

Persistence and Time¹

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Issues about life and death seem intertwined with issues about persistence and time: we live as long as we persist through time, and our deaths seem to mark the limits of our persistence. Metaphysicians have thought deeply about the nature of time, and about what it is for things in general to persist through time. In this chapter I outline some metaphysical views about time, and about persistence, and discuss how they can help us clarify our thinking about life and death.

1. Time and Existence

To understand time, let's start with space. Think of something which is not here, in the place where you are reading this chapter; for example Halley Research Station in Antarctica. Does Halley Research Station exist? It can be difficult for us to find out what exists far away, but we accept that many things do exist far away. From an ontological point of view, every spatial location is on a par with every other: things in all those places are real. Far-away things exist although they do not exist here.

Let's turn to possibilities. Think of something which is not actual; for example the 2010 Olympic Games held in Timbuktu, Mali. Do these Olympics exist? Well, no. There were no Olympic Games held in 2010, and the Olympics have never been held in Mali. From an ontological point of view, merely possible things and events are not on a par with actuality: they are not real. Merely possible things do not exist, because they do not exist in actuality. ([Lewis 1986] is a famous exception to this ontological consensus.)

What about time? Think of something which is not present; for example the Tolpuddle Martyrs, pioneers of British trade unionism in the 1830s. Do the Tolpuddle Martyrs exist? According to some philosophers, other times are like other places: from an ontological point of view, every time is on a par with every other, and past and future things, the Tolpuddle Martyrs for example, exist although they do not

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exist now. For other philosophers, temporal distance is very different from spatial distance: from an ontological point of view, other times are not on a par with the present, and past and future things do not exist, because they do not exist now.

Presentism is the view that past and future things do not exist, whilst *eternalism* is the view that past and future things exist although they do not exist now. (For guidance into the literature about these matters, see [Markosian 2010: section 6].) Presentists and eternalists disagree about whether the future is real. This sounds like a matter of pressing importance for all of us, since so much of what we do and feel is oriented towards the future.

Why should I bother preparing for that talk I'll be giving next month? Wouldn't a presentist advise me to seize the day, live for the moment, since the future does not exist? No. Presentists believe that my talk next month does not exist, but they also believe that next month my talk will exist, and that it will go better if I start preparing now: my choices and actions today will affect the future as it comes into existence. Moreover, presentists accept that the Tolpuddle Martyrs used to exist, and that their actions long ago have consequences for us today. But they deny that the Tolpuddle Martyrs have the same ontological status as Halley Research Station, just as most of us deny that the 2010 Timbuktu Olympics have the same ontological status as the 2012 London Olympics.

Eternalism, on the other hand, might seem to threaten my authorship of my own life. If my talk next month exists, then so does the audience reaction, for better or for worse. They like it, or they don't like it. This can prompt the fatalistic thought that there's no point in my preparing for the talk, since the future audience reaction is just as real as anything which exists right now. Wouldn't an eternalist advise me that it can make no difference how I decide to spend today? No. Eternalists believe that my talk next month exists, but they also believe that the talk is causally affected by my preparations between now and then.

Both presentism and eternalism treat past things and future things symmetrically: neither exist for presentists, whilst both exist for eternalists. An intermediate view – the 'growing block' account – breaks this symmetry. According to the growing block

account of the metaphysics of time, past and present things exist, but future things do not: the universe grows larger with every moment which passes, as new things come into existence, and they remain in existence even as they move into the past.

2. Persistence Through Time

Just as there are rival metaphysical views of what time is, there are rival metaphysical views of how things persist through time. I will explain these rival views of persistence, before connecting them with the rival views of time. (For guidance into the literature about these matters, see [Hawley 2010].)

Again, it is helpful to think about space. You currently occupy a modestly extended spatial region, and you have different features in different places, warm up here where you're holding your coffee, cold down there on the tiled floor. How do you do this? A natural explanation is that you have different parts in different places: warm hands here, cold feet there. You yourself vary across space as you are composed of your various spatial parts.

Now think about time. You persist through a lifetime, and have different features at different times, hungry when you woke up this morning, feeling full once you'd eaten breakfast. How do you do this? According to *perdurantism*, you persist through time much as you extend through space. You have an early-morning temporal part which is hungry, and a post-breakfast temporal part which feels full. You yourself vary across time by being composed of these various temporal parts.

According to *endurantism*, on the other hand, persistence through time is quite different from extension through space. You yourself, in your entirety, are first hungry and then full as you move through time, existing as a whole at each moment of your lifetime. Although you have spatial parts, you do not have temporal parts.

Both perdurantists and endurantists face further questions about what it takes for a single person to persist through time. Is this a matter of psychological continuity, or of biological development? When the teleportation device disperses Spock's molecules and creates a perfect duplicate of him from fresh matter down on the planet, is it Spock who steps out at the other end, or merely a simulacrum of Spock?

If we hold out the hope of an afterlife, a spiritual or bodily resurrection, what exactly are we hoping for? What would it take for *me* to be resurrected?

Perdurantists and endurantists understand these questions in different ways.

Perdurantists understand them as questions about what it takes for a sequence of temporal parts to compose one and the same person. Do the pre-teleportation temporal parts and the post-teleportation temporal parts together compose Spock, or do they compose, respectively, Spock and Spock's successor? Endurantists, on the other hand, understand them as questions about the identity or distinctness of entities wholly existing at different times. Is Spock, wholly present as he steps into the teleporter on the Enterprise, identical to the person who is wholly present moments later on the planet?

These are tough questions, but choosing between perdurantism and endurantism will not settle how to answer them. Perdurantists and endurantists alike can prioritise psychological continuity as the basis of personal persistence if that's what the arguments favour; alternatively, perdurantists and endurantists alike can prioritise our biological natures if the evidence points in that direction. The difference in underlying metaphysics will make some difference in how these views of personal persistence are articulated, but they do not dictate our choices.

Admittedly, there are more subtle ways in which the choice between perdurantism and endurantism, once embedded in a wider theoretical network, can make a difference to the relative attractiveness of different theories of personal persistence. For example, perdurantism is often held along with the view that any old collection of temporal parts, no matter how disparate, composes an object; on this view the world is jammed full of overlapping objects. Then questions about personal persistence become questions about what distinguishes individual people from the myriad of very similar people-like entities with which they mostly overlap; this in turn makes a kind of conceptualism about personal persistence attractive, though not compulsory. Different theories of persistence cannot, in and of themselves, settle all the interesting questions about what it is for us people to persist, though they can play a part in more complex arguments about these matters. (See [Sider 2001b: section 3] for related discussion.)

How do the rival views of persistence cohere or clash with the rival views of time I reviewed in the preceding section? Eternalism – which countenances the existence of past, present, and future – is usually taken to be compatible both with endurantism and with perdurantism (although [Merricks 1994] argues that eternalism commits us to perdurantism). Presentism might seem to rule out perdurantism, but if we squint a little perhaps we can combine the two: on this view, first one part of you exists, and then another, never the whole you at once, though by the end of your life each part of you will have existed in turn. Growing-block perdurantism would have it that more and more of you exists as time goes by.

In short, there are no direct paths between particular views of persistence, particular views of time, or particular accounts of specifically personal persistence.

Nevertheless, keeping these different positions clearly distinguished may help us avoid confusion as we investigate issues surrounding life and death. To that end, we should clarify some terminology. As we have seen, the view that past, present and future things exist is known as ‘eternalism’; it is also sometimes known as ‘four-dimensionalism’. But these two terms also have other meanings in the literature on death, time and persistence. ‘Eternalism’ can refer to the view that death is bad for us at all times, i.e. eternally (Luper 2009: 126). And ‘four-dimensionalism’ can refer to the view I have been calling ‘perdurantism’ (strictly speaking, in this sense ‘four-dimensionalism’ refers both to perdurantism and to the related stage theory of persistence) (Sider 2001a). I will stick with ‘eternalism’ for the view that past, present and future exist, and I will not use ‘four-dimensionalism’ again in this chapter.

3. Time, Existence, and Death

Is there life after death? Some of us believe that people continue after their deaths in another realm or in another form, whether physical reincarnation or spiritual presence. In contrast, some of us believe that death is the end: there was no Nelson Mandela in 1900, and likewise there will be no Nelson Mandela in 2100. An intermediate belief is that death is merely a transition from living human being to corpse, and that the end comes a little later once bodily remains decay or are cremated.

We could think of this as a debate about our existence after death, a dispute between those who believe we continue to exist long after our deaths, those who think that death marks the end of existence, and those who think that we exist just as long as our corpses still remain. But, in the context of the eternalism-presentism debate, this would cause confusion. After all, eternalists believe that past things, including Queen Cleopatra, exist in the same way as present things. Does this commit eternalists to thinking that Cleopatra survived her death?

No. Whilst eternalists might, perhaps for religious reasons, believe in ‘life after death’ they are not committed to this by their eternalism. Eternalists who believe that death marks the end believe that Cleopatra exists, but that she is not located at any times during the twenty-first century. This might seem puzzling, but again we can turn to the spatial analogy for clarification. Think of Halley Research Station in the Antarctic. Halley exists, and you can say truly, sitting here in the warmth at home, that Halley exists. But Halley is not located in your home. So Halley exists, but is not located *here* where you are. Likewise, say the eternalists who deny life after death, Cleopatra exists, but she is not located *now*. From the eternalist perspective, disputes about whether death marks the end of us are not disputes about existence, they are disputes about where our temporal boundaries lie.

4. Existence and Posthumous Harms and Benefits

These points about existence and time may help us understand whether it is possible for us to be harmed or benefited by what happens after our deaths, if death is indeed the end. When someone dies, it matters whether we arrange a decent funeral for her, follow the directions in her will, and try to do ‘what she would have wanted’. It matters partly because it’s a consolation to those left behind, and a reassurance about what will happen after our own deaths. But in addition it seems important for the sake of the person who has died. How can this be? What difference could posthumous events make to how well someone’s life has gone: surely it’s too late by then?

In the face of this puzzle, we could try to explain away the intuition that posthumous harms and benefits are possible. We might try to understand the moral importance of our behaviour with respect to the dead without reference to harming or benefiting the

dead, either by taking morality beyond harms and benefits more generally, or by stressing the potential harms and benefits of post-death rituals for the living. Moreover, we might argue that belief in the possibility of posthumous harms and benefits is merely a cultural relic from a time in which almost everyone in our communities accepted that life continued in some form after death, and that the dead are aware of or otherwise affected by what the living do. Then those of us who now want to deny this should also now reject the possibility of posthumous harms and benefits. Or we might argue that the intuition that posthumous harms and benefits are possible is fuelled by a mistaken view of what well-being is. ([Bradley 2009: 42-3] adopts some of these strategies.)

Alternatively, we can try to vindicate the thought that posthumous harms and benefits are indeed possible. We might pursue this by investigating the nature of harms and benefits more generally, attempting to understand what it is for us to have a good life, and trying thereby to understand whether the quality of our lives can be in part determined by what happens after our deaths. But in this chapter I will confine myself to the question of whether metaphysical accounts of time can help us understand the possibility of posthumous harms and benefits, prior to adopting any specific, substantive account of what our well-being consists in.

Harry Silverstein (1980, 2000, 2010) has argued that posthumous harms and benefits are impossible unless future things exist. He argues that an event can only be good or bad for someone if it is a possible object of that person's positive or negative feelings: as his slogan goes, 'Values Connect with Feelings'. Events which happen after your death can benefit or harm you only by being possible objects of your feelings now, whilst you are alive. And, argues Silverstein, if future things and events do not exist, then they are not the possible objects of your feelings now whilst you are alive. If, on the other hand, future things and events do exist, they can be the possible objects of your feelings now whilst you are alive. Thus what happens in the future, after your death, can be good or bad for you.

Let's suppose that Silverstein is right that posthumous events can benefit or harm us only by being the possible objects of our feelings whilst we are alive. Does this really generate a special problem for presentism, as Silverstein suggests, or, indeed, for the

growing block theory? No. If presentism could not account for the obvious fact that we sometimes think about the future, then nobody would be a presentist. (Likewise, we sometimes think about alternative possibilities, about what might have happened, without commitment to the existence of merely possible events such as the 2010 Timbuktu Olympics, or merely possible objects such as the older sibling I wish I'd had.)

Many presentists take it that there are, right now, truths about how the future will be: we have beliefs about the future, some of those beliefs are true, and some of them are false. Presentists owe us a story about what makes those beliefs true or false, given that future things do not exist. So, for example, Bourne (2006) argues that non-present times are abstract entities, which make our future-directed beliefs true or false. And Prior (1968) argues that present things exemplify all the future-directed and past-directed properties needed to provide truth-values for our beliefs about the past and the future. (Merricks [2007] argues that presentists are entitled to truth and falsity about the past and the future, and that they need not provide any substantive story about what makes the relevant claims true or false.)

There are, admittedly, certain sorts of thoughts we are unable to have about the future: singular thoughts about wholly-future objects. But this limitation is generated by our lack of causal contact with such objects, not their failure to exist: eternalists too must concede that we cannot have such thoughts. And in any case this doesn't restrict us too much: I can still hope that my great-great-grandchildren will have a liveable planet, even though I cannot have singular thoughts about those future people. So we can have feelings about the future, even if presentism is correct.

Bradley (2009) discusses a different challenge to presentists. His concern is not about our ability, whilst alive, to have feelings about the future beyond our deaths. His concern is that, once we are dead, we are not available to feature in singular propositions which say that a certain posthumous event is good or bad for us, or that we would have been enjoying good lives had we still been alive at that time (notice that this concern does not affect the growing block theory). But, as he later concedes, this is just an instance of the general challenge to presentists, 'a problem about how to ground truths about past things and people. The presentist must have some general

story to tell about such truths; that story should just be applied to truths about dead people...’ (2009: 83). ([Bradley 2004] and [Bradley 2010] offer further reasons to think that presentists are worse-off than eternalists in dealing with these issues, but [Bradley 2009] seems to retract these.)

Presentists must have some means of accounting for truths about the past and the future, and for our present ability to think those truths, even whilst they deny the existence of objects at those nonpresent times. So presentists and eternalists need not differ significantly in their treatment of posthumous harms and benefits: ontology isn’t doing much work here. (Thoughts like this lead some philosophers to scepticism about the presentism-eternalism debate more generally; Sider [2013] sees in this an illustration of the gap between fundamental metaphysics and ordinary human concerns).

Moreover, this is what we should have expected. If there is a genuine tension between the claim that death is the end of us, and the claim that posthumous events can harm or benefit us, this is rooted in the temporal separation between the person and the posthumous events. How can posthumous events ‘reach back in time’ to affect us? *When* do they affect us: when we’re still alive, or when the events occur? Even eternalists acknowledge that things and people are located at certain times and not at others. Given that Mandela is not located at the year 2100, how can he be harmed or benefited by events which occur then? When does the harm or benefit occur? Mere temporal separation seems to generate these concerns, without reference to nonexistence.

How might we address these concerns, or try to resolve the tension? As before, one good strategy would be to develop a substantive theory of well-being, of harm, and of benefit, then use that to understand whether, how and when posthumous events can contribute to our well-being by harming or benefiting us. For example, perhaps nothing can harm or benefit us except via our experiencing it, in which case posthumous harms and benefits are impossible. Alternatively, perhaps posthumous events can benefit or harm us by satisfying or frustrating the desires we had whilst alive.

I do not attempt to argue for any substantive theory of well-being in this chapter. Instead, I will suggest a role for the metaphysics of time in these debates, one which does not turn on issues about the ontology of temporal objects. Metaphysics can help us explore the nature of cross-time relations more generally, as we test our understanding of how these work for less controversial issues than harm-or-benefit. This improved understanding will then allow us to consider more carefully whether there is something distinctive about well-being, harm and benefit which means that our usual understanding of cross-time relations cannot apply in this special case. The metaphysician of time can thus act as underlabourer, clearing the ground for discussions of well-being.

5. Cross-Space Relations and Non-Causal Determination

To understand cross-time relations, let's consider cross-space relations. Suppose that you and I live in the UK, that we have never met, and that I weigh significantly more than you do. Because of me, you are slightly below average (mean) weight for the UK. This is not because I have affected your weight, by cancelling your Chocolate Society subscription. It's because my weight has helped make it the case that the average weight for the UK is slightly above the level at which your weight is.

(We don't usually take an interest in where people stand with respect to average weight, but there are significant social science measures, concerning relative poverty for example, which work in relevantly similar ways.)

We can consider a range of questions about this obviously-coherent hypothetical situation. For starters, what sort of property is *being below average weight for the UK*? Metaphysicians disagree about whether there is a property for almost every predicate: some say 'yes', arguing that the properties are abundant, whilst others say 'no', arguing that the properties are sparse, perhaps because only the predicates of fundamental physics correspond to genuine features of the world ([Lewis 1983] is a classic discussion). But that's not important right now. We need focus only on the fact that you are below average weight for the UK, and that this is because of your weight and the weights of everyone else in the UK, including me. This is determined by a combination of your intrinsic features, the intrinsic features of other people including me, and our relations to the UK.

Second question: where are you below average weight for the UK? There are a number of possible answers to this peculiar question, but no single answer seems especially illuminating. We might say that you are below average weight for the UK right where you are. We might say that you have this property across the UK (either at each individual place in the UK, or somehow across the whole country). We might say that you are below average weight for the UK everywhere, including on the Moon, insofar as it is true at every place that you are below average weight for the UK. But, in short, we'd be unlikely to ask this question in the first place.

Third question: do I affect you in any way? By stipulation, I do not causally influence you; moreover, I do not help determine your intrinsic features (that's part of what it is for them to be your *intrinsic* features). On the other hand, I do contribute to your being below average weight, this is partly due to me, I help make it the case that you are below average weight, I am amongst the truth-makers for the claim that you are below average weight, and so on. We might even say that it is my weight which pushes you below the average, or that I help to push you below the average.

Fourth question: does your being below average weight counterfactually depend upon my features? There is a relationship of determination, or grounding, or dependence, between my weight and residence, on the one hand, and your being below average weight for the UK, on the other. It's tempting to think of this in counterfactual terms: if I had been less heavy, or had emigrated, you would not have been below average weight. But for very familiar reasons, such counterfactual analyses of determination relations can easily go wrong. What is the nearest possible world in which I am less heavy? Perhaps it is one in which I cook calorie-rich meals for my family, and their consequent increase in weight more than compensates for my decrease. Perhaps it is one in which sugary soft drinks are taxed at 20%, with consequences for everyone's weight, including yours. And what about the nearest world in which I emigrate from the UK: is that closer or less close than the nearest world in which I weigh less?

By understanding the concept of an average weight, we understand a good sense in which me, my weight and my residence in the UK help determine the fact that you are below average weight for the UK. We should not feel impelled to reduce this

determination to a counterfactual dependence, especially once we realise the difficulties in coming up with a satisfactory analysis (Broome 2013: 225).

Fifth question: where, if anywhere, do I help make it the case that you are below average weight for the UK? Like the question about the location of your being below average weight, this question is peculiar. I have my location, you have your location, we each have our intrinsic features, there are relations between us, and moreover we stand in a complex web of relations with other people in the UK. Once these facts are specified, it is hard to see what further information could be requested by the question about *where* I help determine that you are below average weight for the UK.

6. Cross-Time Relations and Non-Causal Determination

Let's say that a person's Height is the maximum height she has throughout her life (i.e. the height she reaches when first fully-grown). Suppose we took each person whose lifetime includes at least some of the twenty-first century, and arranged them in Height order, starting with the shortest person. Then let's say that each person's Height Number is the number which indicates his/her place in that ordering. The taller the person, the greater the Height Number.

(We don't usually take an interest in Height, but in sports we often take an interest in, for example, the all-time fastest runners, or all-time highest scorers: Usain Bolt, for example, is the person out of all those who have lived so far who has the fastest maximum speed over 100m, whilst Maurice Greene will always be the fastest runner of the twentieth-century over this distance.)

Suppose that your Height Number is 4 billion; suppose that Smallish Sam (b.2079 – d.2154) has Height Number 4 billion minus one. (By the power of stipulation, I condemn you to die before 2079.) In some sense, it's because of Sam that you have Height Number 4 billion, instead of 4 billion minus one. This is not because Sam affects your Height. It's because Sam's Height helps make it the case that your place in the Height line is the 4-billionth place.

As with my cross-space contribution to your being below average weight, we can ask a range of questions about Smallish Sam's contribution to your having Height Number 4 billion. First, what sort of property is *having Height Number 4 billion*? Given that my stipulative definitions of Height and Height Number are coherent, and given the assumed facts about everyone's Heights, it is true of you that you have Height Number 4 billion. At the moment, we can't know this, not even if we have the Height information for everyone who has lived in the twenty-first century so far. Nevertheless, so long as there are truths about who will live in the twenty-first century, and about what their Heights will be (and recall that even presentists make room for such facts), then there is a truth about your Height Number. This is determined by a combination of your intrinsic features (your Height), the intrinsic features of others (their Heights) and their temporal locations (i.e. the fact that they live during the twenty-first century).

Second: when do you have Height number 4 billion? Superficially, this seems less peculiar than the question about where you are below average UK weight. But in fact it is problematic in the same ways. There are a number of possible answers, but no single answer seems especially illuminating. We might say that you have Height number 4 billion throughout your life, or perhaps during the portion of your life following the time when your height reaches your Height (i.e. once you have reached your maximum height). We might say that you have Height number 4 billion at all times in the twenty-first century, or only once everyone who has lived in the twenty-first century has reached their maximum height. We might say that you have Height number 4 billion at all times, past, present and future, insofar as it is always true that this is your Height Number, in the same way that it is always true that Maurice Greene is the fastest 100m runner of the twentieth-century. Each of these claims expresses some sort of information, and we can imagine a situation in which someone might be curious about this, but we should resist the thought that any one of these reveals a deeper truth than the others.

Third question: does Smallish Sam affect you in any way? Smallish Sam cannot causally affect you, since he is born after your death; moreover he cannot help determine your Height. But he contributes to your having the Height Number that you do, this is partly due to him, he helps make it the case that you have Height

Number 4 billion, he is amongst the truth-makers for the claim that you have Height Number 4 billion, and so on. We might even say that Sam and his Height push you up the Height line from 4-billion-minus-one to 4 billion.

Fourth question: does your Height Number counterfactually depend upon Sam's Height? There is a relationship of determination, or grounding, or dependence, between Sam's Height and temporal location, on the one hand, and your having Height Number 4 billion, on the other. It's tempting to think of this in counterfactual terms: if Sam had not existed, or if he had been somewhat taller or somewhat shorter that would have meant changes for other people's Height Numbers. But, again, we should not treat such counterfactuals as analyses of determination relations. If Sam had not existed, perhaps his actual partner would have had kids with someone else and those kids would have affected the Height line in some way. If Sam had been taller than you actually are, perhaps that would have been due to improved general nutrition, and you also would have been taller than you actually are, retaining your actual Height Number. And so on.

By understanding the concepts of Height and Height Number, we understand a good sense in which Sam, Sam's Height and his living during the twenty-first century help determine the fact that your Height Number is 4 billion. We should not feel impelled to reduce this determination to a counterfactual dependence, especially once we realise the difficulties in coming up with a satisfactory analysis.

Fifth question: when, if at any time, does Smallish Sam help determine your Height Number? You have your temporal location and your Height, and Sam has his temporal location and his Height. Once these facts are specified, it is hard to see what further information could be requested by the question about *when* Sam helps determine that you have a Height Number of 4 billion.

7. Well-Being and Cross-Time Relations

I have shown that we fully understand how certain features of a person can be partially determined by what goes on at places and times at which she is not located. There is no fundamental conceptual difficulty in understanding either average weight or Height Number, and no hint of problematic instantaneous-action-at-a-distance or

backwards causation in either case. Eternalists can easily understand how cross-time relations are possible; presentists have more work to do in explaining this, but they will provide some explanation or other, on pain of giving up on vital cross-time relations such as causation

We have various significant properties which fit this pattern. For example, your level of knowledgeability (how much you know) is partially determined by what goes on at places and times at which you are not located. In particular, how much you know is partially determined by events occurring after your death, given the plausible assumption that some of your current beliefs about the future are well-grounded enough to constitute knowledge if they are true. (Don't be distracted by the worry that we can never be *certain* what the future holds: by this standard we are certain of very little about the past or present either, and we are headed for scepticism if we make such certainty a precondition for knowledge.) More controversially, semantic temporal externalists (Jackman 1999, Collins 2006) argue that the meanings of the words you use today are partially determined by facts about future linguistic developments (though see [Brown 2000] for criticism).

What can this exercise tell us about the possibility of posthumous harms and benefits? Try thinking of it rather abstractly, as follows. Each of us has a level of lifetime well-being (just as each of us has a Height Number and a level of knowledgeability). Your level of lifetime well-being is determined by a combination of your intrinsic features, the intrinsic features of various events, and the relations between you and those events. Different substantive theories of well-being disagree about which intrinsic features and which relations are the relevant ones, and about how these combine to determine your lifetime well-being. So for example a simple hedonic theory of well-being says that an event can help determine your well-being only by standing in the *being-an-experience-belonging-to* relation to you. A preference-satisfaction theory of well-being says that an event can help determine your well-being only by satisfying or frustrating your preferences (it is a further issue whether the relations of *satisfying* and *frustrating* are reducible to intrinsic features of you and the events in question).

At this level of abstraction, an event's harming-or-benefiting someone is a matter of its contributing to the determination of her level of lifetime well-being. Intuitively,

some such contributions are positive, pushing up the level of well-being, whilst others are negative, pushing it down. But, as with my contribution to your being below average weight for the UK, and as with Smallish Sam's contribution to your having Height Number four billion, it's possible for us to think of this 'pushing' as non-causal; moreover we should not try to reduce it to counterfactual dependence. Nor, finally, should we feel compelled to specify *when* a certain event contributes to someone's well-being by helping determine it: we have the temporal location of the person, the temporal location of the event, plus the relation between person and event. Nothing further needs to be said.

If this is a good way of thinking about well-being, harm and benefit, then there is no very general reason for thinking that posthumous harms and benefits are inherently problematic or mysterious, any more than is Height Number or your level of knowledgeability. Once we adopt some substantive theory of well-being, and accept what it says about which features and relations are relevant to the determination of well-being, we may then have good reasons to think that posthumous harms and benefits are problematic. But when posthumous harms and benefits are rejected on such grounds, this rejection cannot then provide a noncircular reason for adopting that very theory of well-being.

More optimistically, we might hope to establish some general claims about well-being, benefit or harm which do not flow from any particular substantive theory of well-being, yet put constraints on the types of features and relations which can be relevant to the determination of well-being. We could then investigate whether those constraints permit posthumous harms and benefits. This would involve explicating the theoretical role of well-being, harm and benefit, considering their connections to categories in moral theory for example, and also considering the relationship between well-being at a time and lifetime well-being.

This is an important, deep project which I am ill-qualified even to begin, so I return instead to my underlabouring task. We all have features which are partially determined by events occurring after our deaths, and there is no conceptual obstacle or consideration from the metaphysics of time which suggests that this is in general puzzling or problematic. If our lifetime well-being is not so determined, this is

because of distinctive features of well-being, and if these distinctive features are established on the basis of some substantive theory of well-being, then the ‘impossibility’ of posthumous harm and benefit cannot function as a reason to adopt that substantive theory.

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