Nothing

What do these objects have in common?



Easy: There are holes in all of them! A-ha! Gotcha! So, holes EXIST! But, what are holes?

Assumption: The universe only contains THINGS. It does not contain non-things (i.e., NOTHINGS). So, then, if holes exist at all, they must be THINGS. And yet, holes don't seem to be things at all. Rather, they seem to be, by definition, ABSENCES of things.

[***Other Types of Absences:*** *There's more. It's not just holes in material objects. We seem to treat all sorts of absences as things! For instance, consider:*

> ***House Plant*** *I am leaving town for 2 weeks and I ask you to go to my house and water my plants while I'm away. You agree to do so, but get so distracted that you never make it to my house. When I return, my house plants are all dead.*
>
> *What was the cause of the plants' death?* *Intuitively, a LACK of water.*
> *What might I blame you for?* *Intuitively, your FAILURE to water my plants.*

We often blame others not for what they DID do, but what they DIDN'T. We call such actions (or, rather, INactions) ***omissions****. But, what are omissions?*

A further problem is that it seems that, if FAILURES cause things, then we should blame not only YOUR failure to water my plants but also LARRY'S (though he lives in Australia and has never heard of you nor your house plants). For, he failed to water them too.

In short, absences just do not seem to be causes. As Mumford notes, "[T]he bullet killed Kennedy, not the absence of a truck driving between the sniper and his victim." (95)

But, then, how do we explain the intuition that lack of water caused my plant to die?

We also often make claims like, "That shirt is not blue" or "He is not six feet tall". What are we saying, or referring to, when we make claims like these? Are there ***negative properties*** *in addition to positive ones? (for instance, does the shirt have the property of 'non-blueness'? does the man have the property of 'not being 6 feet tall'?) Perhaps, except, (a) That would be weird if there were such things as negative properties, and (b) If we allow the existence of negative properties, then everything has an INFINITE number of them! For instance, if the man has the property of not-being-6', then he ALSO has the properties of not-being-6'1", not-being-6'2", not-being-6'3", and so on.*

Rather than claiming that he HAS the properties of 'not being 6' tall', we might say that 'he is not 6' tall' is ENTAILED by his having of some POSITIVE property (e.g., being 5'8"), because 'being 5'8" tall' is ***incompatible*** *with those other properties. Problems:*
(a) Incompatibility of 5'8" and 6' seems to involve some form of negative claim.
(b) Lots of negative claims do not seem to involve incompatibilities; e.g., There are no white ravens. Surely whiteness is not INCOMPATIBLE with ravenness.

Note: I'll leave it there for now. We'll revisit the problem of absences several more times, as we discuss truthmaker theory, causation, and the nature of harm, later in the semester.]

Here, let's focus on a single type of absence: Holes. In the dialogue by David and Stephanie Lewis, Argle and Bargle are having a splendid evening, sitting around with some wine and cheese until someone comments that there are holes in the cheese.

There ARE holes in the cheese? as in, there EXIST some holes in the cheese? as in, holes EXIST!? It seems that the following three claims, which are all plausible, are inconsistent:

1. There are no immaterial objects.
2. Holes exist.
3. Holes are not made of matter.

I have paraphrased their conversation below:

Strategy 1: Deny claim (2). There are no such things as holes.
A: Argle tries to deny that when he says, "There are holes in the cheese", he is not committing himself to the existence of holes. Rather, he just means that the cheese itself has the property of *being perforated*.

B: But, Bargle points out that cheese can be perforated in many ways. It can have one perforation, or two, or three, and so on.

A: Argle amends his claim to say that the cheese can have the property of 'being singly-perforated', 'being doubly-perforated', and so on.

B: But, it seems that the cheese's being doubly-perforated has something in common with there being two crackers on the plate. But, this intuition can only be accounted for if there are two THINGS, and two THINGS (2 crackers, 2 holes); i.e., 'doubly-perforated' must mean there are TWO PERFORATIONS. Again, we're forced to treat holes as things.

Strategy 2: Deny claim (3). Holes are material hole-linings.
A: Argle changes his strategy and admits that holes exist as material things. By this, he is clear to point out that he does NOT mean that the holes in the cheese are filled with air molecules and that it is the collection of material air molecules that make up the hole (on this view, the cheese would no longer have holes if it were placed in a true vacuum).

Rather, he means to refer to the hole LINING: The holes in the cheese are really just the bits of cheese that compose the surface lining each hole.

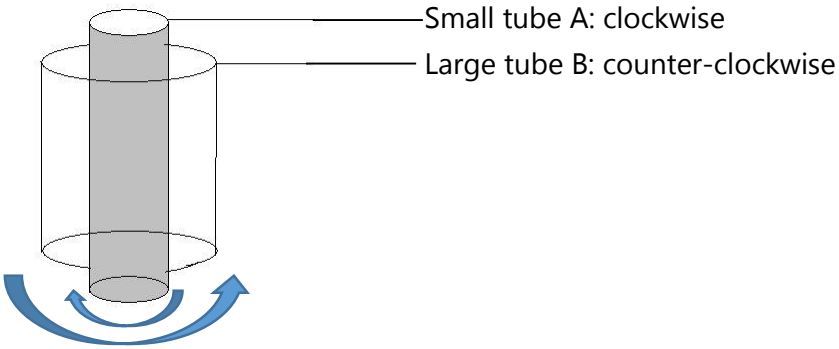
B: Bargle points out that this would make our language about holes strange. Typically, we would think that the cheesy lining around each hole SURROUNDS the hole. But, if the hole JUST IS the lining, then it seems like the hole surrounds itself—and nothing can surround itself.

Furthermore, Argle's suggestion entails that the holes are made of cheese! That seems false. For, it is the very ABSENCE of cheese that seems to be the hole.

A: To these criticisms, Argle simply replies that these claims must be true—it is just that our language doesn't usually accurately capture the nature of holes. Sometimes it does, though. It is common, for instance, for someone to claim that (a) A cave is a hole in the ground, and (b) Some caves are made of limestone. This seems to support Argle's view.

B: Bargle raises a different criticism. Imagine the toilet paper roll above spinning in place. Clearly, all of the MATERIAL of the roll is rotating. But, surely the HOLE doesn't rotate—does it? The view that holes are made of material hole-linings entails that the hole IS rotating.

Even if Argle just bites the bullet and claims that the hole IS in fact rotating, Bargle can come up with an even more problematic example. Imagine that the toilet paper roll is placed INSIDE of a paper towel roll, and that the toilet paper roll is spinning clockwise, while the paper towel roll is spinning counter-clockwise, like this:



According to Argle, large hole B is rotating counter-clockwise, and small hole A is rotating clockwise. But, intuitively, small hole A is a PART OF larger hole B, so A must be rotating counter-clockwise. Now we have a contradiction: Apparently, hole A is both rotating clockwise AND counter-clockwise. And this is impossible.

A: Argle simply denies that hole A is a PART OF hole B. If holes are just hole-LININGS, then in no sense is A a part of B. Hole A is INSIDE OF hole B, and nothing more.

B: Bargle has another worry: Consider this container:

This is a 5-gallon water tank. So, when we ask, What is the volume of the hole inside this tank, intuitively, the answer is "5 gallons".

However, now ask, On Argle's view, what is the volume of the hole? Well, if holes are just hole LININGS, then the volume of the hole must be quite small (just the volume of the plastic that makes up the inner-lining of the tank).

So, Argle's view delivers the wrong hole volume.

A: Argle is quick to point out that EVERYONE has this problem. I might ask, "What is the volume of this bottle?" and one reasonable answer might be "2 liters", while another might be, say, "100 mL". The first answer refers to HOW MUCH VOLUME COULD FIT INSIDE the bottle, while the second refers to THE VOLUME OF THE BOTTLE ITSELF (i.e., its material). There is no problem here. Context picks out the relevant sense of volume.

B: Bargle now asks: How thick is the hole? For instance, for a toilet paper roll, surely the WHOLE roll is not the hole. But, according to Argle, holes are only hole LININGS. So, is the hole the innermost millimeter of the cardboard tube? Or the innermost nanometer? Or what? Any decision about a hole's thickness seems arbitrary.

A: Argle points out that they are ALL holes. The innermost nanometer of the cardboard is a hole, as is the innermost millimeter, and so on.

B: But, clearly, there are only two holes in the cheese. Argle is claiming that there are MANY (an infinite number of?) holes.

A: Argle responds by pointing out that all of the holes surrounding a single perforation are really one and the SAME hole. That is, if "two" holes share the same perforation, then they are really one hole.

B: However, now Argle is committed to saying that multiple non-identical holes are also identical. This is a contradiction.

A: Argle claims that by "same" hole, he doesn't mean IDENTICAL. Rather, he simply means "co-perforated". So, while it is strictly speaking true that there are MANY holes in the cheese (perhaps an infinite number!), exactly two classes of them are co-perforated.

B: First, it seems odd to re-interpret the word "same" as meaning "co-perforated" rather than "identical". But, that aside, it now seems that there are STILL many holes in some objects. Consider, for instance, the toilet paper tube. In your mind, cut that tube in half. Consider only the left half. Then consider only the right half. Argle must admit that we have just considered TWO holes—since neither of them share the same perforation. However, intuitively, there is only one hole in the tube.

A: Argle simply claims that there is only one hole here, since there is one perforation.

B: A final complication: I now punch a tiny hole through the side of the cardboard toilet paper tube, right in the center. I now seem to have two holes, the big one composed of the whole tube, and also the little one. But, if the big hole is just the hole lining (i.e., the cardboard tube) AND the little hole is just the hole lining (i.e., the cardboard tube), then there must be just ONE hole here. Yet, it really does seem that there are two holes now.

A: Bizarrely, Argle now admits that there ARE two holes laid end to end; i.e., the left half and the right half of the tube. And there is ALSO a THIRD hole; namely, the little perforation we've just made, in the middle. None of the three holes are identical, because none of them are composed of the same parts. There is the left big hole, composed of the left half of the tube; the right big hole, composed of the right half of the tube; and the little perforation, which is composed of BOTH the left half and the right half of the tube. So the tube with the perforation actually has THREE holes. Argle admits that this amounts to a revision of the way we speak, but such is the price of good philosophy…