Celebrities discuss philosophy episode 4

Effingham, Nikk

DOI:
10.1017/S1477175621000476

Document Version
Publisher's PDF, also known as Version of record

Citation for published version (Harvard):
Effingham, N 2022, 'Celebrities discuss philosophy episode 4: a transcript', *Think*, vol. 21, no. 61, pp. 57-72. https://doi.org/10.1017/S1477175621000476

CELEBRITIES DISCUSS PHILOSOPHY EPISODE 4: A TRANSCRIPT

Nikk Effingham

If a lump of clay is shaped into a statue, is there one thing or are there two? That is: are the lump and the statue two distinct things? This dialogue introduces some reasons to think they are two different things and then discusses the issues involved.

In early 2012, Fox TV ran a series called *Celebrities Discuss Philosophy*. A 'fly on the wall' documentary, it captured various celebrities having discussions about philosophy in their home environment. Unfortunately, the show did not prove popular, mainly because it aired in a late-night slot. It was cancelled part way through the series, with only three of the six filmed episodes ending up being aired. (The episodes were: a dinner party hosted by Kiefer Sutherland involving a discussion about scepticism; Tilda Swinton discussing modality with her children; and Neil Patrick Harris delivering a – disturbing – soliloquy on medical ethics and adolescent physicians.)

I was fortunate enough to be able to get the original reels of the remaining episodes. Here I provide a transcript of the fourth episode, covering a conversation between Brad Pitt and Angelina Jolie. It took place on the evening of 26 February 2012, shortly after they returned from the Oscar ceremonies.

* * *

Brad Pitt: I don't care if I lost the Oscar to that deadbeat Dujardin, it's just a lump of gold anyway.

doi:10.1017/S1477175621000476
Think 61, Vol. 21 (Summer 2022)

Angelina Jolie: Oscar statues are made of britannium, not gold. Anyhow, darling, the statuette isn't the same as the lump.

B: [*groans*] Seriously? We have to do metaphysics this late at night?

A: Surely you're not scared?

B: Fine. Clearly the lump of metal is the same as the statuette – it's not as if there are two things in one place.

A: That can't be right. The lump of britannium came into existence in the factory which makes lumps of alloys. For instance, imagine that it came into existence six months ago. That lump of britannium was then shipped to the people who make statuettes. They melted it down and shaped it to look like an Oscar. Imagine that happened a week ago. The lump – let's call it 'Lump' – came into existence at one time. The Oscar – let's call it 'Oscar' – came into existence at another. Because they came into existence at different times, they can't be the same thing. If they were the same thing – the *very* same thing – then they'd have to come into existence at the same time. It'd be crazy otherwise! Imagine if you met someone who was born in 1970 *and* born in 1975 – how would that work? No, I'm sorry: Lump and Oscar are two different things.

B: This is ridiculous. Statues aren't special and there are lots of other cases just like this. The wood that makes a table came into existence before the table did. Our bodies will be around – as corpses – after we die. The metal that makes up my Ferrari existed before the car was made. And so on! We all know there can't be two things in the same place at the same time, so just as none of *those* things are examples of there being two things in the same place at the same time, Lump and Oscar don't count either.

A: Oh, Brad dear, what you've just listed are mere *sequels* to the problem of Oscar and Lump. Of course, lots of other things are in the same position. And of course, whatever we say about Oscar and Lump will work for the tables and wood, for the bodies and the people, for the cars and the metal. But all you've demonstrated is that

there's *some sort of answer to be offered* – you've not said anything about *what the answer is*. This talk of other cases doesn't help at all. It just shows that the problem is more wide-ranging than statuettes. So let's stick with Oscar and Lump, for if *Tomb Raider* taught me anything, it's that sequels are worse than the original.

B: I concede, that sounds reasonable. But that doesn't mean this is a serious problem. Clearly this is all to do with language – Oscar existing is just something to do with language and the way we talk.

A: Certainly, there might be some truth in that, but you've still not solved the problem. Don't you remember Francis Ford Coppola explaining to us that logic is 'monotonic'? When you have a set of premises which lead to a conclusion, adding in more premises won't stop that conclusion following. For instance, if you say both that the moon is round and that the moon is square, telling me more things won't stop me concluding the contradiction that the moon is round and square. What you need to do when you're responding to a problem like this is to say either that the argument is invalid or that some premise is false – you can't just tag on the end 'It's all to do with language' and leave it at that.

B: Really? Surely if it's all to do with language there just can't be any problem?

A: What rubbish! Lots of things are to do with language and still leave us with problems. Just ask a linguist! At best you're just signalling that you don't care about the argument. And that's not the same as having an explanation of where it goes wrong. I don't care about your computer not working, but that doesn't mean I can fix it.

B: Oh, I care. And I'm not admitting defeat this early! How about this then: It's all to do with language because Oscar is just what we *call* Lump when it's statue shaped.[1]

A: What we 'call' it? So Oscar *is* Lump, then? A rose by any other name, and all that! And if they're the same thing, then if Lump came into existence six months ago, so too did Oscar. But that sounds weird. Imagine it the other way

around. Imagine that I crush Oscar and leave a flattened Lump. I want to say that Lump exists but Oscar does not, but you now have to say that they both do. That sounds bizarre.

B: Maybe I could live with it.

A: Oh, but what about the sequels? Should an insurance company tell you that they won't pay out for the destruction of a wrecked car just because there's still a lump of metal there? If you get hit by a truck and die, should I still say that it's you in the coffin which they bury?

B: I think I could live with all of these things. At worst, I could compare saying such things to other sentences in English that we often utter. Imagine I'm in our garden sunbathing with a mask across my eyes. I notice I'm no longer warm and ask why it's getting cooler. You say 'The sun has moved behind the elms'. Now, that's a fine sentence to utter – I wouldn't hold it against you if you said it! – and I might even say it was true. But science has shown us that, technically, it's false. The sun *doesn't* move behind the elms. Instead, as the Earth rotates, the elms end up being between the sun and me. It's the Earth hurtling through space around the sun and not the other way around! But we don't take this fact from science to mean that I should stop you saying 'The sun has moved behind the elms.' Nor should we say that it's false. Rather, we say that the fundamental fact about the Earth's rotation makes it true that the sun has moved behind the elms.

I think the sentences about Oscar, the crushed car, my corpse, etc. are like that. When you say Oscar came into existence a week ago, that's true but only in the same way that the elm-sentence is true. The fundamental fact that makes it true is that Lump has become statue shaped, not that some new object has come into existence. Ordinary people nevertheless still get to talk about Oscar 'as if' it came into existence a week ago – though, to do so is just to express the fact that Lump changed shape.[2]

A: I'm uncomfortable saying that the elm-sentence is true. After all, isn't it false? 'Technically' or otherwise?

Everyone who says that sort of thing is surely saying something misleading? Moreover, if the elm-sentence is true, so too are the sentences about Oscar and Lump. And if they're true, then we *still* don't know where the argument goes wrong. Monotonicity strikes again! You have to say which premise was false but all you're now doing is adding that the sentences are 'made true' by other facts. That's just adding in more premises and I said earlier that adding in more premises wouldn't stop us getting to a contradiction. So I don't see this helping.

B: You make good points, so let me change my mind a little. When someone says 'The sun has moved behind the elms' it's false, but they're not saying something *as false as* 'A leprechaun has cast a magic spell and made it dark' or 'An eclipse has just started happening.' Those two sentences are simply false, whereas the elm-sentence isn't so bad in comparison. Let's say it's false but 'nearly as good as true' – it's the kind of sentence we can freely assert without someone complaining and holding it against us; even if it's false, in some sense 'it will do'.

I say that sentences about Oscar are nearly as good as true. They're false, but a nice guide to navigating the world. They're false, but not the sort of thing the ordinary person should stop saying. So now I *am* saying that some premise of the argument is false, so I *do* have an explanation of how I can avoid your argument.[3]

A: Given the sequels, a lot of sentences will be false and 'nearly as good as true' rather than true. Doesn't that worry you?

B: Not really. Science has shown us that lots of sentences are in the same boat. Physics demonstrates that when we say one thing is simultaneous with another, that's invariably false because of Einstein's theory of relativity. Think of how often you say that things are happening at the same time as one another. It turns out, those sentences all fail to be true! Fortunately, we can say that they are 'nearly as good as true' and continue living our lives as if they were true. The way in which they're false is such

that the ordinary person on the street shouldn't stop uttering them. Since there are scads of such sentences, I've no reason to worry about adding scads more about Lump and Oscar, and cars and lumps of metal, and trees and lumps of wood, and…

A: Stop! Stop! I get it. I get it. And I agree there must be something in this. So let me try a different tactic. When we say that Oscar came into existence a week ago, you say that's just a *façon de parler*? That it's not really true?

B: Yes.

A: So we're agreed that *something* has been discovered about the nature of the world, namely that nothing comes into existence when lumps become statue-shaped.

B: I guess that's true.

A: So you're now taking the problem seriously. You're offering a serious, *contentious*, conclusion.

B: I suppose – I don't deny that metaphysical discussions like this can tell us about the world. So I guess I must now confess that I can no longer say the problem is just 'all about language'.

A: Well, having agreed that we're in the business of saying things about how the world is, why not go further? Why think the talk about Oscar coming into existence a week ago is *façon de parler* but think that saying Lump came into existence six months ago is literally true? Why don't you say that talk of Lump coming into existence is also *façon de parler*? Why are you suspicious about Oscar and not Lump?

B: Because I can't see any reason to be worried about Lump, nor any reason to say it's not literally true that Lump came into existence six months ago. When people made Lump, they weren't simply changing the shape of something, like with Oscar. Rather, they were sticking bits of britannium together until they made one big lump. That sounds like a proper, genuine change in the world.

A: Here's a reason to be suspicious of saying Lump came into existence six months ago. Before Lump was made in the alloy factory, there were tiny bits of metal in

the ground – all the little chunks that would eventually be stuck in a pot and melted together to make the lump of britannium. Those chunks existed millions upon millions of years ago. But just as it's weird to think that merely shaping Lump into a statue makes Oscar, isn't it weird to think that bringing those bits together makes Lump?[4] So it turns out that Lump *wasn't* made six months ago – Lump is millions of years old!

B: There's a difference. Those bits of Lump are a far distance away from one another, scattered around the Earth's mantle. That's reason enough to think the two cases are disanalogous. Only when those bits get close to one another do they come to make up Lump. Thus, Lump isn't millions of years old; Lump is six months old.

A: How could distance make a difference? After all, it's not like those bits ever *touch* one another, even when they're melted together. Physics has taught us that nothing ever *really* touches anything else; everything in the world is ultimately made up of scattered little things. So the only difference between the bits of metal before they come to make up Lump and afterwards is how far they are from one another. And at what distance do they have to be in order to make up Lump? It seems to me that only your anthropocentric viewpoint makes you think that it's when they get close to one another at the alloy manufacturers. Imagine some creature that was tinier than you was asked the same question. When the bits were brought together by the alloy-maker, that tiny creature would instead say the bits were too far apart, from its point of view. Or imagine some creature that was enormous and thought that, even when the bits were in the ground, they *were* close enough to make up Lump. How are you going to say *you're* right instead of *them*?

B: Good points again! So I'll change my mind once more. I concede that I should be suspicious of Lump – when we say that Lump came into existence, that's just *façon de parler* as well. In reality, none of these things exist. There is no Lump. There is no Oscar. All that exists,

fundamentally speaking, are tiny little atoms – the kinds of tiny, little things that physicists are ultimately interested in. It's 'nearly as good as true' that Oscar came into existence a week ago because a bunch of those tiny little atoms were arranged 'statue wise'. That's the fundamental fact that, like the rotation of the Earth grounding the truth of the sun moving behind the elms, grounds it being appropriate to say that Oscar was made last week. But in reality, you made nothing, for, in reality, nothing exists except little atoms. And I'll now say the same of Lump! In reality, there is no lump of britannium – all talk of Lump is, at best, nearly as good as true.[5]

A: My, my, how quickly you make such strong statements! Now there are so very few objects! Worse, you have two problems. One: What if there *aren't* any tiniest little atoms? What if physics finds that the particles keep getting smaller and smaller? That, just as quarks make up atoms, something makes up the quarks, and whatever makes up the quarks is also made up by other things, and so on? Surely science could find that the world was like that?[6] Problem two: You no longer exist! And did Descartes not say 'je pense, je suis'? Surely if you know *anything*, you know that you exist. And if you know that *you* exist, then this theory is wrong for you are clearly not a tiny subatomic atom![7]

B: I'm going to get some ice cream and think on it.

* * *

A: So?

B: Okay. I admit that there are two objects in the same place at the same time. But maybe I was too fast in thinking that this was a bad thing. What's happened is that you've tricked me! I thought it sounded stupid to say there were two things in the same place at the same time. But that was only because I was thinking of something like two statues in the same place at the same time, or a ghost passing through a wall, or something ridiculous like that. It turns out that it's not so odd when we're considering things like Oscar and Lump. It sounds ludicrous at first, but when you get your head around it, it's fine.

A: If only it were that easy! This is what James McAvoy said on the set of *Wanted* and I quickly showed it to be false.

B: How so?

A: If the two objects have different properties, we have a problem. I assume that the properties of an object are somehow 'grounded' in its parts – what parts you have, and how they are arranged, somehow 'fixes' what properties you end up having. If so, since both objects have the same parts arranged in the same way, then they must have the same properties. But they don't have the same properties![8]

B: You mean properties like those concerning how long they've existed for?

A: Exactly! How can Oscar have existed for one period of time – and have one property – while Lump existed for another – and has another property – when they've both got the same parts? And why stop there? They also differ with regard to what we *could* do to them (for we can crush Lump without destroying it, but the same isn't true of Oscar). How can one be more brittle than the other? They differ with regard to the *aesthetic* (after all, a statue, but not a metallic lump, can be Romanesque). And they differ with regard to the *sortal* (for Lump isn't a statue while Oscar isn't a mere lump!). If they've both got the same parts, why don't they share all of these properties?

B: Can't I just stamp my foot and say that they simply have different properties, and leave it at that? Why do I need some sort of explanation?

A: You need to say *something*. Imagine I had a machine which duplicated objects – you stick one object in one end and a perfect copy pops out the other. To duplicate it, all you need to do is copy its parts in exactly the same arrangement. Once you've done that, you've made the duplicate. There's nothing more to making one thing the same as another other than ensuring that the duplicate has the same sort of parts in exactly the same arrangement. (Just ask a forger!) It makes no sense to think that I could

put a 1-foot tall statuette in one end, copy all of its parts and have those parts in exactly the same arrangement, but get, say, a 2-foot tall statuette out of the other!

B: Agreed…

A: And we're agreed that Lump and Oscar have exactly the same parts, in exactly the same arrangement, for how could it be otherwise? So they should be duplicates. They should have exactly the same properties. But they don't! So we still have a problem.

B: Bah! I'm tired of this, let's go to bed.

* * *

A: Before we turn off the light, aren't you going to ask?

B: Ask what?

A: What my answer is?

B: Ah, of course – go on then.

A: I spoke to Ron Howard about his new film, *The Perdurantist*, and he says that we can think of objects as being 'spread out in time'. Objects aren't just extended in the three dimensions of space but also extended along the dimension of time as well. You, me, and everyone we know all end up being extended across 'spacetime', not just 'space'.[9]

B: Sounds reasonable. But how does that help?

A: If it were so, then Lump would be extended across spacetime from a period six months ago, while Oscar is extended from a point lying only a week in the past. The places in spacetime they occupy are different – that is, there are no longer two things in the same place.

B: Ah, but there's a problem with this view. Now they're the wrong shape.

A: What do you mean?

B: Well, imagine there were only two dimensions of space, rather than three, to make it easier to picture in your mind. (I hear Woody Allen is doing an adaptation of Edwin Abbot's *Flatland* novel in which exactly this scenario plays out.) Imagine further that the creatures which live in Flatland are circles. Each starts life off as a tiny little dot and then, over time, grows to be a big circle. But, given

your view, they're not actually circles at all. Circles are two-dimensional and, since the creatures are extended in time as well as space, the creatures are three dimensional. Indeed, since they grow from a dot to a circle over time, the shape – considered three-dimensionally – is a cone! It would be the same with Oscar. Oscar *isn't* statue shaped. If Oscar is stretched out in time as well as space, he can't have *that* shape anymore, just as Flatlanders can't be circles. Instead, Oscar will have some weird, funky, four-dimensional shape – we don't have a name for it, because we don't have names for most varieties of four-dimensional shape. Just as the Flatlander stretched out in time ends up being a cone, rather than a circle, Oscar won't be statue shaped since *that* shape is three dimensional, not the four that Oscar now is!

A: True enough. So Oscar, and Lump (and all the sequels, including you and me) all have funny four-dimensional shapes rather than the three-dimensional shapes that we thought we had.

B: Isn't that a deal breaker?

A: Why would it be? Think about how we might talk about how an object is versus how it is *at a certain place*. For instance, where your hand is, you're hand shaped. And where your hand is, you have five fingers. But *you're* not hand shaped and *you* don't have five fingers – you've got ten fingers! How you are *at a place* is different from how you are *full stop*.

B: How does that help?

A: Just as we distinguish between how something is, and how it is at a place, we can distinguish between the shape Oscar is, and the shape Oscar *is at some time*. Oscar has a weird, four-dimensional shape, certainly. But *at any given time* Oscar is statue shaped. When we zoom in and concentrate just on any given moment that Oscar exists at, he will be statue-shaped. We ignore the rest of him just as we ignore the rest of you when I ask how many fingers you have where your hand is. We could also say the same about the growing circle in Flatland. The creatures are

conical, but *at any given time* the creature is a circle. It's circular at every time, but conical 'full stop'.

B: And would this work for all properties? So I'm not good looking, but only good looking at certain times – good looking now, but not when I'm old and wrinkly?

A: I dare say you'll be good looking then, too. But you are correct! You're good looking at a time and not good looking 'full stop'.

B: And it works for being intelligent? Or knowing who the Queen of England is? Or what weight you are?

A: Sure. No-one is intelligent; no-one knows who the Queen is; no-one has a weight. All such properties are only the sort of thing you have at a time, rather than the sort of thing you have.

B: And relations? Like being married?

A: Nothing is married full stop – what would that even mean? People are only married at certain times.

B: And having parts? Do I have certain atoms as a part 'full stop' or merely as a part at a time?

A: The latter!

B: Aha! Then I have you! (And Ron Howard!)

A: Why?

B: Because you said to me earlier that the properties something has at a time are fixed by the parts it has at that time. Because of that challenge, my earlier position was sunk.

A: That's right!

B: Ah, but don't you see that you now face the same challenge? Given *your* theory, Lump and Oscar *do* have the same parts *at the same time*. Take some time when they both exist, as they do now on Dujardin's unworthy shelf. What are they like, at this time and on that shelf? Oscar has no weight full stop, but he weighs 9 pounds at the moment. Oscar has no parts, but at the moment he has lots of bits of britannium as parts. Lump has no weight, but at this time weighs 9 pounds. Lump has no parts, but at the moment it has lots of bits of britannium as parts. Indeed, Lump clearly has the same parts as Oscar has, at

least at this moment. So they *do* have the same parts at the same time. So, given your challenge, how can *you* explain them having different properties?

A: Good point. You kept changing your mind and altering your position, so now it's my turn to do the same. What I shall say is that, not only do objects have parts at a time, but they *also* have parts full stop. And it's the parts which they have full stop that differ between Lump and Oscar. It is the difference between their parts full stop that explains how they have different properties. We could imagine each slice of the four-dimensional object corresponding to a different part full stop – a 'temporal part', we could call it, to distinguish it from the 'spatial parts' you have at a time. It's almost as if objects are stretched out in time like a sausage is across space. Just as we can slice each bit of the sausage, we can slice each bit of the four-dimensional object into slices. Each of those slices is a temporal part that the object has – and it has those temporal parts 'full stop', not at one time or another. Each temporal part is, at the time the object exists, as big as the object (and the same weight as the object at that time and so on), but that temporal part exists for but an instant. So, right now, lying next to you, is a temporal part of Angelina Jolie – it's not Angelina Jolie, it's just a three-dimensional slice of the four-dimensional worm that is Angelina Jolie.

B: Comparing you to a sausage rather than a worm is nicer. In any case, how does this help?

A: Lump has more of those temporal parts than Oscar because it exists longer. Because of that, it can have different properties.

B: Who cares about that? You said earlier that if things have the same parts at the same time, then they have to have the same properties. And you agree that the former thing is true of Lump and Oscar but the latter is false. Remember what you said about monotonicity! Just adding that they have different parts 'full stop' does nothing to alter the fact that they have the same parts at the same time and so should have the same properties.

A: I must further alter my theory. I should instead say: things have different properties at the same time only if those things have different parts at that time *or* if they have different parts full stop. Because of the second clause, Oscar and Lump can have different properties.

B: Your alteration sounds like cheating. I worry that you're making up the rules to fit what you want to say. Worse, if you get to make alterations to save *your* position, why can't I make alterations to save *my* position?

A: Be my guest; I doubt your alterations will work.

B: Let's go back a step, first. Imagine there's a smallest level – a ground floor to reality which is as small as you can get. I know earlier we said that my theory shouldn't rule out that there is no such ground floor, but it swings both ways and you should accept that what *you* say can't rely on there *not* being a smallest level.

A: That seems acceptable to me. Perhaps there is a bottom level and perhaps there isn't. Whatever we say about Oscar and Lump shouldn't depend upon that; the answer to the problems with Oscar and Lump surely can't depend on what the physicists end up saying about such matters.

B: I'm glad we agree. So, imagine that quarks are the smallest things possible. They nevertheless have different properties. Physicists talk about 'spin'. Some quarks 'spin up' and some 'spin down'.

A: I have a working knowledge of quantum physics. I'm fine assuming what you say, for the purpose of argument.

B: Yet the quarks don't have *any* parts at a time – we've assumed that they're the smallest things possible! So even though they have no parts, they still get to have different properties. Thus, what we should have initially said is that for things to have different properties at a time, they must *either* (i) have no parts at all at that time; *or* (ii) have different parts from one another at that time.

A: That sounds correct. So when I add in my alteration, it would become: to have different properties at a time, things must have (i) no parts at all at that time; or (ii) different

parts from one another at that time; or (iii) different parts full stop.

B: Excellent. But then why can I not alter it a tad further. I can make a further alteration and say this: To have different properties at a time, things must have: (i) no parts at all at that time; or (ii) have different parts from one another at that time; or (iii) have different parts full stop; or (iv) have no parts full stop.

A: I guess that's reasonable. I started by thinking that things can have different properties in virtue of having different parts at a time and said, analogously, that things can have different properties in virtue of having different parts full stop. So I guess it's reasonable to think that if things can have different properties if they have no parts at a time, then, analogously, they can have different properties if they have no parts full stop. But how would that help with Oscar and Lump?

B: Because *my* theory is that Oscar and Lump *aren't* stretched out in time and *don't* have weird 'temporal parts'. Indeed, they don't have *any* parts full stop (though, of course, they have many parts at any given time). Crucially, if they don't have parts full stop, then my alteration allows that they can have different properties. So the alteration you made to make *your* theory work licenses me to make my own alteration, which allows *my* theory to work. Our theories are as good as one another!

A: I'll have a think. I've got a charity gig tomorrow to raise money for metaphysicians driven insane by the strain of thinking about this sort of thing. I'll ask them for their advice and help. Goodnight.

B: Goodnight sausage.[10]

Nikk Effingham is a Reader at the University of Birmingham, UK. nikk.effingham@gmail.com

Notes

[1] Conee and Sider (2015) call this the 'just matter' theory.

[2] See van Inwagen (1990: 98–114) for more on this.

[3] See Merricks (2001: 162–90).

[4] See van Inwagen (1990) and Markosian (2008) for more on issues about 'composition'.

[5] This position is more generally known as 'mereological nihilism'.

[6] See Sider (1993) and Williams (2006) for more on this argument.

[7] See Olson (2007: 180–210) for more on this objection.

[8] A standard statement of this worry can be found in Burke (1992).

[9] See Sider (2001; 2008) for more on this view.

[10] For more on this philosophical issue in general, see Sider (2008), Conee and Sider (2015), and Wasserman (2013).

References

Burke, M. (1992) 'Copper Statues and Pieces of Copper: A Challenge to the Standard Account', *Analysis* 52: 12–17.

Conee, E. and Sider, T. (2015) *Riddles of Existence: A Guided Tour of Metaphysics* (Oxford: Oxford University Press).

Markosian, D. (2008) 'Restricted Composition', in T. Sider, J. Hawthorne, and D. Zimmerman (eds.) *Contemporary Debates in Metaphysics* (Oxford: Blackwell), 341–63.

Merricks, T. (2001) *Objects and Persons* (Oxford: Oxford University Press).

Olson, E. (2007) *What Are We? A Study in Personal Ontology* (Oxford: Oxford University Press).

Sider, T. (1993) 'van Inwagen and the Possibility of Gunk', *Analysis* 53: 285–9.

Sider, T. (2001) *Four Dimensionalism* (Oxford: Oxford University Press).

Sider, T. (2008) 'Temporal Parts', in T. Sider, J. Hawthorne and D. Zimmerman (eds.) *Contemporary Debates in Metaphysics* (Oxford: Blackwell), 241–62.

van Inwagen, P. (1990) *Material Beings* (London: Cornell University Press).

Wasserman, R. (2013) 'Material Constitution', *Stanford Encyclopedia of Philosophy* (Summer 2013 Edition), <http://plato.stanford.edu/archives/sum2013/entries/material-constitution/>.

Williams, R. (2006) 'Illusions of Gunk', *Philosophical Perspectives* 20: 493–513.