson from this discussion is that *the teapot-type arguments, by themselves, tell us very little about the believability of any existence claim.* At most, they tell us that we should disbelieve in an unproven object if we already have evidence against the existence of that object. In other words, the teapot-type arguments can only be used to disprove objects that already are pretty well disproven. These arguments tell us little or nothing about objects that we don't already have evidence against.

Applied to God, the teapot-type arguments tell us this: we should believe there is no God *if* we already have other reasons, besides the teapot-type arguments, for believing there is no God. In the absence of such reasons, those who find the evidence for God unconvincing can reasonably remain agnostics. Their most justifiable option is simply to refuse to believe in God – to embrace *nonbelief* while also refraining from positive *disbelief*. If atheists want their position to be convincing, they must still come up with real arguments for their position – that is, positive arguments for the nonexistence of God. It is not enough to affirm that we don't know there is a God, and then to toss around teapots or leprechauns to argue for positive disbelief in God. [12]

In other words, the teapot-type arguments fail as ways of supplanting agnosticism with atheism.

Note that the point I just made is not an argument against atheism. Needless to say, you can reject the teapot-type arguments and still be an atheist. However, arguments using Russell's teapot, pink unicorns, leprechauns, the Flying Spaghetti Monster, and the like are not rational ways to argue for atheism. You need to look for better arguments.

Notes

[1] The best example is found on pp. 51-54 of Richard Dawkins' *The God Delusion* (Boston and N.Y.: Houghton Mifflin, 2006), in a section titled "The Poverty of Agnosticism."

[2] Bertrand Russell, "Is There a God?", pp. 542-548 in *The Collected Papers of Bertrand Russell*, vol. 11, ed. John G. Slater and Peter Köllner (London and N.Y.: Routledge, 1997). The quote is from pp. 547-548. Russell wrote the essay "Is There a God?" in 1952.

[3] Again, Dawkins' *The God Delusion* (cited above) is a prime example. Dawkins covers some, but not all, of these improbable beings. The rest can be found in a profusion of places on the Internet. The main Flying Spaghetti Monster site is at <<http://www.venganza.org>> (accessed 10/28/11). (Alas, making fun of other people's religious beliefs is so much more entertaining than arguing rationally against those beliefs!)

[4] Sometimes this seems to be what Dawkins has in mind (see Dawkins, *The God Delusion*, cited above, pp. 51-54). It may or may not have been what Russell had in mind.

[5] Michael Antony, "Where's the Evidence?", *Philosophy Now*, Issue 78, April/May 2010, <<http://www.philosophynow.org/issue78/78antony.htm>> (accessed 10/16/2011).

[6] Antony, "Where's the Evidence?" (cited above).

[7] Dawkins, *The God Delusion* (cited above), pp. 51-54.

[8] See, for example, Charles Hartshorne, *Omnipotence and Other Theological Mistakes* (Albany, N.Y.: State Univ. of New York, 1984).

[9] G. H. Howison, *The Limits of Evolution and Other Essays* (2nd ed. (rev.); New York, N.Y.: The Macmillan Co., 1904).

[10] Dawkins, *The God Delusion* (cited above), chap. 4.

[11] Mark F. Sharlow, "Playing Fast and Loose with Complexity: A Critique of Dawkins' Atheistic Argument from Improbability," <http://www.eskimo.com/~msharlow/philos/argument_from_improbability.pdf> (accessed 10/16/2011).

[12] Antony (cited above) draws a similar, but perhaps stronger, conclusion: that the New Atheists are mistaken when they insist that theists, but not atheists, have to justify their position with evidence.