

# Issues in Contemporary Metaphysics

## Lecture 10: Lesser Kinds

### 1. Holes

Here are some sentences and their apparent paraphrases:

‘Your handout has two holes in it’.

$\exists x \exists y (x \text{ is a hole} \ \& \ y \text{ is a hole} \ \& \ x \text{ is a part of your handout} \ \& \ y \text{ is a part of your handout} \ \& \ x \neq y)$

‘That cheese has holes in it’

$\exists x (x \text{ is a hole} \ \& \ x \text{ is a part of the cheese})$

‘The hole in the tooth was smaller than the dentist's finest probe’ [Geach 1968]

$\exists x \exists y (x \text{ is a hole} \ \& \ y \text{ is the Dentist's finest probe} \ \& \ x \text{ is a part of the tooth} \ \& \ x \text{ has a smaller width than } y)$

‘There were as many holes in his corpse as there were dirty cops on the force’

This one is tricky– we can only account for it in terms of second order logic. Even counting is tricky in first order logic!

It appears we are quantifying over holes.

#### *Hole anti-realism*

We could try offering a paraphrase. We’ve had examples already: paraphrase ‘x has a hole’ as ‘x is perforated’. No quantification there! Will it work on all ‘hole talk’?

Compare ‘Your handout has a hole in it’ with ‘Your handout has two holes in it’. They clearly describe two different states of affairs. So they must have different paraphrases. But in both cases the handout is perforated! Easily solved. We’ll say that one handout is *singly perforated* and the other handout is *doubly perforated*. Got three holes in it? *Triply perforated*. And so on. Those predicates are certainly understandable.

But we’ll have to take them all as primitives! Compare to what the realist about holes says:

‘x is doubly perforated’ =df There are two holes that x has a parts’

‘x is triply perforated’ =df There are three holes that are parts of x.

etc.

Note that the realist need only have one primitive (‘\_\_ is a hole’) that all these perforation predicates are analysed in terms of. Not so for the nominalist! They have an *infinite* number of primitives.

Let’s try a more complex sentence:

‘The Gloucester and the Cheddar both have the same number of holes in them’

How do we account for that? The realist will just simply say there are some ys (that are holes in the Gloucester), and those ys are equinumerous with some zs (that are holes in the Cheddar). Not so for the nominalist! There are no holes!

What they might say is that the Gloucester and the Cheddar are both *singly* perforated. If they were both singly perforated, it’d be true to say that they have the same number of holes. But that can’t be an *analysis*, for that is only a *sufficient* not a *necessary* condition for the cheeses to have the same number of holes. For what if they were both *doubly perforated*?

Then do the analysis as follows:

‘x and y have the same number of holes’ is true iff  $(x \text{ and } y \text{ are both singly perforated}) \vee (x \text{ and } y \text{ are both doubly perforated}) \vee (x \text{ and } y \text{ are both triply perforated}) \vee (x \text{ and } y \text{ are both quadly perforated}) \vee \dots$

That analysis is infinitely long, and contains an infinite number of perforation predicates.

Worse, try the more complex:

‘There were as many holes in his corpse as there were dirty cops on the force’

How do we account for that? The above analysis won’t work. The Police Force isn’t perforated! And even if you reckon you can paraphrase that one, how about Geach’s sentence:

‘The hole in the tooth was smaller than the dentist's finest probe’

How’d we even start paraphrasing that? Maybe:

In the nearest possible world to the actual world where the tooth isn't singly perforated (or doubly, or triple and so on), there (i) exists an object  $x$  that is a part of the tooth (ii)  $x$  is not a part of the tooth in the actual world and (iii)  $x$  has a width smaller than the width the Dentist's finest probe has in the actual world.

Compare what's going on here with what went on with Quine's *Austere Nominalism*. We have to introduce a flood of primitives, and have no cohesive scheme for translating hole talk. Instead we have to take each sentence, and figure out an appropriate paraphrase (if, indeed, there is any!). So everything that is wrong with austere nominalism is wrong with nominalising away holes.

### *Ludovician Enterprise*

Casati and Varzi call identifying holes with their linings the Ludovician theory.

Problem: There is more than *one* hole lining. We could say that they are all different *hole linings* but they are the same *hole*. What about the following example: imagine a loo roll. It's got two parts thus. But the hole linings on the left don't have any parts in common with the hole linings on the right. So the hole linings on the left aren't 'the same hole' as those on the right. Conclusion: The loo roll has two holes as parts! But loo rolls don't have two holes as parts. A loo roll only has one hole (just have a look and see!)

Further, maybe hole linings have properties that holes aren't mean to. Casati and Varzi think this is the case. So the Lewises have considered some features hole linings have, C&V consider some more.

### *Holes as regions of space*

If we believed 'substantivalism' then maybe holes will turn out to be regions of space? It's a region of space, but a region that is unoccupied. And surely there are lots of unoccupied regions of space? That would be a quite nice identification.

So, we do the same again: are there any predicates that apply to space that don't apply to holes or vice versa? Well, yes! Regions of space don't move. Object move in space, but the regions themselves stay where they are. 'Over there' will always be just over there. But holes can move. Say I burn a hole in your favourite jeans whilst I'm at your house. Annoyed, you bring the jeans to me in my office and declare "You put this whole in my jeans." So you have moved your jeans, have you moved the hole in your jeans? One would hope so, I can't get off the hook by saying "That hole? I didn't burn *that* hole, that's a totally different hole that I've never seen before"

### *Holes are immaterial objects*

Casati and Varzi have their own answer. We introduce two types of being, material beings and immaterial beings. Material beings are objects, immaterial beings include the holes. They are *sui generis*.

Holes *qua* immaterial beings seems excessive. It's unparsimonious, and bloats our ontology. And isn't it just weird to say these *absences* exist? Aren't holes the *lack* of something, not themselves a something. And isn't the be all and end all of being a material object being located in spacetime? Holes do that! So in what way are they *immaterial* beings.

## **2. Works of Music**

The next lesser kind: works of music. Take these sentences:

'Beethoven's Piano Sonata No. 14 is aesthetically pleasing.'

'Bob Dylan composed *Blowin' in the Wind*'

'I love Arcade Fire's *My Body is a Cage*'

Read literally, each of them commits to there existing some thing that is either pleasing, composed by Dylan or loved by me. But that is a metaphysically contentious claim.

### *Works vs. Performances*

What is *not* contentious is the existence of *performances*. For instance, every time an orchestra performs *Piano Sonata No. 14*, my MP3 player plays *My Body is a Cage*, or Dylan knocks out *Blowin' in the Wind* in some room laced with cannabis smoke, there is a performance of that work. The performances are composed out of, say, air vibrations. Enough air vibrations and you end up with a performance. So performances are (relatively) uncontentious because they are *concrete*; they are located in space and time; they are physical objects.

But those three sentences given at the start don't refer to these performances. For instance, the *presto agitato* movement of Beethoven's Sonata is incredibly difficult to play. Across the world, and throughout time, I conclude that many performances of Beethoven's Moonlight sonata have thus failed to be aesthetically pleasing. So the *work* has properties that the *performance* does not have. So those sentences don't refer to *performances* at all. If they refer to anything then they must refer to some thing else: *works of music*. So there exist numerous performances of Beethoven's Piano Sonata No. 14 *and in addition there exists the work itself*. The performances are performances of the work. And the aesthetic properties of the performance are not necessarily the same as the works.

## Nominalising Works Away

‘Beethoven’s *Moonlight* is a sonata’

Following Rudner and Bachrach we could paraphrase the first one as:

$(\forall x) (x \text{ is a performance of } \textit{Moonlight} \rightarrow x \text{ is composed of a succession of three movements})$

But what of the predicate? Surely that predicate isn’t a *monadic* predicate? Surely it’s a *relation*! In other words

$x \text{ is a performance of } \textit{Moonlight} \text{ iff } \exists y \exists x (y = \textit{Moonlight} \ \& \ x \text{ stands in the performance relation to } y)$

Imagine you can sort that out. Try:

‘Nine Inch Nail’s *March of the Pigs* features a seven second silence part way through’

But that could very well be false? If NIN played it live then it might have had an eight second silence, or a six second silence. Maybe one time they did a minute as a joke?

‘The Beautiful South’s *Don’t Marry Her* features the phrase ‘sweaty bollocks’.

To make it radio acceptable the line was changed to ‘Sandra Bullocks’. It is quite conceivable that the radio edit got played more (*more* performances) than the version containing the phrase. Surely that is *irrelevant* as to whether the song contains the phrase (surely it does!). And does the truth change over time?

‘Mozart composed more than thirty symphonies’

‘Exactly one of Bruckner’s symphonies was unfinished’

What paraphrases can we give here? Counting seems to explicitly involve quantification over entities (compare: ‘There are three ways to win this chess match’ and ‘There could have been more things than there actually are’). Consequently we have great difficulty paraphrasing these. I refer you to Dodd’s *Works of Music* §1.3 (where indeed I get some of these examples from)

### Musical Platonism

What if works were *abstract*. If they are abstract, what type of abstracta are they? Are they universals? Propositions? Possible worlds? No, for a work isn’t *had* by an object (like a universal); it isn’t true of false (like a proposition); it doesn’t (usually) represent the world being a certain way (like a possible world). That means we need another ontological category. (These Platonists are starting to get greedy!)

Dodd and Levinson identify works with *Types*. Levinson thinks there are types of ‘sound-structures’. A ‘sound-structure’ is some specific noise pattern. For instance my cough corresponds to one sound-structure, whereas a clap corresponds to another. A cough is a *token* of one type of sound-structure, a clap is a token of another.

But *those* sound structures are, whilst types, *not* identical to works of music! Those types exist regardless of what anyone does. And works of music, according to Levinson, do not – works of music can be *created*, so they did not *always* exist. But *those* types did always exist.

Instead works are identical to *indicated types*. An indicated type is a type that has been ‘tethered’ to an act of indication. So I *indicate* a type to you. For instance, a certain sound structure that all performances of Beethoven’s *Moonlight* Sonata fall under. In doing so I ‘tether’ that type with my act of indication. For Levinson a type-as-indicated-by-an-agent is *not* the same type as that type I indicated. So the sound structure type that all performances of *Moonlight* fall under is not the work of music *Moonlight*. Instead, when Beethoven composed *Moonlight* in 1801 he was bringing our attention to a certain type (the sound structure). In so doing a *new* type came into existence: that sounds structure-as-indicated-by-Beethoven. *That* type is *Moonlight*.

Here’s an example. Imagine I accidentally start playing *Chopsticks* even though I know nothing of the piece. Maybe I was raised by wolves and came across a piano. My performances sound exactly the same as the one played by Tom Hanks in *Big*. Both are tokens of some sound structure,  $\psi$ . But only *one* a token of *Chopsticks*. The song played by Hanks has some sort of causal connection with Euphemia Allen’s composition. So Allen *indicated*  $\psi$  by composing the work. In doing so he brought into existence the type of  $\psi$  -as-indicated-by-Allen in 1877. That type is *Chopsticks* not the sound structure. In the ‘raised by wolves’ scenario, of course, there is no such connection. So it is a token of the sound structure but not the work.

These indicated types only come into existence when an act of indication is tethered to some type. So *Chopsticks* didn’t exist before 1877 (even though the type corresponding to the sound structure did). Why is this important? Because it captures the intuition that composers *create* the musical works that they compose. And if they existed eternally, they’d no more be created than we can create the numbers, or the Platonic universals.

Dodd thinks Levinson’s theory won’t work. Here are two of his reasons:

- There is no motivation for thinking indicated types exist only when indicated.

- Demands that the abstracta causally interact with the concrete.

Instead Dodd says works are eternal Types. This avoids many problems, but doesn't this mean that musical works *aren't* created? Dodds admits this, and then tries to defuse the argument for creatibility.

*Works as concreta*

But wouldn't it be nice if they *weren't* abstract? That'd fit with naturalist intuitions; easily allow for creatibility (as they'd be *concrete*) etc. Maybe we could conjure up some *sui generis* concrete entity and just call it a work of music. But it'd be nice not to do that either.

Well, what *are* musical works to be identified with if not abstract types or some new type of entity? Perhaps they are identical to the performances of the work. But the performances are distinct. So the work can't be identical to every single one of them, as by transitivity of identity we'd have a contradiction. Maybe one of the performances is special? We could identify it with the *first* performance maybe? But what if there is no *first* performance (perhaps it was first played *simultaneously*)?

Caplan and Matheson identify a work with the *fusion* of its performances. Recall that 'fusion' just means the object composed out of those things. So I'm the fusion of my atoms; you're the fusion of yours; and a musical work is composed out of all of its performances put together from every time. So it's not identical to any given performance but the object they all compose.

So works *perdure*. Just as objects have temporal parts according to the perdurantist, so too do works as conceived by Caplan and Matheson. The performances are the temporal parts of the work. (Kind of: that's a lie). So musical works come into existence with their first performance, and then remain until their last performance.

Recall that perdurantists (usually) say that whenever you have some material objects they compose a further object. So if you're that kinda of perdurantist you *already* believe in the perduring fusions of performances. The performances are material objects, *a fortiori* there are fusions of them. So we have identified a musical work with an object we already believe in for independent philosophical reasons.

### 3. Other Lesser Kinds

So we've looked at two lesser kinds: Holes and Works. There are others!

What about *groups* (does Barclays Bank PLC exist?; if it does, is it *sui generis*?; abstract or concrete?; a fusion of all the people who work for Barclays?; some kind of set?)?

Do *species* exist (does the human race exist?; is it the fusion of all humans?; the set of all humans?; a *sui generis* abstract object?)?

Do *sounds* exist (are they physical things?; are they *sui generis*?)?

### 4. Wrapping Up

I said this course was a pack of lies. I introduced various dicta that people have endorsed regarding ontology.

Quinean ontological commitment

Claims about parsimonious ontologies being better

Claims about theoretically simple ontologies being better

Etc.

We then examined how these dicta were deployed. Some people, having seen what's taken place, think something is *fundamentally* flawed with the dicta. That it's just *crazy* to think that such ontologists have been engaging in proper debates. That there is something flawed somewhere along the way. So denying the dicta is quite common. Hence why the course is a pack of lies. But at least *now* you might have a hope of *seeing what it is that they deny*.

*Hirsch/Carnap*

For instance, the Hirsch/Carnap position is that it's all a mistake of *language*. That, properly understood, we'll see that metaphysics is just a load of nonsense to begin with. For instance, they believe that the best way to resolve the cultural prejudice problems is to say there is a linguistic difference.

So the problem was whether these are true:

$\exists x (x \text{ is a taytu})$

$\exists x (x \text{ is a yam})$

The Hirsch/Carnap position is that it all boils down to language. When the Trobriander say 'There is a taytu' they mean:  $\exists_T (x \text{ is a taytu})$ . When they deny yams exist:  $\sim \exists_T (x \text{ is a yam})$

When we say 'There is a yam' we mean:  $\exists_E (x \text{ is a yam})$ . When we deny taytu exist:  $\exists_E (x \text{ is a taytu})$

No contradiction when they disagree! And when we ask what exists, *no language is better than any other at deciding this*. That is, the sentence with just  $\exists$  is ill-formed. There is no such language. The ontologists wants to say the following can be evaluated:  $\exists x (x \text{ is a yam})$  Hirsch/Carnap say that makes no sense. Tell us what language you're speaking in first (at which point it becomes easy to answer)

#### *Other Alternatives*

Others have said that the problem is Quine's ontological commitment.

That we shouldn't worry about what we quantify over (so it doesn't *matter* that we can't paraphrase hole talk, or work talk etc.)

Or they claim not to understand what a paraphrase is.

They try and go and find *different* ways of doing ontological commitment.

For instance, that we are ontologically committed to the *truthmakers*.

Some have even said it's *obvious* that *everything* exists – they're trivialists. But they say that what's interesting is what *really* exists. What *fundamentally* exists; what is the *ground* of the world etc. That there's a difference between the two. So they think ontology is *very* different from what we've done up till now. And more! Lots more! Ontology is going through its renaissance, and exactly what goes on, and what's popular, changes. It's a bit like science during the actual Renaissance. Just like they struggled to find the hypothetical deductive method, ontologists are struggling to figure out *how they're even supposed to answer ontological questions*.