

# Chapter 12

## Persons

### Overview

This chapter considers several accounts of what we are. Animalism claims that we are animals. There are at least four kinds of arguments for animalism. One appeals to phenomenological or scientific analyses of human activities or experiences. If we were not animals, say these arguments, we would not be capable of having the kinds of experiences we have, or of engaging in the kinds of activities we do. A second kind of argument claims that animalism is the best explanation for why so many of our ordinary ways of thinking, speaking, and acting tacitly assume that we are animals. A third kind of argument has the following form: I am the only individual that has feature *F*; an animal has feature *F*; therefore, I am that animal. Consider an example: (1) I am the only individual who is typing these words now; (2) an animal is typing these words now; therefore, I am that animal. A fourth type of argument suggests that animalists should not try to argue for their own view but only against other views. Our pre-philosophical commitment to animalism is so strong, say exponents of the argument, that the burden of proof is on animalism's opponents. Critics of animalism, on the other hand, argue that we cannot be animals because our persistence conditions are psychological, and the persistence conditions of animals are not. Animalists argue to the contrary that the idea that we have psychological persistence conditions has absurd implications involving the possibility of fission: the possibility that one person might become psychologically continuous with two.

Constitutionalism claims not that we are animals, but that we are constituted by animals. I share all the same parts with an animal, but that animal and I are

nevertheless different things with different properties. Constitutionalism offers solutions to problems of material constitution, and this weighs in its favor. Critics of constitutionalism argue, however, that the theory has implausible implications. One of these is the duplication problem: Since you and the animal constituting you share all the same parts, you and that animal must engage in all the same activities. If you are running, then the animal is running; if you are swearing an oath, then the animal must be swearing an oath. Yet this duplication of actions is absurd, say critics.

Exponents of the soul view claim that we are animals that have nonphysical minds or souls as parts. One problem with this view is that it is not clear that there really are nonphysical souls. In the case of physical organs such as brains there are good empirical reasons to think they exist, but nonphysical souls do not appear to factor into our best descriptions and explanations of our behavior, and this gives us some reason to think they do not exist. Some exponents of the soul view argue that nonphysical souls exist by appeal to an argument originally suggested by Aristotle and endorsed by many medieval Aristotelians. That argument draws a comparison between thought and perception. What we perceive is limited by our sensory organs, says the argument. Since thought is not limited in the way perception is (we can think about almost anything it seems), thought must not be embodied in a physical organ the way perception is. Exponents of the soul view go on to draw the conclusion that thought must involve a nonphysical organ. Critics of the soul view object to this argument in several ways.

Exponents of the brain view claim that we are brains. One argument for this view runs as follows: (1) I am the thing that is thinking my thoughts; (2) my brain is the thing that is thinking my thoughts; therefore, I am my brain. Eliminative physicalists reject both premises since they deny that thoughts and other mental states exist. Other critics of the argument target Premise (2). Some have argued, for instance, that psychological predicates and terms cannot be applied to brains or other spatial parts of animals. If that is the case, then it cannot be true to say that my brain thinks.

Temporal parts theory claims that in addition to having familiar spatial parts, things also have temporal parts. Just as you have spatial parts that occupy different regions of space, they say, so too you have temporal parts that occupy different regions of time. Some exponents of temporal parts theory claim that persons are temporal parts of animals – series of continuous psychologically endowed temporal parts. This view has an advantage over other views that take personal identity to consist in psychological continuity: it offers a solution to problems involving the possibility of fission. Critics nevertheless argue that the solution it offers is implausible. In addition, critics challenge the claim that temporal parts exist. One argument for temporal parts theory claims that it offers the best solution to a problem concerning temporary intrinsic properties. Opponents of temporal parts theory claim that the argument fails.

Finally, some philosophers claim that we do not exist. If I exist, they argue, then I must be an entity composed of a collection of fundamental physical particles. But for any collection of particles that might compose me, there is another similar collection of particles that might compose me as well. Consequently, there is no principled way of determining which collection of particles composes me, and, because of that, there is no principled way of determining what 'I' refers to. Consequently, 'I' must not refer to anything. I do not exist, and the same is true of people in general. Many critics of the argument reject the view of composition on which it is based.

## 12.1 Animalism

The preceding chapters have focused on the properties (mental, physical, or neutral) that people, such as you and I, have. With few exceptions, however, we have not said very much about what people are. Animalism claims that people, such as you and I, are animals. Earlier, in connection with hylomorphism (Chapter 10), we considered some claims about what animals are. Consider, for instance, the remarks of the philosopher John Locke:

An animal is a living organized body; and consequently the same animal ... is the same continued life communicated to different particles of matter, as they happened successively to be united to that organized living body ... This also shows wherein the identity of the same man consists; viz. in nothing but a participation of the same continued life, by constantly fleeting particles of matter, in succession vitally united to the same organized body.<sup>1</sup>

Animalism implies that the possession of psychological states has no bearing on what we are. If you and I are animals, then we can exist without mental states. At some point in our past, for instance, you and I were embryos that did not have neural structures capable of supporting psychological capacities. And if at some point in the future we suffer a severe neural trauma that destroys the neural structures we now possess, we might once again be left without psychological capacities. People who are in what is called a permanent vegetative state continue to breathe, their hearts continue to beat; they can still grow hair, digest food, and so on. They simply cannot engage in the kinds of behaviors we describe psychologically.

There are at least four kinds of arguments for animalism. The first claims that a careful phenomenological or scientific analysis of our activities or experiences reveals that we must be animals. If we were not animals, these arguments say, we would not be capable of having the kinds of experiences we have, or of engaging

in the kinds of activities we do. Consider an example. We take it for granted that we engage in perception. Suppose, however, that perception is a complex form of sensorimotor interaction with the surrounding environment. If that is the case, then the only kinds of things capable of engaging in perception are animals – that is, complex physical systems with sensorimotor subsystems that enable the relevant kinds of environmental interaction. Consequently, says the argument, since we do in fact engage in perception, we must be physical systems of that sort; that is, we must be animals.

This type of argument was suggested by the French philosopher Maurice Merleau-Ponty, and more recently it has been suggested by exponents of the embodied mind movement in cognitive science. Defending the premises of this kind of argument is often a labor-intensive and technical endeavor since it involves detailed phenomenological analysis or scientific investigation into the conditions that make our experiences or activities what they are. For that reason, we will not consider arguments of this sort in detail.

A second kind of argument for animalism is an inductive variation of the first. Like the first, it starts with the premise that we have certain experiences or engage in certain activities. Unlike the first, however, it does not insist that animals are only things that can have these experiences or engage in these activities; it simply claims that animalism is the best explanation for why we do. Consider an example. Whenever I act, my actions are coordinated with the actions of a particular human animal – the animal I see in the mirror when I shave, for instance. I am concerned with grooming that animal, with protecting it from injury, with ensuring that it has enough food and drink, with seeking out appropriate reproductive opportunities for it, and so on. Why am I so concerned with that animal? The best explanation, says the argument, is that I *am* that animal. I am concerned with grooming that animal because I am concerned with grooming *myself*; I am concerned that it not get injured because I am concerned that *I* not get injured; I am concerned that it get enough food and drink because I am concerned that *I* get enough food and drink; I am interested in its reproductive destiny because I am interested in *my* reproductive destiny.

Consider likewise the ways we talk about ourselves and our activities: I talk about *my* hair, *my* hands; I shave *my* face; I take care not to injure *my* hamstring. It is fairly evident that talk of *my* face or *my* hamstring implies that the face and hamstring in question are parts of me. In medicine, in sports, in engineering, in architecture, in fashion and design – in all the disciplines in which we are concerned with equipping ourselves for interaction with the broader world, we always tacitly consider ourselves animals, beings that are subject to disease and death, to physical strain and injury, to the relatively limited parameters of athletic performance, comfort, and efficiency. Why is that the case? Why do we so often assume in these contexts that we are animals? According to the argument, the best explanation is that we are in fact animals.

A third type of argument for animalism has the following form: I am the only individual with feature *F*, but there is an animal that has feature *F*; therefore, I am that animal. Consider an example:

- 1 I am the only individual who is typing these words right now.
- 2 There is an animal that is typing these words right now.

Therefore, I am that animal.

Both of the argument's premises are defended empirically: it seems to be an empirical matter of fact that I am typing these words right now, and that I am the only thing that is typing these words right now. Likewise, it seems another empirical matter of fact that it is an animal that is typing these words right now – an animal that is striking the keys on the keyboard. There are nevertheless many philosophers who would look to challenge this argument.

Critics of Premise (1) include substance dualists (Chapter 3) and nonorganismic dual-attribute theorists (Chapter 8). They deny that I am the sort of thing that could engage in a physical activity like typing. Substance dualists deny that I am a physical being of any sort, and nonorganismic dual-attribute theorists deny that I am a physical being that has parts, like fingers, that would enable me to type. The same is true of exponents of the brain view (Section 12.4). They claim that I am a brain. If that is true, however, if I am a brain and not an animal, then once again I cannot be typing these words because I do not have fingers.

Other critics of Premise (1) include constitutionalists (Section 12.2) and nihilists (Section 12.6). Constitutionalists do not deny that I am typing these words right now; they are instead inclined to deny that I am the only individual doing so. These words are being typed by at least two individuals, they say: both I and an animal with which I share all of my parts. Nihilists, on the other hand, deny Premise (1) on different grounds; they deny that I exist. If I do not exist, however, then clearly it is false to say that I am the thing that is typing these words.

Finally, critics of Premise (2) include exponents of the mereological essentialist argument discussed in Section 8.2. They claim that no organism can exist for more than a very brief instant in time – certainly not long enough to type these words. But if that is the case, then these words cannot be typed by an animal since animals are organisms.

Consider another example of the same type of argument for animalism suggested by the philosopher Eric Olson:

- 1' I am the only individual who is thinking my thoughts right now.
- 2' There is an animal that is thinking these thoughts right now.

Therefore, I am that animal.

Once again, the premises of this argument are very intuitive, yet they too inspire criticism. Substance dualists and nonorganismic dual-attribute theorists, for instance, will object to Premise (2'). Animals, they will insist, cannot think. Eliminativists will also object to Premise (2'), as well as Premise (1'). They deny that mental states and thoughts exist (Section 7.1). Consequently, they will deny that I or anything else is thinking my thoughts.

A fourth way of defending animalism claims that arguing on behalf of animalism is in some sense a mistake. Our pre-philosophical commitment to animalism is so strong, it says, and so deeply entrenched in our ordinary ways of talking, thinking, and acting, that the burden of proof is on animalism's opponents. Animalism, in other words, operates like our default view of what we are. Our ordinary descriptive and explanatory practices give us some initial reason to suppose that we are animals. These reasons are strong enough that we should endorse animalism in the absence of compelling reasons to do otherwise – reasons that animalism's opponents must provide. According to exponents of this fourth strategy, in other words, our attitude toward animalism should be analogous to the legal principle that someone is innocent until proven guilty: we should assume that animalism is true until someone proves that it is false. Accordingly, say exponents of this type of argument, the burden for animalists is not to provide arguments that their view is true – we already have good reasons to believe that animalism is true; the burden is rather to provide arguments that competing views are false.

There are also several arguments against animalism. We encountered some of them in the preceding chapters. The argument for substance dualism (Section 3.2), for instance, purports to show that we are not physical beings. If we are not physical beings, however, then we cannot be animals since animals are physical beings. Likewise, the mereological essentialist argument discussed in Section 8.2 purports to show that we are not organisms. But if we are not organisms, then we cannot be animals since every animal is an organism. In what follows we will consider an additional argument against animalism. It claims that we are not animals because our identity or persistence conditions differ from those of animals.

'Persistence' is a philosophical term for existence over time. To say that something persists is to say that it exists – one and the same individual – at more than one time. Something's persistence conditions are the conditions that are sufficient and necessary for it to exist at different times. You exist right now, for instance, and you also existed yesterday. When you see yourself in the mirror now, you are not looking at an individual who is distinct from the individual you saw in the mirror then. You are not looking at two different individuals at those two times, but the same individual at those times. What makes this the case? What makes the individual you see in the mirror now identical to the individual you saw in the mirror yesterday? What enables you to persist from one moment to the next? Your identity or persistence conditions give the answer to this question.

Some critics of animalism argue that the persistence conditions of persons such as you and I are different from the persistence conditions of animals. What it takes for persons to exist over time is different from what it takes for animals to exist over time, they say. But if persons and animals have different persistence conditions, then they cannot be identical. Entities with different properties must be distinct. This is implied by the philosophical principle known as *Leibniz's law* or the **indiscernibility of identicals**: if  $x$  is identical to  $y$ , then  $x$  and  $y$  must have all the same properties. If, for instance, Sam Clemens is identical to Mark Twain – if Sam Clemens and Mark Twain are the very same individual – then Sam Clemens must have all the same properties as Mark Twain. If Twain is thin, Clemens must be thin; if Twain has a moustache, Clemens must have a moustache too, and so on. An individual cannot differ from itself. Consequently, if we can establish that  $x$  differs from  $y$ , we will establish that  $x$  and  $y$  are distinct. The argument against animalism purports to show that persons and animals have different persistence conditions. It thus purports to show that persons and animals are distinct.

Why should we suppose that persons and animals have different persistence conditions? According to the argument, persons have psychological persistence conditions; their identity over time depends on some type of psychological continuity, but the identity of animals over time does not. Let us consider these claims in order.

Critics of animalism claim that for me to remain the same person over time, there must be some continuity between my psychological state at one time and my psychological state at another time. The seventeenth-century philosopher John Locke, for instance, suggested that this continuity consisted in memory. What makes you the same person now that you were yesterday is that you remember the experiences you had yesterday. Few philosophers now endorse Locke's view that memory provides the psychological continuity needed for persistence since there are serious objections to it. Consider an example: Suppose that 4-year-old Eleanor has various experiences that she is able to remember when she is 40. In that case, the memory account of personal identity implies that 4-year-old Eleanor is identical to 40-year-old Eleanor. Imagine, moreover, that 80-year-old Eleanor is able to remember the experiences she had when she was 40. The memory account of personal identity implies that 80-year-old Eleanor is identical to 40-year-old Eleanor. Since 4-year-old Eleanor is identical to 40-year-old Eleanor, and 40-year-old Eleanor is identical to 80-year-old Eleanor, it follows by the transitivity of identity that 4-year-old Eleanor must be identical to 80-year-old Eleanor. (The transitivity of identity, recall, is the logical principle that if  $x = y$ , and  $y = z$ , then  $x = z$  (Figure 5.1).) It is possible, however, that 80-year-old Eleanor might not be able to remember the experiences she had when she was 4, and, in that case, the memory account of personal identity implies that 80-year-old Eleanor must not be identical to 4-year-old Eleanor. The memory account of personal identity thus has contradictory implications; it implies both that 80-year-old Eleanor is identical



to 4-year-old Eleanor, and that 80-year-old Eleanor is not identical to 4-year-old Eleanor.

Because of considerations like these, most exponents of psychological continuity do not require that we be able to remember earlier psychological states, but only that there be some more general type of continuity between earlier psychological states and later ones. Suppose, for instance, that the mental states Eleanor had when she was 4 were causally connected in some way to the mental states she had when she was 5, and those were causally connected to the mental states she had when she was 6, and so on. In that case, there would be a chain of psychological causal connections linking 4-year-old Eleanor's mental states to 80-year-old Eleanor's mental states. Because 4-year-old Eleanor's mental states would be continuous with 80-year-old Eleanor's mental states, this more general account of psychological continuity would not contradict the transitivity of identity.

But why should we suppose our identity over time consists in psychological continuity? Why should we suppose that persons have psychological persistence conditions? One argument to this effect concerns the conceivability of brain transplants. There is good empirical reason to think that psychological capacities are correlated with the cerebral hemispheres of the brain. Imagine, then, that we transplant your cerebral hemispheres into another human body – body B. After the anesthetic wears off, there is a conscious being that believes that it is you, that claims to have all your memories, all of your experiences, that appears to have all your personality traits, and so on. That being consists of body B together with your cerebral hemispheres. By contrast, there is no conscious being associated with your original body, the body from which your cerebral hemispheres were removed. That body now lies on the operating table like an empty shell. Because only the cerebral hemispheres were transplanted not the entire brain, we can imagine that your original body still has an intact brainstem, that your original body is still capable of breathing, of swallowing, of growing hair, and other rudimentary activities; it is simply not capable of having beliefs or desires, of experiencing emotion, of forming or retrieving memories, or having personality traits or conscious experiences. Those capacities went along with your cerebral hemispheres, and those are now attached to body B. Under the circumstances, say critics of animalism, most people have the intuition that you are not your original body, the vegetative being that still lies on the operating table incapable of thinking or feeling. Instead, they say, most people have the intuition that you are the conscious being that believes it is you, that has your personality traits, that claims to have your memories and experiences – the being, in short, that is psychologically continuous with you. Consider the alternatives: if you are not the thing that is psychologically continuous with you, then either (1) you are the empty-headed animal to which your cerebral hemispheres were originally attached, or else (2) you have ceased to exist altogether. But it seems absurd to claim that you have ceased to exist when there is an animal that apparently has your thoughts, memories, and personality characteristics, and for the



same reason it seems absurd to claim that you are the empty-headed animal lying on the operating table. So long as there is a being that believes it is you, feels it is you, has your personality traits, can recall your past experiences, and so on, there is good reason to think that that being is you. Call this idea, the idea that you would go along with your cerebral hemispheres to body B the *transplant intuition*.

According to critics of animalism, the transplant intuition gives us good reason to think that our identity over time consists in psychological continuity. What, after all, explains our sense that you are the animal that receives your cerebral hemispheres? The most obvious explanation is that your identity over time consists in psychological continuity: We think that you are the animal that receives your cerebral hemispheres because that animal and nothing else is psychologically continuous with you. Our implicit assumption, then, is that psychological continuity is the basis of personal identity over time. There are thus good intuitive reasons to believe that our persistence conditions are psychological, say critics of animalism.

But the persistence conditions of animals are not psychological. In order for an animal to exist over time is not necessary that there be continuity between its psychological states at an earlier time and its psychological states at a later time. In fact there are animals that persist even though they have no psychological states at all. Jellyfish, for instance, clearly exist over time, yet they arguably lack psychological states. Consequently, their persistence conditions cannot consist in connections among psychological states, for they have none. Consider likewise the original human animal that had your cerebral hemispheres. It continues to exist after the operation – its heart continues to beat, it continues to breathe, to grow hair; it remains alive despite having lost its psychological capacities. There was also a time early in its development when it lacked psychological capacities: When it was a zygote or embryo it did not have neural structures capable of supporting psychological states, yet it remained the same animal over time as it developed them. The persistence conditions of an animal consist not in psychological continuity, then, but in the continuity of what the seventeenth-century philosopher John Locke called its life:

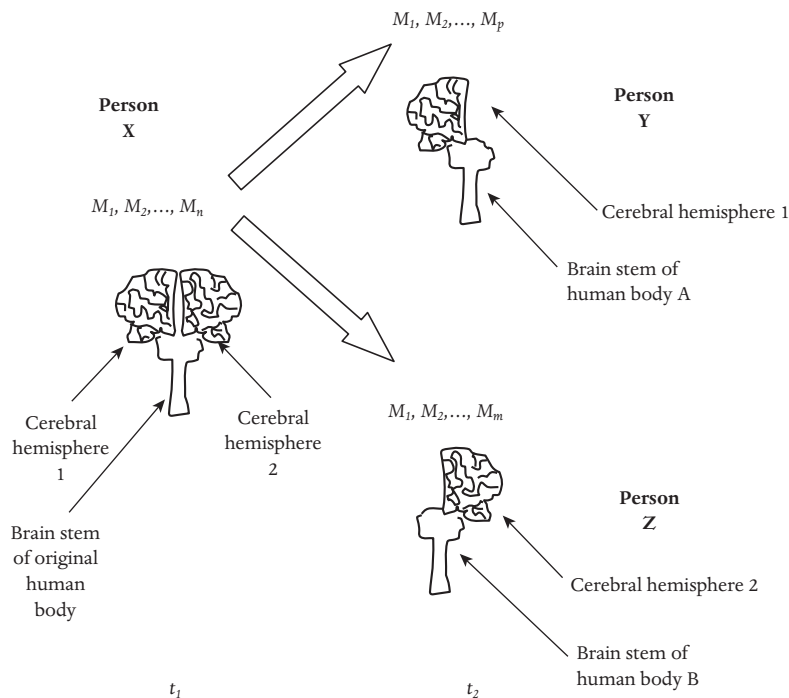
An animal is a living organized body; and consequently the same animal ... is the same continued life communicated to different particles of matter, as they happened successively to be united to that organized living body ... This also shows wherein the identity of the same man consists; viz. in nothing but a participation of the same continued life, by constantly fleeting particles of matter, in succession vitally united to the same organized body.<sup>2</sup>

It appears, then, that the persistence conditions of animals consist in the continuity of their lives. But, says the argument, the persistence conditions of persons such as you and I consist in the continuity of their psychological states.

Consequently, say critics of animalism, persons such as you and I cannot be animals. Animalism must be false.

There are several ways animalists can respond to this argument. The most obvious is to deny the claim that persons have psychological persistence conditions. In point of fact, animalists argue, the claim that we have psychological persistence conditions has absurd consequences. Consider just one of them: the **fission problem**.

The cerebral hemispheres of most humans are functionally asymmetrical; that is, the two hemispheres have neural structures that support different psychological capacities. There is nevertheless a small percentage of the population whose cerebral hemispheres are functionally symmetrical; there are structures in both hemispheres that support the same or similar psychological capacities. Imagine that you are one of these people, and that we transplant one of your cerebral hemispheres into human body A, and the other cerebral hemisphere into human body B (Figure 12.1). As in the original transplant case, there is a conscious individual



Fission cases involve the possibility of one individual, Person X, with mental states  $M_1, M_2, \dots, M_n$ , becoming psychologically continuous with two individuals, Persons Y and Z, by transplanting one of X's cerebral hemispheres into each of those individuals. If this is possible, then personal identity over time cannot consist in psychological continuity: X cannot be identical to both Y and Z – one thing cannot be identical to two – yet X is psychologically continuous with both, something represented by the block arrows.

**Figure 12.1** The fission problem

who wakes up after the operation and believes it is you, that claims to have all your memories and experiences, that appears to have all your personality traits, and so on. In fact, there are two such individuals. The first consists of body A together with one of your cerebral hemispheres, and the other consists of body B together with the other cerebral hemisphere. Now we face a problem. Both of these individuals are psychologically continuous with you, but they cannot both be identical to you: one and same thing, namely you, cannot be identical to two different things. Consequently, one of the following must be the case: either (1) you are the individual with body A and not the individual with body B, or (2) you are the individual with body B and not the individual with body A, or (3) you are neither of those individuals. Yet if any one of these is the case, it seems that the psychological continuity account of personal identity must be wrong. To see why, consider the cases one at a time.

In Case (1), you are psychologically continuous with an individual that you are not identical to, namely the individual with body B. Consequently, your identity over time cannot be due solely to your psychological continuity over time. If it were due solely to that, you would have to be identical to the individual with body B since you are psychologically continuous with that individual. The same is true in Case (2). In Case (2), you are not identical to the individual with body A despite being psychologically continuous with that individual. Consider finally Case (3): if you are neither the being with body A nor the being with body B, then there are two things with which you are psychologically continuous and yet not identical. In each of these cases, then, you fail to be identical to something with which you are psychologically continuous. The psychological continuity account of personal identity must therefore be false; your identity over time cannot consist simply in psychological continuity; psychological continuity cannot be the whole story about personal identity over time.

## 12.2 Constitutionalism

Consider now an alternative to animalism: **constitutionalism**. It claims not that we are animals, but that we are *constituted* by animals. What is constitution? According to constitutionalists, constitution is a relation with the following characteristics:

If *a* is constituted by *b*, then

- (i) *a* shares all the same parts with *b*, yet
- (ii) *a* is not identical to *b*; they are different things, and
- (iii) They have different properties; for example, they have different persistence conditions.

Consider what constitutionalists take to be a paradigmatic case of constitution. Imagine we have a flat lump of clay that we shape into a statue of David, and then squash flat once again. What is the relationship between the statue of David and the clay? According to constitutionalists, the statue is constituted by the clay. The statue and the clay share all the same parts: there is no part of the statue that is not also part of the lump of clay, and there is no part of the lump of clay that is not also part of the statue. Yet clearly, say constitutionalists, the statue is not identical to the clay. They are different things, and we can see this because they have different properties – different persistence conditions; they can survive different kinds of changes. The clay but not the statue can survive being squashed, for instance. Once we squash the statue, the statue ceases to exist, yet the clay persists. Conversely, the statue could survive losing one of its hands; if we were to remove one of the statue's hands, the statue would still be the same statue, it would simply be missing one of its parts. The clay, on the other hand, would no longer be the same quantity of clay. Because the clay and the statue have different persistence conditions, they must be different things. Consequently, say constitutionalists, there are two things located exactly where the statue is: the statue and the clay that constitutes it, and something analogous is true of persons and animals.

According to constitutionalists, there are two things located exactly where you are: you and the human animal that constitutes you. You and that animal share all the same parts; there is no part of you that is not also part of it, and there is no part of it that is not also part of you. Yet clearly, say constitutionalists, you and the animal are different things since you and the animal have different properties. You, for instance, have psychological persistence conditions, and the animal does not. You cannot survive the destruction of the animal's cerebral hemispheres. Once those cerebral hemispheres are destroyed, the psychological states that constituted your existence over time cease to exist, and hence you cease to exist. The animal, however, can survive the destruction of its cerebral hemispheres. Once those hemispheres are destroyed, the animal persists albeit in a vegetative state. It is incapable of thinking or feeling or having conscious experiences, but it continues to live and breathe. On the other hand, you could survive the complete destruction of the animal body, but the animal could not. Imagine that we removed the animal's cerebral hemispheres and kept them alive artificially, and then subsequently destroyed the animal body in which they were originally housed. In that case the animal would not survive, but you would survive since you would be psychologically continuous with the surviving cerebral hemispheres. Consequently, say constitutionalists, because you and the animal have different persistence conditions, you and the animal must be different things. Persons are not identical to animals; they are instead constituted by them.

One advantage of constitutionalism is that it appears able to solve problems concerning material constitution. Consider one of them. The following claims appear to be jointly inconsistent:

- 1 The statue and the lump of clay have different properties.
- 2 If the statue is identical to the lump of clay, then the statue and the lump cannot have different properties.
- 3 The statue and the lump of clay share all the same parts at the same time.
- 4 Two different things cannot share all the same parts at the same time.

Claims (1) and (2) imply that the statue and the lump must be different things since they have different properties. Claims (3) and (4), however, imply that the statue and the lump must be one and the same thing since they share all the same parts. Taken together, therefore, claims (1)–(4) imply both that the statue and the lump are identical and that the statue and the lump are distinct. To resolve the inconsistency we must reject one of the premises, and yet rejecting any one of them seems implausible. According to constitutionalists, however, rejecting (4) is not as implausible as it initially seems. If there really is such a thing as constitution, and the statue is constituted by the lump, then clearly two different things with different properties can share all the same parts at the same time.

Consider now an analogous puzzle involving persons and bodies:

- 5 You and a human animal have different properties.
- 6 If you are identical to a human animal, then you and that animal cannot have different properties.
- 7 You and a human animal share all the same parts at the same time.
- 8 Two different things cannot share all the same parts at the same time.

As in the puzzle with the statue and the lump, claims (5) and (6) imply that you and a human animal must be different things since you and a human animal have different properties. Claims (7) and (8), however, imply that you and a human animal must be one and the same thing since you and a human animal share all the same parts. Taken together, therefore, claims (5)–(8) imply both that you are identical to a human animal and that you and that animal are distinct. According to constitutionalists, the premise to reject is (8). You are constituted by a human animal, they say; hence two things are located exactly where you are: you and the animal. The two of you share all the same parts at the same time, and yet you are different things with different properties. Constitutionalism thus offers what seems to many philosophers an attractive way of solving problems with material constitution, and that, it seems, is an argument in its favor.

Critics of constitutionalism nevertheless argue that the theory has counterintuitive implications. Like substance dualism and nonorganismic dual-attribute theory, for instance, constitutionalism implies that at least one of the following claims must be false since it implies that persons such as you and I are not animals:

- 1 I have beliefs, desires, hopes, joys, fears, loves, and other mental properties.
- 2 I am an animal such as a human being.

Rejecting either of these claims strikes many people as implausible.

In addition, constitutionalism faces the *duplication problem*. According to critics, the idea that there is a human animal located exactly where you are, sharing all of your parts with you is extremely implausible. Consider, for instance, the relationship between the activities of that animal and your own activities. Since you and the animal constituting you share all the same parts, it appears that you and that animal must engage in all the same activities. If you are engaging in some activity by moving those parts, then the animal must be engaging in that same activity by moving those parts. If you are running, the animal must be running; if you are shaving, the animal must be shaving; if you are signing a contract, the animal must be signing a contract; if you are swearing an oath, the animal must be swearing an oath, and so on. But all of this seems very implausible, say critics. Consider the example of swearing an oath. Both Barack Obama and the animal constituting him said, "I do solemnly swear that I will faithfully execute the Office of President of the United States." Does that mean that both Barack Obama and the animal constituting him took the oath of office? Constitutionalism appears to imply that this is so. Likewise, when the bride says to the groom, "I take you as my lawfully wedded husband ..." do both she and the animal constituting her get married? Again, constitutionalism appears to imply that this is so, yet this duplication of actions strikes most people as absurd.

Consider another implication of constitutionalism. If I say, "I am William Jaworski," the animal that constitutes me also says, "I am William Jaworski." According to constitutionalism I am not identical to the animal constituting me, and that means that one of us is saying something false. Since I am William Jaworski, not the animal constituting me, my utterance is true, and the animal's utterance is false. Consider likewise the beliefs the animal and I have about ourselves. I believe, for instance, that I am William Jaworski. Presumably, the animal also believes that it is William Jaworski: I say, "I believe that I am William Jaworski," and it too says, "I believe that I am William Jaworski"; I act in every way as if I believe that I am William Jaworski, and it too acts in every way as if it believes that it is William Jaworski. My belief, however, is true, whereas the belief of the animal constituting me is false. There are, therefore, two speakers and two believers located in exactly the same place making the same first-person utterances at exactly the same times, and yet the utterances and beliefs of the one speaker are true and the utterances and beliefs of the other speaker are false. This too strikes many people as absurd.

Consider one final implication discussed by the philosopher Eric Olson. Given that I and the animal constituting me make all the same utterances and engage in all the same activities, how do I really know that I am William Jaworski and not the animal constituting him? Each of us believes that he is William Jaworski; each of us signs William Jaworski's contracts and deposits William Jaworski's paychecks; each of us attends William Jaworski's engagements, and each asserts vehemently, "I am William Jaworski and not the animal that constitutes him." But

how could either of us know that he really is William Jaworski? It seems that there is no way either of us can tell. Consequently, if constitutionalism is true, there is no way that I, William Jaworski, can know that I really am William Jaworski and not just the animal constituting him. Once again, say critics of constitutionalism, this seems absurd. Constitutionalism and the arguments for and against it remain controversial.

### 12.3 Souls

The term 'soul' has been used in many ways in the history of philosophy. According to an old definition that goes back to Greek philosophy, soul (*psyche* in Greek) is the principle of life – the whatever-it-is that distinguishes a living thing from a nonliving one. Different Greek philosophers gave different accounts of soul. Greek natural philosophers such as Democritus claimed that soul was something that could be described at a fundamental physical level such as a large proportion of round atoms. Philosophers influenced by Plato, on the other hand, claimed that soul was a nonphysical entity present in a living body, and philosophers influenced by Aristotle claimed that soul was the structure or organization of fundamental physical materials in a living thing. In what follows, the term 'soul' will be used to designate a view like the Platonic one. It claims that a soul is a nonphysical part of an organism – an organic part that is perhaps like a brain except that it is nonphysical. Call this the **soul view**.

The soul view is similar to substance dualism (Chapter 3) insofar as it postulates nonphysical entities. Substance dualism, however, identifies the nonphysical entities it postulates with persons. According to substance dualists, you and I are nonphysical entities. The soul view, on the other hand, says that you and I are organisms that have a nonphysical part in addition to our physical ones – a nonphysical mind or soul. This soul is responsible for certain psychological capacities we possess, just as our physical organs are responsible for other capacities we possess. In one sense, then, the soul view is very similar to animalism. Exponents of the soul view do not – or at least need not – deny that we are animals. Their view is compatible with the claim that we are animals albeit animals with nonphysical parts. Some of our psychological capacities, they say, are due not to states of the nervous system but to states of a nonphysical organ. The mind or soul, in other words, is like a nonphysical brain.

Many medieval Aristotelians argued for a version of the soul view by appeal to an argument originally suggested by Aristotle. Human thought, Aristotle said, was unlimited in its subject-matter. Humans are capable of thinking about anything. Human perception, by contrast, is limited. We are not able to perceive just anything. Our eyes are sensitive only to light not to sound, and our ears are sensitive only to sounds not to flavors, and even then, they are sensitive only to sounds



within a limited range of frequencies. There are, then, limitations on human perception. These limitations, however, are not mirrored in human thought. We may not be able to perceive x-rays or hear sounds with frequencies above 22 kHz, but we can still think about x-rays and think about sounds with frequencies above 22 kHz.

Why are our perceptual capacities limited in this way while our conceptual capacities are not? In the case of perception, said Aristotle, the limitations are imposed by our sensory organs. Those organs consist of materials with a certain kind of structure, and because of that they are sensitive to a limited range of environmental stimuli and have limited thresholds of activation. Certain wavelengths of light do not trigger the mechanisms involved in vision, and certain frequencies of sound do not trigger the mechanisms involved in hearing. Since the limitations on human perception are due to the embodiment of our capacities for perception, Aristotle suggested that the absence of limitations on human thought was due to the non-embodiment of our capacity for thought. If our capacity for thought were embodied in a particular organ the way our capacities for seeing and hearing are, he suggested, then our capacity for thought would be similarly limited. Since our capacity for thought is not similarly limited – since it is in principle limitless (there is, it seems, nothing about which we cannot think) – there is good reason to suppose that that capacity is not embodied in a particular physical organ. Based on this argument, exponents of the soul view draw the further conclusion that our capacity for thinking must be due to a nonphysical organ – a nonphysical mind or soul.

The soul view faces several difficulties. Let us start by considering objections to the argument for it. One objection targets the premise that our capacity for thought is not limited. Some philosophers, such as mind-body pessimists (Section 9.6), are likely to argue that there are absolute limits on what we can think. If that is the case, then a key premise in favor of the soul view is false.

Other critics might target the argument's implicit assumption that every embodied capacity must be limited. This might be how it works in the case of perception, critics might argue; it might be true that perceptual capacities are limited because they are embodied, but it does not follow that *all* psychological capacities must be limited because they are embodied. Perhaps some embodied capacities have no limitations even if others do.

A third group of critics might target the argument's final step, the claim that if our capacity for thought does not correspond to a physical organ, then it must correspond to a nonphysical one. Critics might argue that this premise is analogous to claiming that if Santa Claus cannot be identified with a physical individual, he must be identified with a nonphysical individual.

The soul view faces other challenges as well. First, it is not clear that there are good reasons to think souls in the relevant sense exist. There are good empirical reasons to think that animals, their nervous systems, and their other physical parts exist, but are there similarly good reasons to think that nonphysical souls exist?

There are not, critics might insist. Consider one argument to this effect. It appeals to *ontological naturalism*, the idea that when it comes to determining what things exist, the sciences play a starring role (Section 8.5). Science is our best guide to what exists, say ontological naturalists. It may not be the only guide, but it is certainly the most reliable, and its results enjoy a privileged status when it comes to determining what exists and what doesn't. If our best scientific explanations postulate entities of kind *K*, for instance, this gives us good grounds for thinking *K*s exist. Conversely, if our best scientific explanations do not postulate entities of kind *K*, we have little or no reason to think *K*s exist. Consider now our best explanations of human behavior. Do these explanations postulate the existence of nonphysical souls? They do not. Biologists, psychologists, social scientists, and others do not appeal to nonphysical souls in their descriptions and explanations of human behavior. In that case, however, there is little or no reason to think nonphysical souls exist.

Second, even if exponents of the soul view can provide reasons for thinking that souls exist, they confront other problems. Many of these are analogous to the problems confronting substance dualists. Consider the problem of interaction (Section 3.5). If you and I have nonphysical souls, it is not clear how these souls could ever interact with parts of our bodies. For reasons discussed earlier, it seems that nonphysical beings could never interact with physical ones. If that is the case, however, then nonphysical souls could never interact with the physical parts we possess, and, in that case, they would never be able to contribute to our behavior.

In addition, even if exponents of the soul view were able to solve the problem of interaction, they would face a problem with mental causation similar to the problem confronting emergentists (Section 8.11). Suppose that you do in fact have a nonphysical soul. You also have a physical brain. That brain is able to influence your behavior: its states are able to produce movements, utterances, gestures, and so on. How, then, is the activity of your brain related to the activity of your nonphysical soul? Are they both responsible for, say, contracting your muscles when you reach for a glass of water? If so, then your behavior is overdetermined by physical and nonphysical causes, and as we saw in our discussion of emergentism, this has some very awkward consequences. If, on the other hand, your behavior is not overdetermined, then either the nonphysical soul must not have an influence on behavior at all (contrary to what exponents of the soul view claim), or else the brain's ordinary causal activity must be suspended when the soul's activity intervenes. As we saw earlier, this outcome has awkward consequences as well. There are, then, several serious challenges confronting the soul view of persons.

## 12.4 Spatial Parts of Animals: Brains

Another type of view claims that we are spatial parts of animals. Consider one version of this view; we can call it the *brain view*. It claims that we are brains. Like

constitutionalism, the brain view is motivated by the idea that we are psychological beings and that there is a close connection between psychological states and states of the brain. Like constitutionalism, moreover, the brain view is similar in its implications to substance dualism and nonorganismic dual-attribute theory. It implies, for instance, that one of the following statements must be false:

- (i) I have beliefs, desires, hopes, joys, fears, loves, and other mental properties.
- (ii) I am an animal such as a human being.

According to the brain view, you do not have hair, skin, or eyes. You are not over 1 foot tall; you do not move yourself about, or weigh more than 5 pounds. Like substance dualists, exponents of the brain view can handle some of these counterintuitive implications by reinterpreting some of the things we ordinarily say (Section 3.1). Because brains are typically attached to animal bodies, for instance, they can reinterpret statements that suggest that we are animals as statements about the animal bodies to which we are attached. When we say that we have hair, skin, and eyes, for instance, exponents of the brain view can claim that we are really saying that the bodies to which we are attached have hair, skin, and eyes. Likewise, when we say that we are over 1 foot tall, move ourselves about, and weigh more than 5 pounds, they can insist that we are saying that the bodies to which we are attached are over 1 foot tall, move themselves about, and weigh more than 5 pounds.

Why should we suppose the brain view is true? Here is one argument in favor of it:

- 1 I am the thing that is thinking my thoughts.
- 2 My brain (that is, the brain in the skull of this animal) is the thing that is thinking my thoughts.

Therefore, I am my brain.

There are several ways of responding to this argument. Eliminative physicalists, for instance, will argue that both premises are false, that neither I nor my brain is a thinking thing (Section 7.1). According to eliminative physicalists, there are no thoughts, mine or anyone else's. Consequently, it is false to claim that I am a thing thinking thoughts or that anything else is a thing thinking thoughts. Nihilists, on the other hand, will deny Premise (1) on the grounds that I do not exist (Section 12.6). Finally, critics of Premise (2) can argue either that (i) brains do not think, or that (ii) brains do think, but they cannot think my thoughts. Consider an example of an argument supporting (i).

The neuroscientist M. R. Bennett and the philosopher P. M. S. Hacker argue that brains cannot think or feel, only whole organisms can. The reason, they say,

is a purely linguistic one: There are criteria for correctly applying psychological predicates and terms which brains and other organic parts do not satisfy. As a result, it is impossible correctly to apply psychological predicates and terms to brains, and in that case it is not true that a brain could be thinking my thoughts or any thoughts at all. Let us consider this argument in detail starting with its major premise, the claim that there are criteria for correctly applying psychological predicates and terms. According to Bennett and Hacker, correctly applying a predicate or term to something requires that the thing satisfy certain criteria. The predicate 'is spicy', for instance, cannot be correctly applied to the number 2. Saying that the number 2 is spicy is not merely false; it is completely nonsensical. Contrast this with the claim that milk is spicy. This claim is false, but it at least makes sense. Flavor predicates can be applied correctly to something only if that thing can be tasted. Since milk can be tasted, it is a suitable subject for flavor predicates. The number 2, on the other hand, is not the sort of thing that can be tasted. Consequently, it makes no sense to apply flavor predicates to it; it makes no sense to say that the number 2 is spicy, or sweet, or sour, or bland, and the reason is that the number 2 fails to satisfy the criteria for correctly applying flavor predicates.

Just as there are criteria for correctly applying flavor predicates, say Bennett and Hacker, so too there are criteria for correctly applying psychological predicates, and here they follow the philosopher Ludwig Wittgenstein in claiming that those criteria involve humanlike bodily behavior: "[O]nly of a living human being," said Wittgenstein, "and what resembles (behaves like) a living human being, can one say: it has sensations; it sees; is blind; hears; is deaf; is conscious or unconscious."<sup>3</sup> Just as we can only say of something that has limbs or limb-like appendages that it reaches, or grasps, or walks, likewise, say Bennett and Hacker, it is only of something that interacts with other people and the environment in humanlike ways that we can say it thinks or feels. Human brains, however, are not capable of interacting with other people and the environment in humanlike ways. Brains do not have parts that would enable them to engage in these behaviors. Consequently, Bennett and Hacker conclude, brains are not suitable subjects for the application of psychological predicates. Saying that a brain thinks or feels is analogous to saying the number 2 is spicy: it is complete nonsense.

How do we know that it is complete nonsense? Contrast the claim that brains think, Bennett and Hacker say, with the claim that chimpanzees or dolphins think. We are able to discover empirically that chimpanzees and dolphins are capable of engaging in the kinds of activities that qualify them as thinking things. But an analogous discovery could not be made of brains. Exponents of Premise (2) do not claim to have discovered empirically that brains are capable of thinking; they do not claim that brains are able to engage in the kinds of behaviors that display the intelligence that chimpanzees and dolphins possess. Exponents of Premise (2) simply assume that this is the case. They assume without argument, in other words, that brains are suitable subjects for the application of psychological

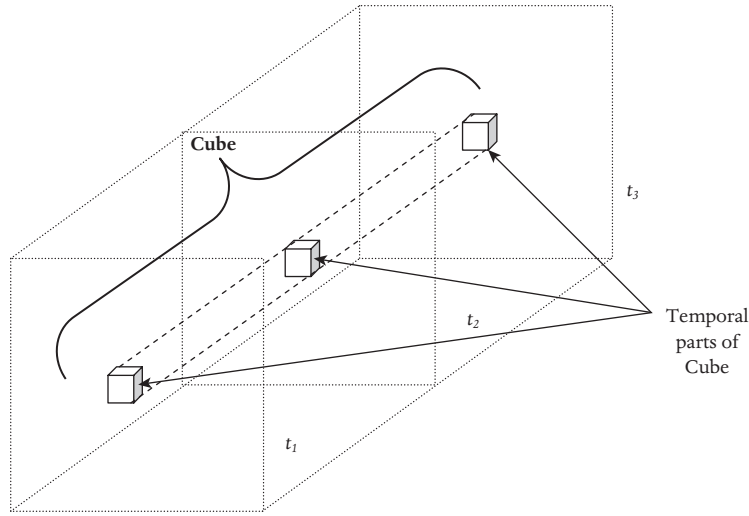
predicates. But given the counterintuitive implications of the brain view – implications similar to substance dualism’s – we should expect its exponents to provide some argument in support of the assumption that brains are suitable subjects for psychological ascriptions – some reason to believe that saying, “My brain thinks my thoughts,” is not analogous to saying, “The number 2 is spicy.” Consequently, Bennett and Hacker conclude, the claim that brains think is nonsense.

According to Bennett and Hacker, then, brains are not suitable subjects for psychological predicates. Organic parts do not think, only whole organisms do. If that is the case, then Premise (2) is nonsense. It is nonsense to say that my brain is the thing thinking my thoughts. But if that utterance is nonsense, then it is certainly not true. And if it is not true, then the argument for the brain view fails.

## 12.5 Temporal Parts of Animals

The brain view claims that we are spatial parts of animals. The temporal parts view, on the other hand, claims that we are temporal parts of animals. **Temporal parts theory**, which is sometimes called *four-dimensionalism* or *perdurantism*, claims that in addition to familiar spatial parts, things also have temporal parts.<sup>4</sup> We can understand the notion of a temporal part by analogy with the more familiar notion of a spatial part. You have spatial parts that occupy different regions of space. If you are lying on a bed, for instance, part of you occupies a region of space near the foot of the bed, another part occupies a region near the middle, and another occupies a region near the top. You are thus stretched out in space. According to temporal parts theory, you are also stretched out in time. Just as there are parts of you that occupy different locations in space, there are also parts of you – temporal parts of you – that occupy different locations in time. Part of you is located now, other parts are located in the past, and yet other parts of you are located in the future.

Figure 12.2 is meant to illustrate the idea of temporal parts. It depicts an object called ‘Cube’. Cube has parts occupying different regions of three-dimensional space, but it also has temporal parts occupying different regions of time:  $t_1$ ,  $t_2$ , and  $t_3$ . Importantly, according to temporal parts theory, the three-dimensional objects we see in each time frame are only parts of Cube. They are not the whole object. Cube is the four-dimensional object that has each of these as parts. In our everyday dealings, we tend to think that an object is entirely present at each moment at which it exists. When we look at the three-dimensional image of Cube in frame  $t_1$ , for instance, we suppose that the entire object exists at that time, and that it also exists at times  $t_2$  and  $t_3$ . According to temporal parts theory, however, this is not the case. When we look at Cube in a given time frame we are seeing only a part of it, the temporal part that exists at that time. By analogy, when I look at your hand, I am looking not at the whole of you, but just one part, the part that

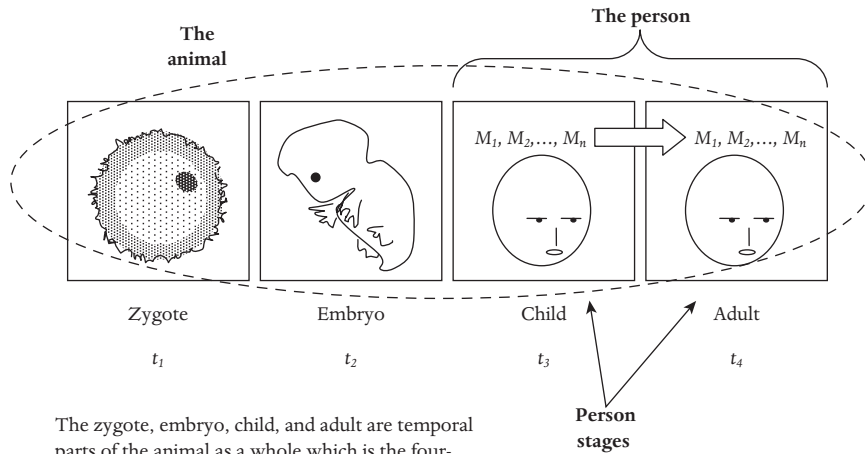


Cube is a four-dimensional object. It has spatial parts that occupy different locations in space: length, width, and height. It also has temporal parts that occupy different locations in time:  $t_1$ ,  $t_2$ , and  $t_3$ . Cube is not wholly present at each of the times at which it exists; only part of it is present at each of those times. Only the  $t_1$ -part of Cube is present at  $t_1$ , for instance; only the  $t_2$ -part of it is present at time  $t_2$ , and so on.

**Figure 12.2** Temporal parts

occupies a particular region of space. Similarly, according to temporal parts theory, when I look at you now, I am not seeing the whole of you, but just one temporal part, the temporal part that exists now. It occupies a particular “location” in time in something analogous to the way your hand occupies a particular location in space. Nothing that exists through time is wholly present at each of the times at which it exists, say exponents of temporal parts; each object is instead like a worm stretched through time. Cube is not wholly present at time  $t_1$ ,  $t_2$ , or  $t_3$ . It is instead the spacetime “worm” with parts occupying each of those times – an object that has three spatial dimensions constituted by its length, width, and height, and a fourth temporal dimension constituted by its temporal parts.

Exponents of temporal parts theory have sometimes combined their view with a psychological-continuity account of personal identity (Section 12.1). Exponents of this combined view – let’s just call it *the temporal parts view* of persons – claim that persons are psychologically continuous temporal parts of animals. Figure 12.3 depicts the life of a human animal. It comprises a series of temporal parts spanning its lifetime. It begins as a single-celled organism at time  $t_1$ , develops into an embryo, grows through infancy, childhood, and adulthood. At some times during its existence it has mental states ( $M_1, M_2, \dots, M_n$ ) and at other times it does not. Call each of the temporal parts that has mental states (the parts existing at  $t_3$  and  $t_4$ ) a *person stage* of the animal, and let us suppose that these person stages are



The zygote, embryo, child, and adult are temporal parts of the animal as a whole which is the four-dimensional object represented by the dashed ellipse. Some of the animal's temporal parts (namely, the child and the adult) have mental states ( $M_1, M_2, \dots, M_n$ ). These parts of the animal are *person stages*. The arrow represents the continuity between the mental states of the earlier person stage and the mental states of the later one. A *person* on the temporal parts view is a series of psychologically continuous person stages. It is a temporal part of an animal that comprises smaller temporal parts, namely the person stages.

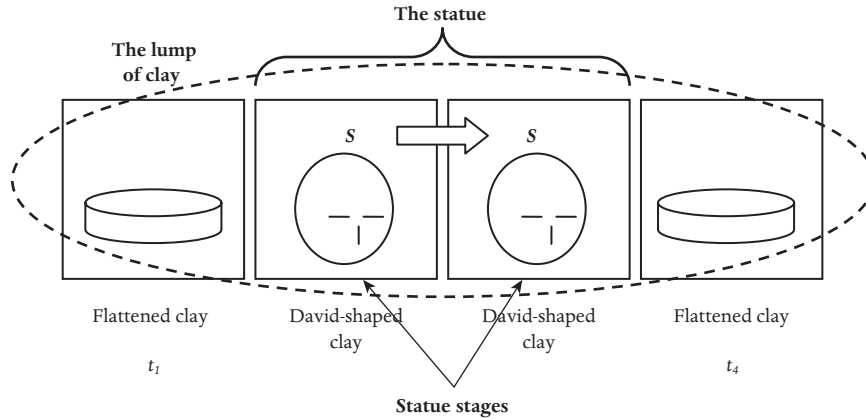
**Figure 12.3** Animals, persons, and temporal parts

psychologically continuous with each other in the way exponents of psychological-continuity accounts of personhood claim. According to the temporal parts view of persons, a person is a series of psychologically continuous person stages. Hence, the temporal parts at  $t_3$  and  $t_4$  constitute a person. A person, then, is part of an animal – not a spatial part like a brain, but a temporal part. It is, in particular, a temporal part that comprises smaller psychologically continuous temporal parts in something analogous to the way a hand is a spatial part that comprises smaller spatially contiguous parts such as fingers.

Like constitutionalism, the temporal parts view offers solutions to the problems of material constitution. Consider again the statue and the lump. According to a temporal parts view of statues, the statue is a temporal part of the lump. The lump consists of a series of temporal parts (Figure 12.4). At some times during its existence the lump is David-shaped and at other times it is not. Call each of the temporal parts that is David-shaped (the parts existing at  $t_2$  and  $t_3$ ) a *statue stage* of the clay. According to a temporal parts view of statues, a statue is a series of continuous statue stages. Hence, the temporal parts at  $t_2$  and  $t_3$  constitute a statue; a statue is a temporal part of the lump.

Recall now the original problem with the statue and the lump. It was based on the following claims:





The lump of clay is a four-dimensional object represented by the dashed ellipse. It comprises temporal parts that exist at times  $t_1$ ,  $t_2$ ,  $t_3$ , and  $t_4$  respectively. Some of the lump's temporal parts (namely, those at  $t_2$  and  $t_3$ ) are statue-shaped (S). These parts of the lump are *statue stages*. The arrow represents the continuity between the statue shape of the earlier statue stage and the statue shape of the later one. The *statue* on the temporal parts view is a series of continuous statue stages. It is a temporal part of the lump that comprises smaller temporal parts, namely the statue stages.

**Figure 12.4** Lumps, statues, and temporal parts

- 1 The statue and the lump of clay have different properties.
- 2 If the statue is identical to the lump of clay, then the statue and the lump cannot have different properties.
- 3 The statue and the lump of clay share all the same parts at the same time.
- 4 Two different things cannot share all the same parts at the same time.

Recall that the problem with these claims is that they are jointly inconsistent. Claims (1) and (2) imply that the statue and the lump must be different things since they have different properties, but claims (3) and (4) imply that the statue and the lump must be one and the same thing since they share all the same parts. Taken together, therefore, claims (1)–(4) imply both that the statue and the lump are identical and that the statue and the lump are distinct – a clear contradiction.

Temporal parts theorists solve the problem by rejecting Claim (3). According to them, the term 'parts' in statement (3) is ambiguous; it can refer either to spatial parts or to temporal parts. Although it is true that the statue and the lump have all the same spatial parts, it is false that they have all the same temporal parts since the lump has temporal parts that the statue lacks. Since 'parts' can refer either to spatial parts or to temporal parts, it is false that the statue and the lump share all of the same parts, for they have different temporal parts. If the statue and the

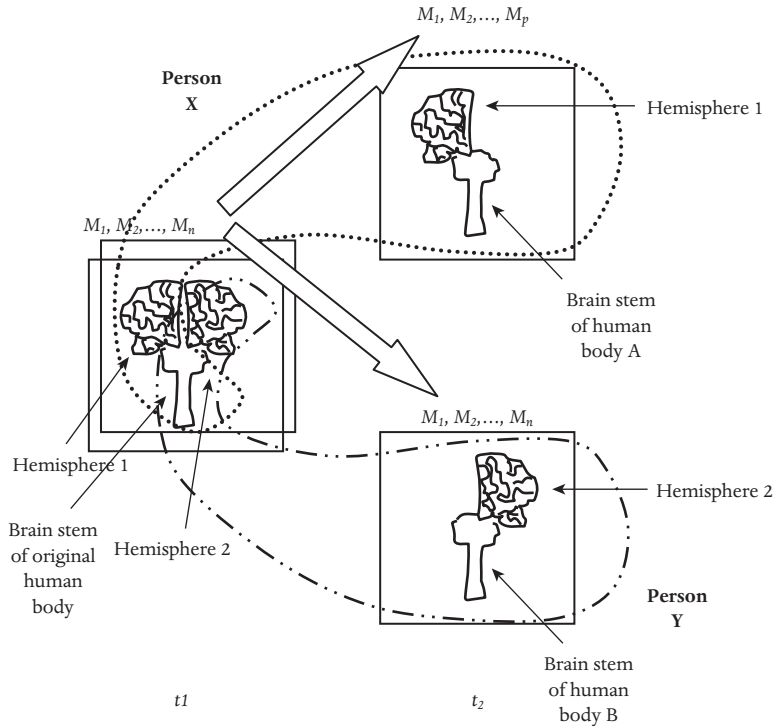
lump do not share all the same parts, however, it does not follow from (4) that they must be one and the same thing. The problem is therefore solved.

One further advantage of the temporal parts view is that it offers exponents of a psychological-continuity account of personhood a way of responding to the fission problem (Section 12.1). The fission problem, recall, involves one individual being psychologically continuous with two individuals. If we transplanted one of your cerebral hemispheres into human body A and the other hemisphere into human body B, two people – the person who consists of body A with one cerebral hemisphere, and the person who consists of body B with the other cerebral hemisphere – would each wake up believing that he or she was you, would claim to have all your memories, would appear to have all your personality traits, and so on. You could not be both people since one thing, namely you, could not be two things, yet you would be psychologically continuous with both. The argument concluded, therefore, that psychological continuity does not provide an adequate account of personal identity over time.

In response to this problem, temporal parts theorists say that no real fission has taken place. It is not the case that one person was split into two; rather, there were two different persons there all along – persons with different temporal parts who nevertheless had certain spatial parts in common at certain stages in their existence. In Figure 12.5, Person X and Person Y (represented by the dashed curves) comprise different temporal parts. At time  $t_1$ , they share some of the same spatial parts. At time  $t_2$ , however, they no longer do. Alleged cases of fission, then, do not involve a single person becoming psychologically continuous with two different people, say exponents of the temporal parts view of persons; they involve two different people sharing spatial parts at a given time.

Critics of the temporal parts view nevertheless claim that this approach to fission is absurd. It strikes them as absurd, for instance, that there might be two people seated exactly where you are thinking exactly your thoughts, each feeling and being entirely convinced that the two of you are only one being. Yet this is exactly what the temporal parts view implies if your future includes an episode of fission.

The temporal parts view has other problems as well, say critics. Consider a variation of the statue and lump case. This time suppose that the statue and the lump come to exist simultaneously and cease to exist simultaneously (Figure 12.6): A number of scattered clay particles simultaneously coalesce to form a lump in the shape of David at time  $t_1$ , persist through time  $t_2$ , and then spontaneously disaggregate. In that case, the statue and the lump share all the same parts, both spatial and temporal. This presents temporal parts theorists with a problem, for if the statue and the lump share all the same parts, then the way temporal parts theorists originally proposed to resolve the problem generated by statements (1)–(4) is no longer available. Their solution to the original problem with the statue and the lump was to deny Claim (3). The statue and the lump in the original puzzle had the same spatial parts but different temporal parts; consequently, they

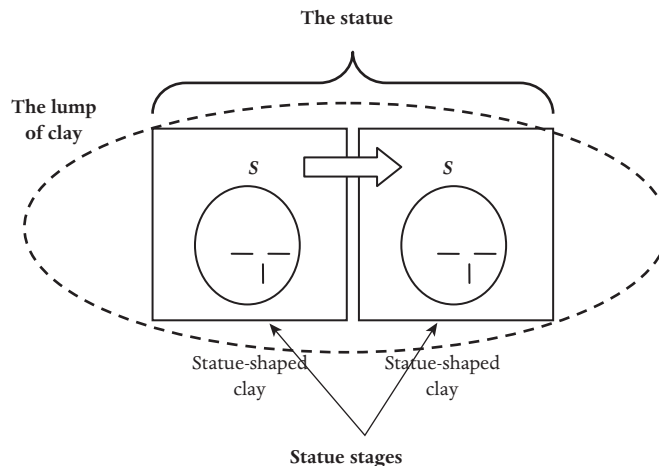


On the temporal parts view, cases of fission do not involve a single individual that is psychologically continuous with two individuals; rather, exponents of the temporal parts view claim that there have been two individuals all along. Person X is represented by one dashed curve, and Person Y is represented by the other dashed curve. Persons X and Y have overlapping spatial parts at time  $t_1$ , but they no longer have overlapping spatial parts at time  $t_2$ . The squares represent different temporal parts. The arrows represent psychological continuity between early person stages and later ones.

**Figure 12.5** Temporal parts and fission

said, Claim (3) was false, and so the puzzle was solved. In this new variation of the statue and lump case, however, the statue and the lump do not have different temporal parts. Hence, they share all the same parts, both spatial and temporal. As a result, we are back to the original problem: claims (3) and (4) imply that the statue and the lump must be identical, while claims (1) and (2) imply that they must be distinct. Together, then, the four claims imply a contradictory result: the statue and the lump are both identical and distinct.

Could exponents of the temporal parts view respond by denying one of the other claims – (1), (2), or (4)? Let us consider each. In order to deny Claim (1), exponents of the temporal parts view could argue that if the statue and the lump have all the same parts at exactly the same times, they must have all the same



A number of scattered clay particles simultaneously coalesce in the shape of David at time  $t_1$ , persist through time  $t_2$ , and then spontaneously disaggregate. The statue and the lump thus come to exist simultaneously and cease to exist simultaneously. They thus share all the same parts, both spatial and temporal. This presents temporal parts theorists with a problem: If the statue and the lump share all the same parts, then temporal parts theorists can no longer solve the problem of the clay and lump the way they originally intended.

**Figure 12.6** The coinciding lump and statue

properties as well. The problem with this response is that the statue and the lump do not appear to have all the same properties. There appears to be at least this difference: the lump can survive being squashed, but the statue cannot. The lump and the statue thus have different *modal* properties – that is, they differ in terms of what they *can* and *cannot* survive. If the statue and the lump were identical, however, they could not differ even in their modal properties. It would thus be difficult for exponents of the temporal parts view to reject Claim (1). The same is true of Claim (2) since it appears to follow directly from Leibniz's law, the indiscernibility of identicals. A thing cannot be different from itself, so if the statue and the lump have different properties – even different modal properties – they must be different things.

That leaves Claim (4). If temporal parts theorists reject Claim (4), however, they will be endorsing a form of constitutionalism, and we saw earlier that constitutionalism has problems of its own (Section 12.2). Moreover, the temporal parts view was supposed to provide a superior alternative to constitutionalism. If exponents of the temporal parts view reject (4), then their view does not provide a superior alternative to constitutionalism; it instead collapses into a version of it.

There are other problems with the temporal parts view as well. Consider just one: The temporal parts view claims that there are temporal parts. But what reason do we have to believe there are such things? The traditional argument for

temporal parts theory claims that it provides the best solution to a problem concerning temporary intrinsic properties. Temporary intrinsic properties are intrinsic properties that something possesses only temporarily. Intrinsic properties are, roughly, the properties something has on account of itself, and not on account of its relations to other things. Gold, for instance, has a density of 19.32 grams per cubic centimeter simply on account of being gold. Having that density is an intrinsic property of gold. Gold also has a price of approximately \$1,000 per troy ounce, but this property of the gold depends on how it is related to other things including how much people want it and how much is available for them to have. Consequently, the price of gold is not an intrinsic property of it.

A helpful way to think about something's intrinsic properties is to think of them as properties that an exact duplicate of the thing would possess. Imagine a gold brick here on Earth, and an exact duplicate of it on another planet. Both the original brick and the duplicate would have the same shape, the same density, the same mass, and so on. These are the properties that are intrinsic to the brick. But the bricks would not necessarily have the same desirability or the same availability. Properties that would depend on relations to factors like these are not intrinsic to the brick.

Some intrinsic properties are possessed by a thing only temporarily. Shape is an example. It is an intrinsic property, but one that many things possess only temporarily. Imagine again the lump of clay. It is flat at time  $t_1$ . Later, however, at time  $t_2$  it is no longer flat but David-shaped. An exact duplicate of the flat lump at time  $t_1$  would also be flat, and an exact duplicate of the David-shaped lump at time  $t_2$  would also be David-shaped. Being flat and being David-shaped, then, are intrinsic properties that the clay possesses, but it possesses them only temporarily, during only part of its existence.

According to exponents of temporal parts theory, temporary intrinsic properties pose a serious philosophical problem, for the clay, it seems, has incompatible properties. At one time it is flat, and at another time it is not. The clay is thus both flat and not flat. But it is impossible for something to be both flat and not flat. The apparent existence of temporary intrinsic properties thus poses a problem.

One way of responding to the problem is to say that this last claim is ambiguous: it is impossible for something to be both flat and not flat *at the same time*, but it is not impossible for something to be flat at one time and not flat at a different time. Consequently, some might argue, since the clay is flat at  $t_1$  and not flat at  $t_2$ , there is no incompatibility, and hence no philosophical problem. But exponents of temporal parts argue that this response is unacceptable. According to the response, they say, things have properties at times. It claims, for instance, that the clay has the property of being flat at time  $t_1$  and the property of being David-shaped at time  $t_2$ . According to the response, then, having a property really amounts to standing in a relation, namely a three-way relation involving an object, a property, and a time. But if having the property of being flat is really a relation of this sort, then it looks like being flat is not really an intrinsic property after all

but a relational one – and the same is true of all the intrinsic properties we take things to possess temporarily: they are not really intrinsic since having any one of them involves standing in a relation to a time. Consequently, say exponents of temporal parts, if there really are temporary intrinsic properties, this is an unsatisfactory solution to the problem, for it effectively denies that there are such properties. The better solution, they say, is provided by temporal parts theory.

According to temporal parts theory, the lump of clay does not have the properties of being flat at one time and being David-shaped at another time. Instead it has different temporal parts, one of which is flat, the other David-shaped. It is not the clay itself, therefore, that has the property of being flat, but one of the clay's temporal parts. When we say that the lump of clay is flat at  $t_1$  and David-shaped at  $t_2$  what we really mean is that the lump of clay has a temporal part at  $t_1$  that is flat, and a temporal part at  $t_2$  that is David-shaped. But having a flat part and having a David-shaped part are not incompatible properties. Hence, the problem of temporary intrinsic properties is solved.

Critics of temporal parts theory can respond to this argument in at least three ways. First, they can deny that there are any intrinsic properties of the sort temporal parts theorists allege exist. Rather, they can say, the correct way of understanding the lump's apparent change in properties is the way suggested earlier: the lump has the property of being flat at time  $t_1$  and it lacks that property at time  $t_2$ . Properties are always had relative to a time.

Second, critics of temporal parts theory can argue that even if there are temporary intrinsic properties of this sort, temporal parts theorists have as much trouble accommodating them as their opponents. Temporal parts theorists argue that their opponents deny the intrinsic character of temporary intrinsic properties, yet their own view, critics can say, denies the temporary character of temporary intrinsic properties. Exponents of temporal parts solve the problem of temporary intrinsic properties by claiming that the lump has a temporal part that is flat, and another temporal part that is not flat. But the lump does not have a flat temporal part temporarily. The whole point of the temporal part solution is that we can understand claims about the temporary possession of intrinsic properties in terms of the non-temporary possession of different temporal parts. The lump does not temporarily have a flat part. It does not have a flat part time  $t_1$ , and then lack that flat part at time  $t_2$ . Rather, the lump has a  $t_1$ -part that is flat and a  $t_2$ -part that is not flat. Having a  $t_1$ -part and having a  $t_2$ -part are not properties that the lump has temporarily. But if that is the case, then temporal parts theorists have the same problem they accuse their opponents of having: their view implies that there are no temporary intrinsic properties – no intrinsic properties that things have temporarily.

Finally, critics of the temporal parts view can argue that if properties are always had by things at times, this still does not imply that an object, a property, and a time stand in a three-way relation. There are ways of understanding the claim that the clay is flat at time  $t_1$  that do not imply that there is a three-way relation in

which the clay, the property of flatness, and the time  $t_1$  all stand. If there are alternative ways of interpreting the claim that the clay is flat at time  $t_1$ , however, then opponents of temporal parts are not committed to denying the existence of intrinsic properties in the way exponents of temporal parts allege.

Because of criticisms like this, temporal parts theorists have advanced other arguments in support of their view, but those arguments are for the most part too technical for us to enter into here. Temporal parts theory and the arguments for and against it remain highly controversial.

## 12.6 Nihilism: Do People Exist?

Consider finally an argument for eliminativism about people. Earlier we used the term ‘eliminativism’ as a label for views denying the existence of properties – especially eliminative physicalism which denies the existence of mental properties. Here, however, the label refers to a view that denies the existence of persons. According to eliminativists of this sort, persons such as you and I do not exist. This view has also been called **nihilism**, and we will use that term here; although it has meant different things in other areas of philosophy.

Many people find the very idea of nihilism strikingly implausible. How could anyone claim that people do not exist – that they themselves do not exist? But nihilists have argued forcefully in favor of their position. According to one argument, we have good reason to think people do not exist because there is no way to determine what expressions such as ‘you’, ‘I’, ‘Gabriel’, and ‘Eleanor’ are referring to. If there is no way to determine what such expressions refer to, however, then these expressions must not refer to anything. You and I, Gabriel, and Eleanor must not exist. Let us consider this argument in detail.

Suppose that I exist and that I am composed of a collection of fundamental physical particles  $p_1, p_2, \dots, p_n$ . Call this collection ‘ $S_0$ ’. Now, located almost exactly where  $S_0$  is located there is another collection of particles that consists of  $S_0$  minus particle  $p_1$ . Call this collection of particles ‘ $S_1$ ’. Likewise, another collection of particles occupying almost exactly the same location consists of  $S_0$  minus particle  $p_2$ . Call this collection ‘ $S_2$ ’. In fact, for every particle in  $S_0$ , there is a collection of particles occupying almost exactly the same location that consists of  $S_0$  minus that particle. As a result, there are many collections of particles,  $S_0, S_1, S_2, \dots, S_n$ , that are located almost exactly where  $S_0$  is. What is significant about these collections, says the argument, is that each is capable of composing an individual like me. After all, the addition or loss of just one tiny particle could not make much of a difference to something’s composition. If  $S_0$  composes me, then surely  $S_1$  or  $S_2$  or  $S_3$ , or any of the other collections of particles could compose me as well. But now we face a problem: To which of the individuals composed by each of these collections does the term ‘I’ refer? There are three options: (1) ‘I’ refers to the



individual composed by exactly one of these collections; (2) 'I' refers to more than one individual composed by more than one of these collections; or (3) 'I' refers to none of the individuals composed by any of these collections – 'I', in other words, refers to nothing.

Intuitively, we want to endorse option (1); we want to say that 'I' refers to the individual composed by exactly one of these collections. The problem, according to nihilists, is that there is no principled way of determining which of the collections composes the individual that 'I' refers to. In that case, however, the referent of 'I' would have to be selected arbitrarily, but we do not take the referent of 'I' to be determined arbitrarily. Similarly, we do not take the term 'I' to refer to a plurality of entities as option (2) would have it. When I say "I", I take myself to be referring to a single individual not several different individuals. That leaves option (3): if 'I' does not refer to exactly one thing, and it does not refer to more than one thing, then it cannot refer to anything. There is nothing, then, that I refer to when I say "I". I, in other words, do not exist, and the same is true of you and of other people. When I say "you" or "Eleanor" or "Gabriel", these terms refer to nothing. None of you exist. There are no people.

There are several ways of responding to the nihilist argument. Substance dualists and idealists, for instance, will argue that person-referring terms such as 'I' and 'you' refer to entities that are not composed of fundamental physical particles. Others will challenge the premise that there are many collections of particles that are all equally capable of composing me. Exponents of the nihilist argument typically defend this premise by appeal to **mereological universalism**, the claim that any things whatsoever compose a whole. According to mereological universalism, your left pinky, this book, and the Eiffel tower, for instance, compose a distinct object, one that has your left pinky, this book, and the Eiffel tower as parts. And the same is true of any other objects: the president's liver, the planet Venus, Chopin's gravestone, the period at the end of this sentence – according to mereological universalism, any and all of these objects compose distinct wholes. If mereological universalism is true, if any objects whatsoever compose a whole, then any collection of particles whatsoever composes a whole. Consequently, for every particle in  $S_0$ , there will be a collection of particles that consists of  $S_0$  minus that particle, and that collection will compose a whole that is almost completely indistinguishable from the whole composed by the particles in  $S_0$ .

Critics of the nihilist argument will nevertheless retort that there is little reason to think that mereological universalism is true. In point of fact, they will say, there are good reasons to think that mereological universalism is false, not least of which is that it has absurd implications. Mereological universalism implies, for instance, that there is an object composed of your left pinky, the planet Venus, and Chopin's gravestone. But that is absurd, say critics. And mereological universalism violates more than common sense, critics will argue, it also violates our best science. Consider again the ontological naturalist view discussed earlier (Section 12.3). Ontological naturalism takes science to be our best guide to

determining what exists. When it comes to determining what parts exist, for instance, ontological naturalists say that we should defer to our best scientific descriptions and explanations of things. If our best descriptions and explanations of human behavior imply that we have hands and hearts, for instance, there is good reason to think that hands and hearts exist. The problem with mereological universalism, critics can say, is that it does not leave it up to science to determine what parts exist. Consider an example. Intuitively, most people are happy to say that there are parts such as hands and hearts. Mereological universalists go further, however, and claim that in addition to hands and hearts, there are also hand-complements and heart-complements. A hand-complement would be a part of an organism that consists of the entire organism minus its hand, and a heart-complement would be a part of an organism that consists of the entire organism minus its heart. According to mereological universalists, any things whatsoever compose something, so according to them, there are hand-complements and heart-complements for the same reasons there are hands and hearts: if an organism is composed of certain fundamental physical particles, and a subset of those particles compose its hand, the remaining particles will compose something else, namely its hand-complement. Are mereological universalists right? Do hand-complements and heart-complements exist? According to ontological naturalists, there is good reason to think that mereological universalists are wrong. Parts such as hands and hearts factor into our best descriptions and explanations of human behavior, and for that reason there is good empirical reason to think that hands and hearts really exist. Hand- and heart-complements, by contrast, do not factor into our best descriptions and explanations of human behavior, so there is not good reason to think that hand- and heart-complements exist. Moreover, because hand- and heart-complements do not factor into our best descriptions and explanations of human behavior, ontological naturalists might be emboldened to take a further step and argue that there is good empirical reason to think hand- and heart-complements do not exist. Consider how an argument along these lines might go.

Suppose that our best science of human behavior reveals that parts are individuated by their functions in the way that, say, hylomorphists claim (Section 10.3). Since there is no particular function associated with a hand- or a heart-complement, the way there is with a hand or a heart, there is good empirical reason to think that hand- and heart-complements do not exist. Since mereological universalism implies that hand- and heart-complements do exist, however – since it robs science of any say-so in determining what parts exist in general, critics might say, there is good reason to think mereological universalism must be false.

Critics of mereological universalism can argue in favor of an alternative mereology such as the mereology endorsed by hylomorphists. If parthood is based on the contributions a part makes to the activities of a living thing, as hylomorphists claim, then not just any things can constitute a whole, but all and only those things whose activities are integrated into higher-level patterns of behavior. If that is the

case, however, there is a principled way of determining which particles compose me and which do not: a particle that contributes to my activities is part of me, and a particle that does not contribute to my activities does not. If, therefore, I really am composed of the particles in  $S_0$ , then I am composed of all of them. There is not a distinct individual that is composed of all of those particles minus  $p_1$ . Particle  $p_1$  is, after all, a part of me since it contributes to my activities. When we talk about  $S_1$ , the collection of particles in  $S_0$  minus the particle  $p_1$ , we are not talking about another individual, say exponents of the hylomorphic mereology; we are instead talking about a logical construction, a fiction we have invented, and that we are able to invent because we have the ability to imagine what the particles composing me would be like if one of them were absent.

If mereological universalism is false, as critics of the nihilist argument might contend, then the nihilist's conclusion does not follow; the argument does not succeed in proving that people do not exist. The nihilist's argument and various responses to it remain controversial.

### Further Reading

Animalism has been defended recently by Eric T. Olson (1997). In addition, Olson (2007) provides an excellent survey of many of the views discussed in this chapter. Essays on topics concerning personal identity including psychological continuity and fission are collected in John Perry (1975), Raymond Martin and John Barresi (2003), and Amélie Rorty (1976).

Sydney Shoemaker (1984) argues that persons and animals have different persistence conditions. Lynne Rudder Baker (2000) does the same, and also offers a general defense of constitutionalism. E. J. Lowe (1996) defends a similar view. Some important essays discussing the problems of material constitution are collected in Michael Rea (1997).

Medieval exponents of the soul view may have included Thomas Aquinas; although this interpretation is disputed. See his *Commentary on Aristotle's De Anima*, Lectures 7–10, and *Summa Theologiae*, Part I, Questions 75–8. Aristotle's argument that thought is not embodied in a physical organ appears in *On the Soul* (also known as *De Anima*), Book III, Chapter 4.

Wilfrid Sellars (1965) appears to have endorsed a version of the brain view. See also Roland Puccetti (1973). M. R. Bennett and P. M. S. Hacker (2003: Chapter 3) argue against the possibility of applying psychological predicates to brains and other parts of animals. Hud Hudson (2001) advances a different argument for the claim that we are spatial parts of animals. His argument appeals to mereological universalism.

David Lewis (2003) defends a temporal parts account of persons. He also defends temporal parts theory by appeal to temporary intrinsic properties (1986:

202–4). The argument is criticized by E. J. Lowe (1987) and Sally Haslanger (1989). Lewis (1988) responds to Lowe, and Lowe (1988) responds in turn to Lewis. For a general defense of temporal parts theory see Theodore Sider (2001).

Peter Unger (2006a; 2006b; 2006c) has been the foremost defender of nihilism about persons. Peter van Inwagen (1990) defends a mereology opposed to mereological universalism.

## Notes

- 1 John Locke, 1959 [1690], *An Essay Concerning Human Understanding*, 2 vols. New York: Dover Publications, Inc., Book II, Chapter 27, Sections 6–9.
- 2 Locke, *An Essay Concerning Human Understanding*, Book II, Chapter 27, Section 9.
- 3 Wittgenstein, 2001 [1953], *Philosophical Investigations*, translated by G. E. M. Anscombe, 3rd edn., Malden: Blackwell Publishers, Section 281.
- 4 Two notes on terminology: First, perdurantism is contrasted with *endurantism*. Entities that exist through time by having temporal parts are said to *perdure*, whereas entities that exist through time by being wholly present at each moment they exist are said to *endure*. Second, ‘four-dimensionalism’ is also used as a label for the claim that there exist past or future objects, that there are objects other than those that exist in the present. By contrast with four-dimensionalism in this sense, *presentism* claims that only present objects exist.

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