Problems with a Constitution Account of Persons

DAVID B. HERSHENOV *University at Buffalo*

ABSTRACT: There are some problems with Lynne Baker's constitution account of personal identity that become evident when we consider brain transplant thought experiments and two kinds of rare cases of conjoined twins — the first appears to be one organism but two persons and the second seems to involve two organisms associated with one person. To handle the problems arising from brain transplants, the constitution theorist must admit an additional level of constitution between the organism and the person. To resolve the problems posed by the two kinds of conjoined twins, the constitution theorist must accept that constitution is not always a one-to-one relationship.

RESUME: La théorie constitutionnelle de l'identité personnelle de Lynne Baker soulève certains problèmes qui deviennent évidents lorsque l'on considère des expériences de pensée sur des transplantations de cerveaux et deux genres de cas rares de jumeaux conjoints — du premier cas paraît s'ensuivre qu'il y a deux personnes pour un seul organisme alors que du deuxième découle qu'une seule personne existe dans deux organismes. Afin d'expliquer les problèmes qui surviennent avec les transplantations de cerveaux, le théoricien de la constitution doit admettre un niveau de constitution intermédiaire entre l'organisme et la personne. Pour résoudre les problèmes que posent les cas de jumeaux conjoints, le théoricien de la constitution doit accepter que la relation de constitution ne se réalise pas toujours entre deux termes.

Introduction

There are some problems with Lynne Baker's constitution account of personal identity that become evident when we consider brain transplant thought experiments and some rare kinds of conjoined twins. One pair of conjoined twins

***Dialogue* 48 (2009), 291-312. Printed in the U.S.A.**
© 2009 Canadian Philosophical Association/Association canadienne de philosophie
doi:10.1017/S001221730909026X

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

appears to involve one organism but two persons,[1] and the other may best be described as two organisms associated with one person. It will be argued that Baker will have to make some significant adjustments in her account of constitution if her approach is to be extended to all the possible cases in which human persons and human animals are found together.[2]

To handle the problems arising from brain transplants, the Baker-inspired constitution theorist must abandon the claim that organisms can have any non-derivative thoughts and must also admit an additional level of constitution between the organism and the person.[3] Since the entity at the intermediate level of constitution is essentially a thinking being, though not essentially self-conscious, there arises the problem of determining whether we are to be identified with it or with the person who is essentially self-conscious. The standard transplant thought experiment that is used to show that we are essentially thinking entities rather than organisms cannot adjudicate when the issue is to which of the two transplanted thinking entities we are identical.

A solution will be offered that supports Baker's claim that we are essentially self-conscious beings and would thus go out of existence with the loss of the capacity for self- reflection, even if there remained a merely sentient being. Not only should this conclusion be of interest to metaphysicians but it also has implications for bioethicists. It suggests, for example, that we would not persist through the descent into late-stage Alzheimer's disease and thus advanced directives made by us would actually determine the treatment, or the withdrawal of treatment, for merely sentient beings with whom we are not identical. An account is offered that explains why our concern for the future being with our Alzheimer's damaged brain mistakenly leads many of us to identify ourselves with such a patient.

To resolve the problems posed by the first pair of conjoined twins, the constitution theorist must accept that constitution is not always a one-to-one relationship. Sometimes one entity can constitute two others. This will compel the constitution theorist to acknowledge two things: (1) that bodies don't individuate persons and (2) that there are other categories of what Baker calls "excluded properties" that spatially coincident objects do not derivatively borrow from each other. These adjustments may first appear to be just minor tinkering with Baker's theory. However, the revised constitution relationship entails that one entity will constitute two entities that are of the *same kind* and this will conflict with a widely held position in metaphysics. This position, going back at least to Locke, is that while spatially coincident entities of different kinds such as the organism and the person are acceptable, it is impossible for there to be two spatially coincident entities of the same kind. There can't be two persons located in the same place at the same time. Some readers may think that if the constitution approach is committed to such a view, then it should be abandoned. However, many of our deep-seated convictions about what we are, what is distinctive about us, and what matters to us will have to be given up if the constitution account is abandoned. I will also argue out that the two

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

spatially coincident persons don't have the individuating problems that readers might expect upon first hearing that such entities are being posited. And I will even suggest that spatially coincident entities of the same kind will have to be accepted elsewhere in the world if there are such commonplace things as roads that can overlap for a stretch. This should make the solution offered in the case of the conjoined twins seem less ad hoc and thus more palatable.

To resolve the problems posed by the second pair of conjoined twins, the constitution theorist will have to admit that sometimes two organisms can constitute one person. If this isn't accepted, then there will be two persons, essentially and non-derivatively persons, thinking the same thoughts, which Baker doesn't want to allow. What is especially interesting about this case is that it poses a problem for the animalist opponents of constitution theory that is akin to a problem that they often claim sinks the constitution project — the problem of too many thinkers. In the twin scenario to be described in this paper's last section, there are two organisms that share a cerebrum but have distinct brain stems and do not share any organs beneath the brain. Since the two organisms share an upper brain, it appears that they will be thinking the same thoughts. The animalists will have to suffer the same problems here that they claimed undermined the constitution approach. If the animalist and the constitution theorist both have to accept a second thinker's sharing a brain with the first, this makes constitution more attractive than it would otherwise be vis-à-vis animalism. A result of recognizing that constitution theory shouldn't be abandoned because it, but not animalism, must tolerate a second thinking being overlapping the first, which will also mean that this paper's suggested revisions to the constitution theory will appear less like desperate ad hoc epicycles designed to save a pet theory.

Baker's Theory

Thought experiments like the famous cerebrum transplant from one body to another elicit intuitions that we are essentially persons rather than organisms. But theories that assert that we are essentially persons and distinct from but spatially coincident with an organism have been criticized for positing one too many thinkers. It is charged that if the person and the organism share a brain, the organism should be able to think as well as the person. This is "The Problem of Too Many Thinkers." Baker counters that when the relation between one entity and another that it *constitutes* is understood correctly, there will be no duplication of mental properties. Thus there will be no extra thinkers. Nor will there be any worries about whether one is the person or the organism. Her theory is appealing because it saves our intuitions about being essentially thinking beings and does so without suffering all of the problems that plague other accounts that posit a spatially coincident person and organism.

Before outlining Baker's purported solution to The Problem of Too Many Thinkers, the notions of "constitution" and "derivative" and "non-derivative" property possession need to be clarified [Baker 2000, pp. 43-5]. Accounts of

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

constitution frequently begin with the example of the statue and the lump of clay said to constitute it. The lump and statue are in the same place at the same time (i.e., are spatially coincident), and composed of the same atoms and physical particles. Every atom in the statue is also in the clay. Despite being physically no different, it is maintained that they are distinct entities. The lump could have existed before the statue came into existence. It wasn't until the sculptor came along and molded the lump into, say, the shape of a famous politician that the statue came into existence. And the statue might be destroyed if it loses too much of its shape but the lump would persist through that change. However, if the statue has its hand replaced by a hand composed of a different type of material or just different clay, the statue would survive the "repairs" but the original lump of clay would not. There would then be a different lump constituting the statue. So for such reasons, it is argued that the statue and the lump of clay are distinct.

The lump is said to constitute the statue rather than vice versa because the lump could exist without having given rise to the statue (or anything else). That is, if the lump wasn't in the right circumstances, i.e., intentionally molded by the sculptor and displayed, then the statue would never have come into existence. The constituted entity in our example, the statue, can't exist without being constituted. But that statue, as we have seen in the case of the hand replacement, need not always be constituted by the same entity (Baker 2002a, pp. 43-5).

Baker claims that when one entity is constituting or constituted by another, each can *borrow* properties from the other. The entity that borrows a property has it *derivatively;* the other has it *non-derivatively*. The constituted entity can have properties nonderivatively if the object constituting it couldn't have those same properties without constituting it. For example, the statue is non-derivatively beautiful and valuable while the lump wouldn't possess such properties if it didn't constitute the statue. So the lump is beautiful and valuable derivatively. The constituting entity, on the other hand, could have a property non-derivatively if it could possess that property even when it didn't constitute another object. For example, the lump of clay non-derivatively possesses the property of weighing two thousand pounds. It would have that weight if it had never been shaped by the sculptor. And if the constituted entity (the statue) has a property that the constituting entity (the lump) could have without constituting anything, then the former has it derivatively. The *statue's* possession of weight is an example of such a derivative property. There are two things, the statue and the lump, but they don't each weigh a separate ton; the scale is not forced to register four thousand pounds when the clay statue is placed upon it. The lump and the statue share the same weight. They possess the same token property of weighing two thousand pounds.

Baker believes that the constitution relation between persons and bodies is analogous to that of statues and lumps. A person is distinguished by her capacity for self-consciousness, what Baker calls the "first-person perspective."

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

Possession of such a perspective entails a consciousness of oneself as a being with beliefs and desires. Baker believes that you and I are essentially persons. The organism that constitutes a person doesn't have the property of personhood essentially (and non-derivatively). It can exist without being self-conscious. When the organism was an embryo it was not a person. Yet in certain circumstances, the organism constitutes a person. When a person emerges, it is not a phase of the organism but a substance in its own right.

Baker maintains that when the organism constitutes the person there do not arise two fully separate thinking beings, each with its own mind and mental properties that are duplicates of the other's. Both the organism and person have the same mind and share the same desire and belief properties. However, one of them will have certain of these properties derivatively and the other will have those same properties non-derivatively. Baker also believes that the human organism is the subject of certain mental states and events independently of its constitution relation (Baker 2000, pp 61-2, 68, 101-5). That is, the organism's undergoing such thoughts doesn't entail that it constitutes a person. These non-derivative moods, feelings, believings, desirings, etc., will be called "first-order" mental states or events. Events such as an organism's fear of the dark, investigation of a curious object, boredom in the absence of certain stimuli, comfort around familiar voices, or anxiety in the presence of strange faces are all examples of mental phenomena that an organism could have without self-consciousness. The person, on the other hand, is involved in such first-order mental events derivatively, borrowing the mental properties from the organism.

Baker argues that the organism is also a person when it comes to constitute the person. But this doesn't mean that there are two persons in the same place, one essentially a person and the other contingently. There is only one person. The property of personhood is derivatively possessed by the organism while held non-derivatively by the being which is essentially a person. Baker protests that those who think that there are two persons in these puzzle cases do so because they conceive of the two beings in the constitution relation as if they were fully separate entities that just happen to be in the same place at the same time. Such a perspective overlooks the unity relation that a constituted object has to that which constitutes it. There is more to constitution than just spatial coincidence. While constitution is not identity, it is not full separateness either. Baker insists that the constitution relation makes it possible for two things to be the same F without their being identical. To claim that x and y are the same F should be understood as stating that *either* x and y stand in a constitution relation to each other, *or* they are identical to each other.

Only the entity that is non-derivatively a person can refer to itself by use of first-person pronouns. When that entity says or thinks "I," it refers to itself. The spatially coincident organism also refers to the person by first-person pronouns. The organism can't refer to itself qua organism by the first-person pronoun. It lacks self-consciousness of itself as an organism. It can't think of itself as

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

itself. "I" does not work as an essential indexical for it. The only first-order thoughts it can reflect upon are those that are non-derivatively thought by the person. So when the constituted person thinks "I am essentially a person," the organism doesn't think that thought falsely about itself but thinks it truly of the person. To borrow Harold Noonan's description, "There is a distinction between the 'I'-user and the reference of 'I' (1998, p. 316). If the organism and the person were each referring to themselves by the first-person pronoun, there would be distinct contents and thus two thoughts and perhaps two minds would have to be posited. There would also be what Olson calls the epistemic problems and personhood problems (2002). The former is that if there were two self-conscious entities then there would be two distinct persons, though one (the human animal) contingently a person and the other essentially a person. The epistemic problem is that each would have no way of knowing which one it was. But since the human animal can't think about itself non-derivatively qua animal, it is not a person distinct from the one it constitutes. Persons are defined as self-conscious entities. And since the animal can't refer to itself and think about itself directly and incorrigibly by use of the first-person pronoun, then it can't ask the question of whether it is the person or the animal. Therefore, there is no epistemic problem plaguing the constitution account.

There are likely to be a number of points in the above discussion that readers will contest. Readers may sympathize with some of Baker's more trenchant critics such as Olson (2001, 2002) and Zimmerman (2002). But I don't want to defend Baker against these criticisms. I'll just assume that she has resolved the problems that she has tackled (2002a) or, if she hasn't, I'll show in the paper's final section that the animalist suffers similar problems in some rare scenarios. What I want to do is to explore some problems that Baker has not recognized and to suggest how she could alter her account to handle them.

Sentience and Constitution

The possibility of cerebrum transplants and the replacement of one's organic body with inorganic parts is traditionally thought to provide important support for the claim that a person is not to be identified with an organism. Baker insists that both procedures are metaphysically possible. The person can switch bodies or have its organic (cellular) body gradually replaced with a new inorganic body as long as this doesn't interfere with certain aspects of the mental life of the person. Regarding the part-replacement scenario, Baker insists that the person would survive such changes, but would cease to be a biological entity, a human organism. If the organism and the person can be separated, then they obviously are not identical and, therefore, "person" can't be treated as a mere phase-sortal.

Ironically, Baker's account actually has problems with the very thought experiments commonly put forward to show that we are essentially persons rather than organisms. For the sake of brevity, I will limit the discussion to the upper brain (cerebrum) transplant, but the same lessons can be drawn from the

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

thought experiment involving complete inorganic part replacement. The major problem has to do with how we explain the transplant of a sentient being whose brain either has not yet acquired the capacities to give rise to a first-person perspective or will have lost the self-conscious capacity prior to the cerebrum transplant — perhaps due to stroke or Alzheimer's disease.[4] If the diminished cerebrum is transplanted, that is not the transplant of a person — a being with a first-person perspective. There was no self-conscious person *immediately* prior to the transplant that could have become pared down in the transplant scenario. So no person has to be constituted by the upper brain rather than by the organism, and then placed in the cerebrumless body of a twin and thus restored to its earlier dimensions. Nor can the cerebrum transplant be described as the transplant of an organism since the latter is left behind in a mindless condition equivalent to a permanent vegetative state.[5] We should say that a thinking being has been transplanted.[6] It is especially hard to resist this conclusion if the stream of first-order thought continues uninterrupted during the transplant procedure.[7] Since a thinking being that is not identical to the person or the organism has been transplanted, my contention is that Baker is forced to recognize a new level of constitution, that of a sentient being, which is found "in between" a person and an organism.

It is this sentient entity that non-derivatively thinks first-order thoughts. Baker was wrong to maintain that there were feelings, desires, and beliefs that the organism had non-derivatively. While these thoughts could be had without the self-consciousness characteristic of the person, it is the sentient being, not the organism, which has them independently of constituting a person. So first-order thoughts are derived by the person from the sentient being rather than from the organism. And the organism will undergo its first-order mental experiences derivatively as a result of its constituting the sentient being.[8]

Some readers might agree with me that Baker ought to accept the existence of a sentient being as a primary kind but think that she provides her own reasons for such a judgment and that mine are superfluous, if not problematic.[9] Baker argues that when a constituted entity comes into existence, it has "whole classes of causal powers" (2000, p. 41) that its constituting entity did not. It might be maintained that the appeal to such causal powers would be sufficient to make the case for another level of constitution. But I think that the modal intuitions appealed to in my thought experiment are needed to convince people that sentient beings are distinct from the animal and the person. The onset of causal powers doesn't seem a sufficient test for whether constitution has taken place. Since the existence of new causal powers appears to be just a necessary indication of the emergence of something new in the universe, it can be given support from my appeal to modal properties. Baker has been heavily criticized by Olson and others for not being able to say when constitution occurs (Olson 2007, p. 57). If it takes place just when considerable new causal powers come along, why isn't becoming a president or dictator who can cause a nuclear war and exercise many other powers a case of constitution in which a new

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

substance comes into existence? Likewise for puberty and the physical powers that it bestows upon an adolescent, such as being able to conceive a new life and do many things not possible before. The same can be said for an individual person who comes up with a new high-tech engineering idea that bestows incredible financial and industrial and military power. Or consider an individual who becomes infected with a disease that will kill hundreds in a plague and force thousands of others to flee. Finally, analogous to Baker's case of a stone's coming to constitute a monument, imagine a person who learns to play an instrument in a way that moves people to tears or incites their passions (Baker 2000, p. 33). I would imagine that readers don't want the causal powers test to imply that the above individuals have come to constitute new entities in such situations. So one useful test for constitution is whether the constituted object can exist separated from the particular entity previously constituting it. If our modal intuitions support such separations, that would be evidence that we believe the objects to be distinct. For example, one can't separate the musician from the musical person, nor the human animal undergoing puberty from the adolescent undergoing puberty, nor the person from the engineer with the high-tech idea, nor the infectious individual from the contagious human body. But the river can continue to exist separated from the (present) aggregate of H_2O molecules constituting it. And we can imagine the self-conscious person with a first-person perspective removed from the animal in the cerebrum transplant thought experiments. Likewise, we can imagine the separation of the animal from the merely sentient being with the transplant of a cerebrum that no longer possesses the capacity to give rise to a first-person perspective. And I will provide a thought experiment in which the person apparently could survive fissioning and transplant without the original sentient being's continuing to constitute it. So my modal argument can do some work that Baker's new causal powers account leaves undecided.

There is another possible misunderstanding that I want to prevent. Someone might believe that recognizing another level of constitution will give rise to a problem that cannot be handled by the suggested reformulation of Baker's approach.[10] The worry is that if being sentient is a primary-kind property, then since the self-conscious person is also *essentially* sentient, the person would have two primary-kind properties, both essentially and non-derivatively. But a substance can have only one primary-kind property non-derivatively and essentially.

However, this alleged problem is one that Baker would suffer even if she didn't admit to my suggested additional primary kind, the sentient being. There are many analogous situations. I will mention one of the many that she discusses. She notes how an aggregate of H_2O molecules constitutes a block of ice which constitutes an ice sculpture. An aggregate of H_2O molecules, a block of ice, and an ice sculpture are all primary kinds. But the ice sculpture is essentially a block of ice, and the block of ice is essentially an aggregate of H_2O molecules. That is, there are no possible worlds in which there is an ice

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

sculpture that is not a block of ice, nor a block of ice that isn't an aggregate of H_2O molecules. An ice sculpture is necessarily constituted by a block of ice and thus (according to Baker) would always have the property of being a block of ice, though it wouldn't be identical to the block of ice. So one primary kind, the ice sculpture, is essentially a block of ice; likewise, a block of ice is essentially an aggregate of H_2O molecules. Thus the ice sculpture will essentially possess, in addition to its primary-kind property, a property that is the primary-kind property of something else. But there is no problem here as long as being a block of ice is not what the ice sculpture is *fundamentally*. And it is not; while the ice sculpture is *essentially* (i.e., *necessarily*) a block of ice, being a block of ice is not necessary and *sufficient* for being an ice sculpture. A sculptor or art world would be needed for a block of ice to be a sculpture. Baker understands primary-kind descriptions to be those that inform us of what the thing *fundamentally* is; that is, those that give its essence and its persistence conditions. But the block of ice doesn't have the essence or persistence conditions of the ice sculpture and the aggregate of H_2O molecules. The ice sculpture and the aggregate of molecules could still exist while the block doesn't. For instance, the ice sculpture could still exist if its frozen hand was severed, but a different block of ice would then come to constitute it. This claim is compatible with the sculpture's being destroyed by destroying the block of ice when the latter constitutes the sculpture.

Moreover, the ice sculpture will have the property of being a block of ice derivatively. This follows from Baker's already-discussed definition of having a property derivatively already discussed X has a property derivatively if it is constituted by something Y that could have the property even if it Y didn't constitute anything (2000, pp. 48–50). Since the block of ice will have the property of being a block of ice even if it doesn't constitute a sculpture, then the sculpture has it derivatively. (The block of ice wouldn't constitute a sculpture if no one intentionally produced it but rather it formed long before mankind populated Earth.)

So I don't think there is any problem, other than someone's reading Baker's use of "or" in an exclusive rather than inclusive sense when she claims that "for any primary property, being an F, if any x is an F at all, then either x is essentially or x has the property of being an F derivatively" (2000, p. 56). There is no reason why Baker can't allow a property that is one entity's primary kind property to be an essential (i.e., necessary) property of something else, and derivatively a property of that thing as in the case of the block of ice and the aggregate of H_2O molecules.

Let's return to my example of the person who is essentially sentient and self-conscious, but constituted by an individual who is essentially sentient yet only contingently self-conscious. The merely sentient being could exist without the person's existing. The person is essentially self-consciousness, but derivatively acquires its *merely* conscious states from the sentient being. Baker says as much about animals. Desires and beliefs that human animals have without

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

constituting human persons are borrowed from the animal by the person. It is just that, according to my reformulation of Baker's account, the person borrows such desires and beliefs from the sentient being since it is an additional layer of constitution that she overlooked. So the person has only one property as its primary kind property. It is, of course, also essentially sentient, but derives that property from an entity which possesses sentience as its primary-kind property.

Persons or Sentient Beings?

Readers may protest that while cerebrum transplants and inorganic part replacements may show that we are not identical to the human organism, the thought experiments don't appear to reveal whether we are essentially persons or merely sentient beings with the accidental property of personhood, i.e., a first-person perspective. Why follow Baker and think that we each are another entity, a person, that comes into existence when a distinct entity's brain develops to the point that it can support a first-person perspective? Baker appeals to the first-person perspective as being what distinguishes us from all other *merely* sentient beings in the animal kingdom. Unlike them, our capacity for self-consciousness provides us with an inner life, enables us to have a sense of ourselves as having a future and a past, and allows us to reflect upon and alter our desires and beliefs and to engage in rational activity. In virtue of this first-person perspective we can partake in morality, art, science, philosophy, religion, politics, and other notable aspects of civilization. But even if readers assume that there are two distinct but spatially coincident thinking entities, which one are we: the sentient (conscious) being that is contingently a person or the self-conscious being that is essentially a person?

It might appear that Unger-inspired prudential pain tests (Unger 1991, pp. 27-35) suggest that we are identical to the merely sentient being that is only contingently self-conscious. These tests involve being told that the cerebrum we each now possess will in the future no longer be capable of realizing self-consciousness, though it will still give rise to sentience. The being with the impaired cerebrum will undergo torture at a future time unless we agree to now take on less but still considerable torment. Would we do it? Most of us would take on much more pain now to prevent the future individual with our cerebrum from being tortured than we would for some unrelated person. This prudence-like concern about the future well-being of that individual with our cerebrum suggests that we each believe that we would be that individual.

My first response is to note that just as constitution is a third relation between identity and separateness, so there is a third type of concern between prudence and altruism. Call this "constitutional concern."[11] It is the concern a person has for the sentient being that constitutes it. This concern is easily confused with the person's prudential concern in the Unger-inspired scenario but it is not prudence if the modified constitution account is correct. The person who insists that it is prudential concern that s/he is showing for the being with

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

the diminished mind is misconstruing what is really constitutional concern. And constitutional concern does not track identity, i.e., it is not concern for a future being with whom one is not identical.

But this is not the only defense that we can make for the claim that we are identical to the person that essentially has a first-person perspective and is distinct from a spatially coincident *merely* sentient being. Imagine a case of asymmetrical fission where one transplanted cerebral hemisphere gives rise to self-consciousness and the other to *just* sentience (*mere* consciousness). We would likely identify with the entity that received the first hemisphere. It is the self-conscious entity capable of thinking about itself, its past and future. However, readers may suspect that this thought experiment involves just a metaphysically uninformative asymmetrical split such as when a rock has just a small piece cut off from it. We don't believe the rock fissioned out of existence, just that a new pebble has come into existence. The original entity survives as the chipped, larger rock. So the cerebrum fissioning and transplant may be interpreted by readers as our identifying with the resulting being whose cerebral hemisphere is "psychologically larger," i.e., has more cognitive capacities and is thus a better candidate for being our Nozickian closest continuer (1981), rather than as revealing that we are essentially self-conscious beings. My response, though it may be flirting with a category mistake, is to imagine that the two hemispheres have *equal* amounts of conscious capabilities. What the non-self-conscious entity lacks in that capacity, it makes up for by having certain feelings, sensations and beliefs that the other hemisphere is not equipped to realize. I suspect readers would still identify with the individual possessing the cerebral hemisphere capable of supporting self-consciousness, even if that self-consciousness was over a much more diminished range of experiences than normal. If we were merely contingently self-conscious but essentially sentient, we should have fissioned out of existence or arbitrarily survived as one rather than the other since there is no reason on the grounds of sentient capacity to claim to identify with one of the two post-fission sentient beings. But we do non-arbitrarily identify with one of the fission products. This suggests that we think that mere sentience is necessary but not sufficient for us to exist.

Hopefully, my account of the fission thought experiment vindicates Baker's approach. We can't exist without the additional capacity for self-consciousness. We are each essentially persons rather than identical to a sentient being that is only contingently a person, i.e., has a first-person perspective. This conclusion reinforces the interpretation of Unger's thought experiment that it is constitutional concern and not prudential concern that is at work in our response to the prospect of future torture.

The Dicephalus

Another problem for Baker's account arises from an extreme version of conjoined twins called the dicephalus. The dicephalus has two cerebrums, each encased in separate heads, each with its own eyes, ears, nose, and mouth.

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

But beneath the two cerebrums there is just one brainstem that supports or *subserves* both heads. And below the single brainstem there is the same number of limbs and organs as possessed by the normal human being. Readers would see what looks like a normal body except that above the neck there are two heads. This hypothetical case of conjoined twins invites description as one organism with two distinct minds belonging to different persons. The reason for individuating two persons is that each cerebrum realizes thoughts that are as inaccessible to each other as are the reader's thoughts to me. Only third-person knowledge is available. The single organism can't be identical to the persons since they aren't identical to each other. But describing the dicephalus as one organism and two distinct persons leads to a problem for Baker since she insists that organism/person constitution is a one-to-one relation.[12]

However, there are interpretations of the dicephalus that would sustain constitution as a one-to-one relation, though I suspect readers will find them less plausible than the suggested alternative. The first is to claim there is only one person, a divided person. So what looks like two persons because of the lack of psychological unity is really one. This will likely strike most constitution theorists as too much of a stretch of the concept "person." Persons and their minds are synchronically individuated in terms of psychological unity. Mental states inaccessible to other mental states are determined to belong to different minds and persons. We allow the unconscious and conscious to be part of the same mind because of their intimate causal contact and influence, even though conscious access in not available. In the case of the dicephalus, the thoughts realized by the two cerebrums are so completely independent of each other that they will feel compelled to speak of two minds and two persons.

A second interpretation is that there are two organisms, overlapping except for the cerebrum.[13] But this is not a biologically sound way to individuate organisms. An extra cerebrum no more indicates an extra organism than does an eleventh finger. Cerebrums are required for the organism to have a valuable life but not for it to be alive. Most organisms begin life without a cerebrum and some even survive the loss of a cerebrum due to stroke or injury. Organisms are typically individuated in terms of those events that are lives in Locke's sense. A life involves those metabolic and homeostatic processes that organize, assimilate, and sustain all of the parts of the organism. Since the dicephalus is involved in only one life, it is determined to be just one organism. And Baker's own account of organism individuation in *Persons and Bodies* would seem to preclude this. She writes that "there are two animals if there are two centers of control of biological function" (107). The dicpephalic persons share a single brain stem controlling the autonomic life functions of the organism.

A third position is that each conjoined person is constituted by an aggregate of particles that overlap but are not identical to the aggregate of particles that compose the organism at that time. Or a variant of this third approach is to maintain that each person is constituted by a large part of the organism that includes all of the dicephalic organism's parts except for the head of the other

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

person. Unlike an aggregate, these two large parts of the organism's body can survive replacement of their own parts. This means that the organism doesn't constitute either person, but rather that two large embedded parts of it stand in a constitution relationship. On account of Baker's allowing only spatially coincident entities to derivatively borrow properties, the organism would not derivatively think the two persons' thoughts. Since the organism doesn't constitute a person, and given that it has two heads and can apparently use them to think, then it would be thinking the self-conscious thoughts non-derivatively, contrary to Baker's constitutional account of organism thought.

Some readers might have reservations about my claim that each person couldn't be constituted by different overlapping parts of a single dicephalus organism because that would leave an organism thinking non-derivatively. Such readers might wonder why we would have to accept that such an organism thinks non-derivatively when we wouldn't accept that an object composed of a dog and a human organism thought non-derivatively just because a part of it constituted a thinking person.[14] My response is not just that organisms are the type of things that can think if their brains are functioning in a certain way, but also that the suggestion would also lead to an organism's losing the ability to think merely as a result of a growth elsewhere on its body. Readers can see the latter point if they imagine that the two heads of the dicephalus don't come into existence at the same time. There will first be a "normal" organism with one cerebrum and that organism will derivatively be a person because it constitutes a person. Then the other cerebrum grows and develops to the point that it too can make thought possible. If each person had become constituted by a different (though overlapping) part of the same organism, then that organism would have lost the capacity to think and would have ceased to be derivatively a person with merely the growth of the second cerebrum. I don't think we should countenance an organism's losing the capacity to think with one cerebrum just because it grows another cerebrum elsewhere on its body.

My argument against organisms thinking derivatively in virtue of proper parts that think derivatively can be reinforced if we keep in mind that constitutionally related entities borrow properties in both directions. The person also has certain biological properties because of the organism that constitutes it. But if the dicephalic person were constituted not by an organism but only by a part of it, then it wouldn't be derivatively alive (nor could it die), for while organisms are alive, their larger multi-cell parts are not. For instance, my leg isn't alive though it is composed of living cells. And there would be other properties such as the organism's mass that wouldn't be derivatively shared by the person and the organism's proper part that constitutes the person. Informal fallacies of division and composition threaten when we try to extend the idea of derivative properties to proper parts. So there doesn't seem to be a principled account of what properties are derivatively borrowed that can cover entities in relationships of spatial coincidence and also those in part/whole relationships.

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

A fourth approach, and the one which I will defend, recommends dropping Baker's claim that constitution is a one-to-one relation [2000, p. 107]. I suggest that the organism can constitute two people and think the thoughts of each derivatively. The organism thinks self-conscious thoughts derivatively, while the two persons think their thoughts non-derivatively. The two people do share every molecule with each other (and with the organism). It is just that they cannot each think with the other cerebrum. Nevertheless, the cerebrum that each person can't think with is still a part of that person. The idea of not being able to think with part of oneself is not that strange. None of us can think with our feet but they are still parts of ourselves. But, of course, readers might object that the crucial difference is that feet don't think at all, while cerebrums do make thought possible. If a cerebrum is in good working order, why shouldn't the person who possesses it think in virtue of it? Why associate the person's thought with only one of its two cerebrums?

My response is threefold. First, there is unconscious thought of which people can, at best, only obtain indirect awareness. Although such thought doesn't belong to our conscious mind, we would still say it was our thought. Thus the reader must at least acknowledge that there is thought made possible by one's parts that one is not aware of. Still, in such cases we would say that thought belongs to the person because there is (the right kind of) causal interaction, e.g., the unconscious affects the conscious mind and vice versa. But the dicephalus is different. The two persons have completely separate minds. Neither depends upon the other. You could anaesthetize one and teach the other a different language.

My second response involves imagining a different case of two organs within one person, each capable of giving rise to thought. Readers should imagine that some change occurred in one of their intestinal organs so it developed the capacity to realize the most minimal sentience. We'd be reluctant to claim that we were thinking with our intestinal organ since the thought made possible by the latter was not accessible or even causally related to the thought made possible by our cerebrum. But that intestinal organ would still be considered part of the person. Likewise, I suggest that we view the particular cerebrum that each of the conjoined twins cannot think with as a part of both persons.

It might also help if we imagine a Dr. Jekyll and Mr. Hyde scenario. Shoemaker considers such a case to be two persons constituted by one animal (2003, pp. 17–8). The two persons alternate periods at which they are "ascendant." That is, at one time, Mr Hyde is the only one thinking; at another time, Dr. Jekyll is the only person present. Neither has any recall of the other's thoughts even though they share a cerebrum. So, against the background assumption that the persons are substances distinct from the organism, they each undeniably have a part (the cerebrum) that gives rise to thought which the other person can't access. This is analogous to my description of the dicephalus as two spatially coincident persons, each able to think with a part of the other person but not

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

possessing the other's thoughts. If we can say that Mr. Hyde's brain gives rise to thoughts (those of Dr. Jekyll) that Mr. Hyde doesn't think, then it will be easier for readers to accept that the dicephalic persons each have two cerebrums as parts but think with only one of them.

What Baker must do is drop her claim that persons are individuated by their bodies (2000, p.107). It is not true that what distinguishes two conjoined persons is their different bodies. What individuates them is just their first-person perspective's being different. One is self-conscious of a mental life that the other is not, and vice versa.

If I am right to suggest that constitution sometimes involves one substance's constituting two other substances rather than its always being a one-to-one relation, then another type of property must be added to Baker's list of excluded properties. Baker understands excluded properties to be those that one of two spatially coincident entities possesses but does not derivatively share with the other. Baker presents temporal and modal properties as two kinds of excluded properties (2002a, p. 43). An example of an excluded modal property is that the statue constituted by a lump of clay is essentially and non-derivatively a statue, but the spatially coincident lump is not *essentially* a statue even derivatively. An example of an excluded temporal property is found in the case of the lump of clay that comes into existence before the statue. The statue originates later when the sculptor molds the clay. The statue doesn't possess derivatively the lump's origins or any other historical properties that predate its creation.

As a result of the dicephalus's consisting of one organism constituting two persons, a new category of excluded properties must be added to deal with the properties of spatially coincident entities at the same level of constitution.[15] Otherwise, we are stuck with both of the spatially coincident persons' having the thoughts of the other derivatively. Since the thoughts of each of the two persons are completely inaccessible to each other, it would be quite odd and unwelcome to theorize that they both are derivatively (or non-derivatively) thinking the other's thoughts. Thus while the two persons will have many of the organism's properties derivatively, neither will have the other person's mental properties derivatively.

In case some readers suspect that there is special pleading occurring here on behalf of persons — the dicephalus and Dr. Jekyll and Mr. Hyde — I will show that there is an analogous need for additional kinds of excluded properties whenever there are entities that are the same kind of object at the same level of constitution.[16] Consider the example of a pair of roads that later become spatially coincident [Hershenov, pp. 12–20]. Picture two highways, Route 2 and Route 4, that partially overlap for a stretch and then diverge. Since a road can become smaller when pieces of it are eliminated, imagine an earthquake's destroying all the diverging portions of the two highways. The only parts that are left are the earlier overlapping sections. The two previously overlapping roads would have become spatially coincident. Therefore, two roads would be

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

constituted by the same stretch of, say, cement. The two spatially coincident roads wouldn't derivatively possess each other's non-derivative properties. That is, if Route 2 is being travelled upon by a car, Route 4 is not *derivatively* being travelled on by the same car. Therefore, it must be admitted that a new category of excluded property is needed not just in the case of the dicephalus, but whenever two spatially coincident things are constituted by a single object.

Thus we see that there is a solution to a problem of person/organism constitution that can be motivated in a way that is not ad hoc. So my conclusion in the case of the dicephalus is that there is one organism constituting two persons. Each person shares all of its parts with the other person and organism. This will sound odd, but I doubt that there is any completely intuitive interpretation of the dicephalus. Accounts of the dicephalus are akin to accounts of vagueness in that no "solution" will be obviously commonsensical and cohere with every one of our pre-theoretical intuitions. But we still have reason to prefer the theory that will allow us to maintain more of our pre-theoretical and considered judgments than others.

Two Organisms Constituting One Person

In the scientific literature can be found a description of aborted conjoined (Cephalothoracopagus Janicep) twins that shared one cerebrum but had two brain stems, each *possibly* maintaining control over what could count as a distinct body (there being two cerebelli, two sets of lungs, two stomachs, two livers, other duplicated organs, and two pairs of arms and legs).[17] It seems plausible that such twins engaged in minimal thought before they were aborted or that it was metaphysically possible for such twins to have lived long enough to think. Baker's own account of individuating organisms by the number of control centers (2000, p. 107) suggests that there are here two organisms.

The constitution theorist should treat the twins as one person constituted by two animals. If constitution theory insists on a one-to-one relationship between organisms and persons, then there will be two persons sharing the same cerebrum and thinking the same thoughts, since there are two organisms possessing that cerebrum. And each of these persons will be essentially and non-derivatively persons. Neither person can be said to be derivatively a person as Baker says of some human organisms. One wouldn't be able to say one of the conjoined persons was derivatively thinking the other's thoughts and really referring to the other one with the first person pronoun. And if there were two persons each constituted by different organisms, then if one person said, "I am the person with the body on the left," one would have spoken truly and the other falsely and neither could know which was which. So it seems much better to claim that that there is only one essential and non-derivative person where there is one functioning cerebrum. The two organisms would constitute the same person and each would be derivatively a person. The organism would derivatively think the person's thoughts. When the person thought, "There is a dog over there," the organisms would instantiate the same thoughts. But there

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

wouldn't be three thoughts any more than there are three bruises when the elbow of your arm is bruised — you and your arm and elbow all instantiate the same bruise trope. And when the person said, "I am essentially a person" the referent would be the person for both the person and the constituting animals derivatively uttering that sentence.

I think constitution is the most promising of the psychological approaches to personal identity that insist we are essentially thinking entities and that we cease to exist when we lose the capacity for all or some kind of thought. The constitution approach has a certain intuitive advantage over the animalist approach. One reason results from our reactions to cerebrum transplant thought experiments. The second is that constitution gives ontological significance to those mental traits that are unique and important to us. As Baker says, constitution, unlike animalism, takes persons seriously. But the approach seems to be plagued by The Problem of Too Many Thinkers. This is a problem that arises if the person is understood as being not identical to the organism but rather spatially coincident with it. It would then seem that if the person can use its brain to think, the organism could as well. Since the organism shares a brain and every other organ and atom of its body with the person, one would expect it to have the same physically based capacities. The result would be that there are two thinkers where common sense assumes there is just one.

Animalism, the main rival of the constitution account of persons, maintains that we are essentially living beings. Our capacity to think is a contingent property. We each once existed as a mindless fetus and we could continue to exist if we lost the capacity for thought due to the onset of a permanent vegetative state. Animalists identify the person and the human animal and thus claim to avoid the problem of two spatially coincident thinkers. But the just outlined peculiar case of conjoined twins sharing only a cerebrum suggests that animalists have their own version of the problem. If their assumption that the human animal is the subject of thought is granted, then in a bizarre (but actual) case of conjoined twins consisting of two human organisms sharing one cerebrum, there would appear to be two human animals capable of thinking with the same cerebrum.[18] The very puzzles of too many thinkers that supposedly embarrass the constitution theorist would then reappear to plague the animalist, even though the conjoined twins were not spatially coincident organisms. The reason these problems show up for the non-spatially coincident pair of conjoined organisms is that they would be sharing one cerebrum, which is the organ that realizes (or subserves) conscious life. Any pain one twin felt, the other would be using the same cerebrum to feel. And if we imagine that they survive to the developmental age at which self-consciousness emerges, there would arise the earlier-discussed problems of self-reference and self-knowledge.

The animalist can point out that such a scenario is uncommon. But metaphysics is concerned with all possible worlds. There could be a world that was populated with only such conjoined twins. And Olson himself admits when discussing dissociative disorders that we shouldn't make an exception for

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

weird cases and then say normal scenarios that human persons are identical to human organisms. He writes:

> Why couldn't we normal human beings be animals, while people with extreme split personality are something else? But that would be an uncomfortable view. What sort of things would the people in those unusual cases be? They must be *something*. Perhaps they would be bundles of mental states, or parts of brains. But if an animal with a split personality could house two or more such non-animal people, we should expect your animal (which I take to be normal and mentally unified) to house *one* non-animal person. (2007, pp. 57-8).

The dilemma for the defenders of animalism would appear then to be that whatever way they can use to avoid the problems that arise from positing two thinkers with one cerebrum that way would also be available to the advocates of the constitution approach who posit the spatially coincident organism and person sharing the same cerebrum.[19] Given that constitutionalism is otherwise more intuitively compelling than animalism in regards to the transplant thought experiments, their sharing of The Problem of Too Many Thinkers may be troubling news for the animalist approach. If the animalist and the constitution theory both have to accept a second thinker sharing a brain with the first, this makes constitution more attractive than it would otherwise be vis-à-vis animalism. A consequence of recognizing that constitution shouldn't be abandoned because it, but not animalism, must tolerate a second thinking being overlapping the first, is that this paper's suggested revisions to the constitution theory will no longer appear like a resort to ad hoc epicycles in the attempt to save a failing theory. Since there isn't a theory waiting in the wings that avoids the too-many-thinkers problem, it thus makes more sense to make modifications in Baker's constitution theory aimed at better handling cases of conjoined thinkers.

Conclusion

My aim in this paper has been to present an approach that draws upon the initial attractiveness of Baker's constitution accounts of persons while handling puzzle cases better than her original presentation. The account offered preserves the following beliefs: we are essentially thinking beings; our capacity for self-consciousness — which distinguishes us from every other known creature — is an essential trait of ours; we switch bodies if our properly functioning brains do; we can't survive the destruction of our cerebrum though our organism can; identity is what matters to us in survival; no person has two minds since minds and persons are synchronically individuated by conditions of psychological unity; persons are constituted by entire organisms; and an organism is individuated by what Locke called a life. These are all considerations that should make constitution theorists find my account attractive. Whether or not philosophers should be constitution theorists is a question for a different paper.[20]

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

Notes

1 Readers should not protest that my claim about conjoined twins being one organism and two persons is incoherent because twins are organisms. That is, there couldn't be two twins that weren't two organisms. I am not using "twin" as a biological category. There are two thinking entities and, if persons are not identical to organisms, then it is an open question whether they are constituted by one or two organisms. If readers find my discussion of twin persons that are not distinct organisms to be a misuse of language, they can just substitute the phrase "conjoined persons" for my use of "conjoined twins."

2 This problem will be shared by nearly all constitution accounts since it widely assumed there is a one-to-one relationship between bodies and persons.

3 This is a problem only for accounts according to which organisms constitute thinkers that are essentially persons rather than thinkers that are essentially sentient but merely contingently self-conscious. The latter accounts still will suffer the problems discussed in the later section "Persons or Sentient Beings?"

4 I am using "sentient" and "conscious" interchangeably and not limiting sentience to a capacity to feel, thus ignoring the possibility of a conscious, but unfeeling, non-sentient being.

5 Furthermore, the cerebrum is an organ and not an organism.

6 An anonymous reviewer claimed that a problem with using the cerebrum transplant thought experiment to show that sentient beings aren't animals is that the animalist can offer an alternative interpretation in which the sentient person doesn't switch bodies, leaving its original animal behind. The first difficulty with this claim is that, on it, the animal moves with the cerebrum. But no animalist would defend this view. Olson, the most prominent of animalists, specifically denies that moving a cerebrum moves an animal (1997: 117-8). If it did, then removing a cerebrum would not cause the human animal that went into the operating room to become cerebrumless and merely vegetative, but would mean a new animal popped into existence on the operating table. That is bad biology or, at least, very peculiar biology. And if the animal could be moved by merely moving its cerebrum, then the other mindless animal that is the intended recipient of the cerebrum, would go out of existence upon receiving the cerebrum instead of just gaining the ability to think. (I am assuming that there couldn't be two animals in the same place.) A second difficulty is that it is equally bad biology to hold than an organism would go out of existence merely by the successful transplant of an organ that doesn't play any role in regulating its life processes.

7 Don't confuse first-order thoughts with the possession of a first-person perspective. The former are available without the latter. The former are characterized by being possible in the absence of self-consciousness.

8 Baker once claimed that the constitution relation is intransitive. If that were the case, then the organism would constitute the sentient being but not the person and thus couldn't derivatively borrow the person's properties and vice versa. This would create problems for the claims that I make in this paper. But she has abandoned the claim that constitution is intransitive in more recent works. See her (2002b: 623-4).

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

9 This was the response of an anonymous reviewer. The passage in the main text outlines the reviewer's concerns and my response.

10 This worry in the main text was raised by an anonymous reviewer.

11 I have chosen to speak of constitutional concern, a term coined by my graduate student Andrea Ott, rather than the better-known term "quasi-prudential concern." It may be that constitutional concern is a species of quasi-prudential concern, but I thought it better to use a different name in order to emphasize the differences from the "standard" cases of quasi-concern and thus avoid consideration of other cases of non-constitutional quasi-concern. Constitutional concern is different because the concern is for something that once was the same animal or sentient being while there is no sameness with quasi-prudential concern. On Baker's picture, the animal is derivatively the same person as that entity which is the person essentially and nonderivatively. (Sameness is a distinct relation from identity for Baker.) Constitutional concern is also different from standard cases of quasi-prudence because there is not sufficient psychological continuity or capacity for the original person to survive as the new thinking being, while in quasi-prudence cases of fission the original person could have survived as either fissioned result if the other wasn't an equally good candidate. That is, quasi-prudence involves a relation between two persons, while constitutional concern is a relation between a person and an organism and a merely sentient being. Finally, Parifitian-inspired quasi-prudence runs afoul of the only-x-and-y rule when it builds a no-branching rule into its account of identity. Parfit believes identity consists of just psychological relation R and a no-branching rule. Since the no-branching rule is extrinsic and trivial, Parfit concludes that it must be not identity but just psychological relation R that matters. But it is a mistake for any theory of identity to include a no-branching clause.

12 Baker claims that two persons can't have the same body because bodies express a person's intentional states. She explains: "If S1 and S2 shared a body at time t, then it would not be physically possible for S1 to be making an enormous physical effort at T and for S2 to be totally relaxed at that time" [2000, 108]. I don't see this argument as posing a real problem for my suggested alternative. Most readers will have heard of someone anaesthetized or with a spinal injury willing that he or she move but there being no trace of that in their body. Likewise, our dicephalic twins may have to synchronize their wills, otherwise nothing happens in their body despite the intentional effort of one. Of course, there are other possibilities. The Hensel twins, a real life dicephalus, each had exclusive control of the limbs on their side of the body but received enough information about the limbs on the other side to run and ride a bike (McMahan: 35). Different centres of conscious control over their limbs didn't mean that the Hensels had two bodies. As the anaesthetized and paralyzed show, something can be part of one's body but not susceptible to conscious control. And, of course, there are some internal organs that even the healthy can't consciously control. What makes something your body, or a part of your body, is its being caught up in your life processes, not its being under your conscious control and thus expressive of your intentional state.

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

13 Baker suggested this in conversation.

14 This question was posed to me by an anonymous reviewer. More details about the alleged claim of fusion are needed. If the dog and human being were fused into a giant organism, then I would say that the giant organism constitutes and derivatively thinks the person's thoughts rather than a part of it doing so, even if that part earlier (pre-fusion) constituted the person. If the alleged fusion is not a single organism, I would be rather hesitant to say there was any such composite object for the same reason, following van Inwagen (1990: 33-7, 56-60), and I doubt there is a single object that my body and my glasses compose. So if there isn't any such composite object, its potential for thought is a non issue.

15 Thanks to an anonymous reviewer for helping me clarify my thoughts about how Baker's account of excluded properties would need to be modified to cover the case of the dicephalus.

16 I was helped on this matter by a conversation with Tim Campbell.

17 *Ultrasound in Obstetrics and Gynecology*, 18, 2001, pp. 289-90. A picture of a related kind of conjoined twins (Craniothoracopagus), one cerebrum and possibly two organisms, can be found at the following Web site: http://www.conjoined-twins.i-p.com/

18 Both dualism and McMahan's (2002) embodied mind account, the latter which understands persons to be the thinking parts of organisms, avoid positing two thinking persons sharing a cerebrum. But McMahan's account has the organism thinking derivatively, so its advantage here over constitution is unclear. And dualism's success here may be offset by its well-known problems.

19 I would like to thank Rose Koch for bringing to my attention the craniothoracopagus and cephalothoracopagus Janicep twins which share a single cerebrum.

20 I would like to thank Tim Campbell, Mathew Liao, and some anonymous reviewers for very helpful comments. I would also like to thank Frederic Tremblay for his translating the abstract into French.

References

Baker, Lynne Rudder

2000 *Persons and Bodies: A Constitution View*. Cambridge: Cambridge University Press.

2002a "On Making Things Up: Constitution and Its Critics." *Philosophical Topics*, 30: 31-51.

2002b "Replies." *Philosophy and Phenomenological Research*, 64: 593-635.

Hershenov, David B.

2003 "Can There Be Spatially Coincident Entities of the Same Kind?" *Canadian Journal of Philosophy*, 33: 1-22.

Lewis, David

1983 *Philosophical Papers Volume 1*. Oxford: Oxford University Press.

McMahan, Jefferson

2002 *The Ethics of Killing: Problems at the Margins of Life*. Oxford: Oxford University Press.

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press

Noonan, Harold
1998 *Personal Identity*. London: Routledge Press.
Nozick, Robert
1981 *Philosophical Explorations*. Cambridge: Harvard University Press.
Olson, Eric
1996 "Composition and Coincidence." *Pacific Philosophical Quarterly*, 77: 374-403.
1997 *The Human Animal: Identity without Psychology*. Oxford: Oxford University Press.
2001 "Material Coincidence and the Indiscernibility Problem." *The Philosophical Quarterly*, 51: 204, 337-55.
2002 "Thinking Animals and the Reference of 'I'." *Philosophical Topics*, 30: 189-208.
2007 *What Are?* Oxford: Oxford University Press.
Shoemaker, Sydney
2003 "Realization, Micro-Realization, and Coincidence." *Philosophy and Phenomenological Research*, 67: 1-23.
Snowdon, P.F.
1991 "Personal Identity and Brain Transplants," In *Human Beings*, edited by D. Cockburn. Cambridge: Cambridge University Press. 109-27.
Unger, Peter
1991 *Identity, Consciousness and Value*. Oxford: Oxford University Press.
Van Inwagen, Peter
1990 *Material Beings*. Ithaca: Cornell University Press.
Zimmerman, Dean.
2002 "The Constitution of Persons by Bodies: A Critique of Lynne Rudder Baker's Theory of Material Constitution." *Philosophical Topics*, 30: 295-339.

https://doi.org/10.1017/S001221730909026X Published online by Cambridge University Press