



Gruyère & crackers

Argle Only concrete material objects exist. Behold the Gruyère. Lots of holes in it, right? **Bargle** Yup. ...gotcha! Clearly, the existence of immaterial holes refutes your materialism. Yet I never admitted their existence! ...wait, you didn't? "There are holes in the cheese", when I say it, is just a way of predicating 'being perforated' of what exists: the cheese. No hasty assumptions about my existential commitments, please! But holes can be counted, right? If two pieces have an equal # of holes... ...that just means both are **either** singly-perforated, or doubly-, triply-, etc. Without 'number' & 'hole', you must have learned infinitely many predicates to make sense of the predicate 'equally perforated.' ...!?! All we really predicate is that the cheese is perforated x-fold.

Argle Can holes in paper-towel rollers spin? **Bargle** Yup. And can't small holes be **parts of** other holes (like a toilet-paper roller put within the bigger roller) and then spin in a different direction? Wouldn't that entail (absurdly) that the small hole spins at once in opposite directions? No. The small hole is **inside**, not **part of**, the other one. When I say 'There are holes in the cheese', I mean: 'There are material objects that are both holes and parts of the cheese.' Being parts of cheese, are holes in the cheese made out of cheese, then? We don't talk this way often (enough) about cheese (but about caves), but yes: right on, B.! But if a hole-lining surrounds the hole, then it (absurdly) surrounds itself! I allow such hole talk. For holes, 'surrounds' just means 'is identical with.' You need more dictionary entries for 'surround' than I do, then... also for 'is in' and 'is through'. OK, then, there **are** holes, but they are material objects! Filled with some matter, no doubt? Well, they **could** even be empty. How could they be made of matter, then? **Holes are really hole-linings.**

Argle I won't accept that the small hole spins along with the big one. **Bargle** Hm... If hole-linings **are** holes, though, how can the hole that holds the volume of a bottle, i.e., what fits in it, differ from that of the glass constituting the bottle, i.e., that of its lining? Holes can be voluminous in two ways: in terms of the volume of the hole-lining itself & in terms of the volume of the fluid one could maximally fill it with. OK, but what's the volume of the hole? How much of the cheese is included? How to decide? Every choice of hole-lining constitutes a hole & two holes are identical iff they have a common part that is itself a hole. Aren't you identifying holes with certain equivalence classes of hole-linings, then? Well, when use 'the same' regarding holes, I really mean 'co-perforated'. I don't seriously use the language of identity or numbers for holes. In your idiom, how can one say that there are **as many holes** in my cheese **as** crackers on my plate? X=part of the sum of all crackers; Y=part of the cheese; Z=part of Y. So here is my way of saying it: Suppose, every maximal connected part of Y is a hole, and every hole in the cheese is the same as some maximal connect part of Y. Also, X overlaps all crackers, Z each maximal connected part of Y.

Argle Any cheese has cheese-filled parts in any shape that don't contrast with their surroundings (not holes, thus). I think you must say that a paper-towel roller has two holes. Aren't the left half and the right half different holes on your view? Nah, these are two parts of one hole. But aren't they singly-perforated hole-linings whose matter contrasts with what's within them? If cut, they'd be two proper holes, right? Yes. I admit that such "holes" can be proper parts of other holes with thicker linings. These parts, though shaped like holes, aren't real holes, though, and while I can't give you a good definition why, you wouldn't call them proper holes, either, would you? Err.. no? Yes, I agree that the two halves are only part of a hole because they are part of one hole-lining. I'll even admit that at least among singly-perforated hole-linings, co-perforation may be an equivalence relation. But what if the lining itself has a hole? I see the absurd consequences (e.g., there could be no cheese without holes). But **holes** are also what they are by virtue of how they contrast with the matter inside and around them. Cool, but any two overlapping sections of cheese have a common part that is a hole-lining, possibly filled with cheese. **Being co-perforated** is the same as **overlapping** and for every two non-overlapping hole-linings one finds one that overlaps with both. Also, whatever is either the intersection of X and a cracker or the intersection of Z and some maximal connected part of Y is the same size as any other such thing. Given all that, **'X is the same size as Z'** is my way of saying what you want me to say.

Argle Here are some: What if **the host is not homogeneous or cohesive**, like, a pile of miscellaneous rubbish? Fill the hollow in it completely with more rubbish... is the hole gone? As (strictly speaking) there is no homogeneous matter anyway, are holes in bee swarms & streams of traffic derivative? Holes by courtesy? That depends. Incompletely fills holes, or holes filled with matter that different from the hole-lining still have or are holes. Importantly, statements about holes are true or false **due to the arrangement of matter**. Your dispute scarcely matters (though we prefer Bargle's common sense). Hm. Your taxonomy of hole-kinds is cool, but why distinguish hollows from depressions, but not tunnels with differing entrances? Holes are immaterial, dependent entities, they require a (typically) material host, are **in** something. Yay, but against A, I think that holes are dependent entities that **supervene** on matter. Yay! Holes are distinct entities & necessarily related! SNAP! **Achille Varzi** **Roberto Casati** Common sense matters. But the price I pay by sticking to my position is fine. After all, **I don't have to admit crazy entities!** I think the price is too high. We always end up with stalemates like this. Ah, well...

If so, how to distinguish holes & holes by courtesy?... Surprise! We have more questions! Also: Is a filled hole still a hole?