

## 29. Identity over Time

It would be natural to suppose that the question of identity over time, known as diachronic identity, emerges as a problem only toward the close of our four centuries. For the scholastics, one might suppose, the hylomorphic framework resolves all such questions as soon as they arise; only once the Aristotelian framework is abandoned does diachronic identity take center stage as a philosophical problem. So one might suppose, given both the existing scholarly literature on the subject, and given the sorts of conclusions reached in earlier chapters. The reality, however, is quite different. Although it is true that many scholastic authors face no problem of diachronic identity, this is not always the case. In particular, many authors associated with nominalism have to deal with extremely difficult issues regarding identity through change, to which they respond by articulating a framework that is strikingly similar in many respects to the famous seventeenth-century treatments of Locke and others. Considering these issues in their broader historical context will help make clear, in the following chapter, just what sort of view Locke is likely to have held, and why he – along with many others – was compelled to hold it.

### 29.1. *Identity Made Easy*

Debates over diachronic identity go back to Hellenistic discussions of puzzle cases such as the Ship of Theseus. These questions came into renewed prominence with the rising tide of philosophical speculation in the early twelfth century. Peter Abaelard and other so-called Nominales defended the thesis that *Nulla res crescit* – “Nothing grows” – seemingly denying that material objects ever do endure through change. The only identity over time, on this view, would be absolute and complete sameness down to all of a thing’s integral parts.

Naturally, this claim met with considerable opposition.

In the thirteenth century these earlier metaphysical discussions were flooded over by the Greco-Arabic Aristotelian tradition, which swept away much of twelfth-century logic and metaphysics, including these debates over diachronic identity. It is easy to see why these debates in particular might have seemed outmoded, because within an Aristotelian framework it is not obvious that there is any special problem about identity over time. In postulating a substantial form that persists for as long as the substance persists, the Aristotelian seemingly has a straightforward account of what makes a substance the same over time. As we saw in chapters 24-25, the details here are complex and subject to considerable debate, but on any version the Aristotelian would seem to have a metaphysical part – the substantial form – that is ready-made to dissolve the problem of diachronic identity.

Accordingly, one finds only the most desultory discussions of identity and change among the classical authors of scholasticism, all the way through Scotus. Although the debate over the plurality of substantial forms gave rise to extremely nuanced discussions of the identity conditions of a material substance and its parts (see Ch. 25), the more basic question of how a thing endures through change was regarded as settled. One can see the rapid transformation that took place by considering William of Auvergne's *De anima* (ca. 1240), written with some knowledge of the burgeoning Aristotelian movement – especially as it was manifested by Avicenna – but generally resistant to that influence. William takes up Avicenna's thoroughly Aristotelian position on diachronic identity: that what makes a human being the same over time is its soul, which endures even as the underlying matter is constantly replaced by the ordinary biological processes of nutrition and growth. According to William, "this doctrine is not only contrary to the Christian faith but also in itself

impossible” (*De anima* II.1). For a body to be alive, William charges, just is for it to endure through such biological processes, and for it to die just is for to cease to exist. Moreover, if the body were to change in this way, then the human being would change its identity, because mere identity of form would not be enough to preserve the identity of the composite. Finally, moving onto theological ground, William asks which body would be resurrected on this sort of account. Since there would be no reason for one rather than “infinitely many others” to be resurrected, they would all have to be resurrected, a monstrosity that, according to William, goes beyond the wildest of poetic fictions.

Amazingly, William says nothing at all about what makes our changing body the same over time, as it grows and decays. The debate effectively stops with him, however, because the next generation of Parisian theologians would embrace the Aristotelian model that William rejects. As a result, they have no need to worry about the body’s changing over time, provided that the soul endures. Aquinas, for instance, readily admits that

the human body, over one’s lifetime, does not always have the same parts materially, but only specifically. Materially, the parts come and go, and this does not prevent a human being from being numerically one from the beginning of his life until the end. (*Summa contra gent.* IV.81.4157)

This would be the common consensus of scholastic authors throughout our period, and is uncontroversial enough that in the late sixteenth century the Coimbrans can cite both Aquinas and Ockham – the two bookends of the scholastic corpus – as authorities for the view that “Socrates, in continuous succession, acquires some parts and loses others” (*In Phys.* I.9.5.2). Given the presence of an enduring substantial form, such facts struck many as unproblematic, and Ship-of-Theseus style worries could stay on the sideline.

It may seem surprising to find such consensus regarding the changeability of the matter that underlies a substance. This might seem to clash with two different aspects of scholastic Aristotelianism: first, with the doctrine that prime matter is conserved through all

change (§2.5); second, with the doctrine that the parts of a material substance are individuated by its substantial form (§24.?). There is, however, no conflict between these theses. What the Coimbrans (and Aquinas, and Ockham) accept is that a material substance can gain and lose integral parts – through growth, for instance, or through a part’s being forcibly removed. As we saw in Chapter 26, integral parts are themselves substances of a certain imperfect sort, and each such part can be understood to have its own prime matter. So what the conservation thesis predicts in such a case is that the matter will go with the part: for a substance to gain an integral part is for it to gain a certain chunk of prime matter, suitably informed, and similarly to lose an integral part is for it to lose a chunk of informed prime matter. With respect to the second of the above theses – the individuation of the parts by the substantial form – there is also no conflict. That thesis maintains that the integral parts of a body take their identity from their form. The implication is that when a material substance loses a part, that part loses its identity. (A severed hand is a hand in name only [Aristotle, *Meteor.* 389b31].) The thesis does not maintain that a body cannot acquire new parts – no more than it insists a body cannot lose parts. The requirement is only that those parts that have been gained become something new, in virtue of coming to exist as part of a larger whole. To say they take on a new identity, however, is not to say that they become identical with any other part of the body, or to deny that they are indeed *new* and *distinct* parts of an enduring whole. Aristotle himself had discussed this phenomenon at some length in *Generation and Corruption* I.5, under the heading of growth, and this became one of the principal topics of discussion in commentaries on that work. Scholastic authors thus had a very vivid sense of the difficulties in accounting for diachronic identity in terms of bodily identity. Such difficulties were often thought to pose little difficulty for diachronic identity in general, however, because of course the substantial form was thought to endure. As Ockham

puts it, “someone certainly is said to be numerically the same human being, because the intellectual soul, which is a simple form, remains in the whole body and in each part of the body” (*Sent.* IV.13, *Opera theol.* VII:264). The situation is, however, much more complex than these brief remarks suggest, and the trouble in fact seems to have begun with Ockham.

The question of identity through growth is said to go back to Epicharmus in the fifth century BCE, and is briefly considered by Plato in the *Symposium* (207d-e). On the Hellenistic debates, which seem to have occurred primarily between the Academics and the Stoics, see Long and Sedley, *Hellenistic Philosophers* sec. 28, and also Sedley, “Stoic Criterion”; Lewis, “Stoics on Identity,” and Sorabji, *Self* pt. II. Tellingly, the Stoics responded to Academic puzzles over identity by invoking metaphysical parts: substance and quality.

It surely cannot be coincidence that the Hellenistic debate, couched in terms of whether anything grows, is taken up in exactly that same peculiar form by Abaelard. It is unclear, however, how he knew about these debates. It is also unclear precisely how to interpret the views of Abaelard and other Nominales, in part because the texts here are rather thin. See Arlig, “Abelard’s Assault” and “Medieval Mereology”; King, “Metaphysics”; Martin, “Logic of Growth”; Normore, “Abelard and the School of the Nominales” and “Tradition of Medieval Nominalism.”

Scotus does devote a disputed question to personal identity – “An haec sit vera ‘Socrates senex differt a se ipso puero’” (*In Isagoge* q. 24) – but the discussion is technical and focused on peripheral issues.

### 29.2. Identity Made Hard: Ockham

Given what I have said so far, one might have expected that diachronic identity would continue to be a non-issue throughout the scholastic era. In fact this is not the case. By the middle of the fourteenth century, in the work of John Buridan and allied figures, one finds an extremely interesting and sophisticated body of literature on these issues, which has only recently begun to receive any attention from scholars. Although the label ‘nominalist’ often obscures more than it clarifies (see §4.?), there is a striking consensus on the topic of diachronic identity among authors associated with that movement – enough to justify our speaking of a nominalist theory of identity, even if the nominalists have not hitherto been recognized to have distinctive views in that domain.

The reason one finds this effusion of interest in diachronic identity is that these authors accept a pair of theses that make it exceptionally difficult – even for an Aristotelian –

to account for endurance through change. First and foremost, they accept the part–whole identity thesis, according to which the whole composite material substance is nothing over and above its various parts (see §28.5). This alone poses a quite severe obstacle to diachronic identity, because it – together with the indiscernibility of identicals – entails that if a thing gains or loses a part, then it is no longer the same thing. Second, these authors deny that substantial forms can ordinarily transfer from one subject to another. This *no-transfer principle*, as I will call it, means that, when the integral parts of a substance change, the substantial form must also change, at least partially. (For the vexed question of whether substantial forms have parts, see §26.6.) This no-transfer principle, when conjoined with the part–whole identity thesis, makes even more trouble for diachronic identity, for it now looks as if substances that gain or lose integral parts (as all living things presumably do) will not be the same with respect to either matter or form. It seems, in other words, as if these theses conjoined make even partial identity impossible. For the nominalists, committed as they are to these two theses, diachronic identity turns out to be surprisingly elusive.

One can see the seeds of this predicament in Ockham himself, because Ockham accepts the two theses just mentioned. We have seen already his commitment to part–whole identity (§28.5). The force of that commitment emerges in his discussion of the resurrection, which is one of the few places where scholastic authors can be counted on to consider questions of diachronic identity. Taking it as an article of faith that individual human beings will live again, after death, Ockham asks whether this entails that numerically the same body will be resurrected and joined with our souls. Presumably, God *might* do this if he wanted to. But would he *have* to do it, for the same human being to exist again? Ockham treats this question as equivalent to the question of whether matter belongs to the essence of a composite substance. In arguing for the affirmative, he is particularly worried about an

opponent who claims that what is essential to a material substance is merely matter of the same *kind*, rather than the particular matter the substance possesses right now. Against that position Ockham deploys, in effect, the part–whole identity thesis, insisting that “that is not the same whole that does not have the same parts” (*Sent.* IV.13, *Opera theol.* VII:260). Hence for a thing to lose or gain a part, even if it is replaced by one of the same kind, is for that thing to become something new. Ockham spells out the consequences of this view as follows:

Having seen this, I say to the question that matter is part of the essence and quiddity of the composite, as was said. And where there is one matter in something and then another, in succession,  
 3 there is in some way a real distinction between the same thing and itself at one time and another, because something belongs to the essence of the one that does not belong to the essence of the other. And likewise where there is something entirely (*simpliciter*) the same at the start and at the end of the  
 6 change, the whole can be said to be really the same, on account of the identity of that [persisting part].  
 (ibid., VII:264)

Ockham takes the part–whole identity thesis to commit him to a form of mereological essentialism, according to which the parts of a thing are essential to it: lose a part and the thing is no longer the same. But although he commits himself to this quite expressly at line 3 and elsewhere in the discussion, he is rather cagey about just what mereological essentialism implies. He clearly does not wish to understand the claim in a very radical sense, as maintaining that a whole with a new part becomes something *entirely* new. This would be an odd result, given that the rest of the parts are the same, and given that *ex hypothesi* the whole just is its parts. But in some sense the whole *is* something different from what it was. So Ockham says in the passage just quoted that in such a case there is “in some way a real distinction” (line 3) but yet “the whole can be said to be really the same” (line 6). Exactly how both of these claims can be true is not at all clear, but Ockham tells us nothing more

about it.

Ockham's subsequent discussion focuses on the extent to which living things can be said to be really the same through change, in virtue of having some part that persists unchanged. He makes things easier for himself by supposing that living things of all kinds always retain some kernel of unchanging matter, from birth until death (ibid., VII:268-69). But he makes the situation much harder by endorsing the second of the complicating theses described above: that substantial forms generally depend on their material subject, and so change as that matter changes:

When an animal with an extended form grows, ... just as there is growth and variation in matter, so too in the extended form. This is proved, because an extended form does not pass anew into some matter that it had not previously informed" (ibid., VII:261).

This means that hylomorphism will be surprisingly unhelpful in accounting for identity through change. When matter changes, form changes, and so a material substance can have only as much formal identity through time as it has material identity through time. Indeed, if not for the kernel of unchanging matter that Ockham postulates in living things, he would seemingly have no basis for insisting on any sort of diachronic identity for living things. *Except*, that is, in the human case. The above passage applies only to animals that have an "extended form" (lines 1, 2). For Ockham, all forms are extended, except the rational soul, which exists holomerically throughout the body (see §16.?), and persists unchanged through change to the body and even, of course, apart from the body.

With these results in hand, Ockham summarizes his account of how living things persist through change:

I say, then, that in the case of growth there is not entirely (*simpliciter*) the same individual in every way before growth and after, because where there is one matter and then another, belonging to the quiddity and essence of the thing, there is in some way a real distinction, because something belongs

to the essence of the one that does not belong to the essence of the other, as was said. In the same way, in the case of the resurrection, it will not be in every way the same human being before  
 6 resurrection and after, because according to all the doctors there is not entirely the same matter numerically in the resurrected body as there was before the resurrection, nor is there the same sensory form – supposing that it is something distinct from the intellective soul and is extended – because in  
 9 that case one should speak of it just as one speaks of matter in growth in all cases. Still, someone certainly is said to be numerically the same human being, because the intellective soul, which is a simple form, remains in the whole and in each part. (ibid., VII:264)

The passage shows Ockham continuing to want it both ways. On the one hand, no living thing that endures through change will be entirely the same (lines 1-9). This is so both for the matter and for any extended – that is, non-holomeric – substantial form that a thing has. Given Ockham's pluralism (see §25.?), he can apply this claim even to the human sensory soul (lines 7-9). Despite this result, however, Ockham still has a way to account for the identity of a human being, even through that most radical change of death and resurrection, because of the simple, holomeric intellective soul, which persists. (This last sentence of the passage was quoted at the end of the previous section.)

The position Ockham arrives at is unstable and perplexing. It might not be obvious that this is so: one might suppose that Ockham is stating a fairly predictable result for any hylomorphic analysis of diachronic identity: that of course a material composite changes in part, with respect to its matter, but that of course it also remains the same, with respect to its form. But the view is not nearly so straightforward. What one would expect from an Aristotelian account is an insistence that the composite wholly endures – endures *simpliciter*. One can say this, however, only if one rejects part–whole identity, in favor of the view that the composite whole is something distinct from its parts. One finds this sort of account in Scotus, for whom what is destroyed at the death of a living thing is “some positive entity

that is not the material part, the formal part, or the parts [together]” (*Ord.* IV.43.1 n. 4). One seems to find it in Suárez, too, who contends that in living things “the whole substance is permanent *simpliciter*,” even if “the loss and gain of substantial parts is continuous or nearly so” (*Disp. meta.* 50.7.4). If instead, however, the whole just is its parts, then when the parts change the whole must lose its identity. Ockham sees this quite clearly, and puts that result in the strongest way possible: that the integral parts of a body are essential to it. Hence we arrive at mereological essentialism. But what is perplexing is that Ockham refuses to follow this result to what would seem to be the inevitable conclusion: that material substances are never the same through growth and decay. Instead he thinks there is room for some sort of compromise view: that “in some way” (line 3) identity fails, but that yet so long as there is some part that endures unchanged, there is another sense in which the substance endures. This sort of partial verdict is perhaps not so odd. But what makes the whole treatment especially curious, and unstable, is that Ockham seems to think the result in the human case is not partial at all. For he ends the above passage with what seems to be the wholly unqualified conclusion that “certainly” (*bene*) the human being is numerically the same, because of its intellectual soul. Why one should say that a human being certainly endures, in virtue of having one enduring essential part, rather than instead saying that it certainly does *not* endure, in virtue of losing other essential parts, is entirely unclear. So far as I have found, Ockham says nothing more to clarify the situation. The issue becomes much clearer, however, in the discussions of subsequent nominalists.

Ockham treats his commitment to the no-transfer principle as uncontroversial, and so later on do Buridan and other authors associated with him. It is by no means clear to me that this is the view of earlier authors such as Aquinas. Doubtless there are extensive discussions of this issue among later scholastics authors, but I have not found them. The most extensive discussion I know of is in pseudo-Marsilius of Inghen, *In Phys.* I.10, who defends the no-transfer principle and holds “quod opinio ponens augmentationem in viventibus fieri per extensionem formae in plurali materia est falsa. Verbi gratia, quidam ponunt quod in augmentatione plantae anima vegetativa quae preexistebat informat materiam nutrimenti supervenientis sine generatione alicuius novae

partis formae” (f.10ra). Pseudo-Marsilius cites *De caelo* I in opposition to this view, and perhaps one could find a discussion of this issue in commentaries on that work.

Paul of Venice provides a good example of an author who takes for granted the contrary view, that substantial forms are transferable: “quaelibet forma substantialis vivens per totam suam periodum maneat eadem numero primo modo [i.e., quod nec in toto nec in parte est substantialiter variatum]” (*Summa phil. nat.*, De gen. et cor. 15, f. 44ra). If he is aware that this is a controversial thesis, he does not show it.

The notion of substantial form’s changing over time, along with the matter it informs, raises a host of complex questions. The situation looks relatively straightforward on views, like Oresme’s, that take the whole substantial form to consist merely in the sum of the partial substantial forms (see §26.6). The situation seems more complex for authors like Buridan who deny that the integral parts of a body have their own partial substantial forms, because Buridan then needs an account of how the one substantial form of the whole partially changes, without entirely ceasing to exist. In a way, the problem of diachronic unity for the whole substance is simply recapitulated here, at the level of substantial form.

Oresme discusses change to material substantial forms in the context of his general theory of the intension and remission of forms, at *De configuratione* II.13 (p. 300).

### 29.3. Nominalist Identity: Buridan and Oresme

The difficulties that Ockham’s discussion inchoately raises receive an explicit and sophisticated treatment in various natural philosophers from the mid-fourteenth to early fifteenth century. Buridan seems to have been the first, in a series of discussions that runs throughout his work. One of the most extensive treatments, from his *Physics* commentary, takes up the question of “whether Socrates today is the same as he was yesterday” (I.10), supposing that today Socrates has either grown or had a part removed. After considering various ingenious arguments for one side and then the other, Buridan proceeds to offer an analysis of diachronic identity on the basis of “three ways in which we are accustomed to say that one thing is numerically the same as another” (f. 13vab). These three ways are so interesting, and would be so influential on subsequent discussions, that they are worth quoting at length:

3 The first way is by being totally (*totaliter*) the same – namely, because this is that and there is nothing belonging to the whole of this that does not belong to the whole of the other and vice versa. This is numerical sameness in the most proper sense. According to this way it should be said that I am not the same as I was yesterday, for yesterday there was something that belonged to my whole that has now been dissolved, and something else that yesterday did not belong to my whole which later, by

6 nutrition, was made to belong to my whole....

9 In a second way, however, one thing is said to be *partially* the same as another – namely, because this is part of that (and this is especially said if it is a major or principal part), or else because this and that take part in something that is a major or principal part of each.... And in this way a human being remains the same through the totality of his life because the soul remains totally the same, and the soul is the principal – indeed the very most principal – part. A horse, however, does not remain the same in this way, and indeed neither does the human body. And in this way it is certainly true that you are the same one who was baptized forty years ago – especially since this holds of us principally because of the soul and not the body. It is also in this way true that I can pursue you for injuries or be required to repay you, because harmful or meritorious deeds also come principally from the soul and not from the body. So too we do not say that you were generated yesterday because we do not say that something is generated absolutely (*simpliciter*) unless it is generated as a whole or with respect to its major or principal part.

18 But in a still third way, less properly, one thing is said to be numerically the same as another according to the continuity of distinct parts, one in succession after another. In this way the Seine is said to be the same river after a thousand years, although properly speaking nothing is now a part of the Seine that was part of it ten years ago. For thus the ocean is said to be perpetual, as is this earthly world, and a horse is the same through its whole life and likewise so is the human body. (*In Phys.* I.10, f. 13vb)

24 Approached out of context, it would be quite puzzling why Buridan makes the choices he makes here. Why insist on the first, hyper-strict sense of total sameness? Why allow a human being to be the same over time only in the second, relatively weak sense of partial sameness? Why demote other animals to the third, still weaker category, making them akin to rivers? In light of Ockham's discussion, however, all of this is quite clear. Although it is hard to say whether Ockham's discussion was the immediate inspiration for Buridan's theory of diachronic identity, it is at least clear that his account is motivated by the same philosophical circumstances. Buridan reasons as he does because he shares Ockham's metaphysical

commitments to the part–whole identity thesis, and to the no-transfer principle.

These motivations are made explicit in another extended discussion of this material, in Buridan’s commentary on *Generation and Corruption*, where he considers “whether something that grows remains wholly the same before and after” (I.13). His conclusions are what we should expect, given the discussion from the *Physics*: (1) a thing that grows is not totally the same as what it was; (2) a human being who grows is partially the same, in virtue of having the same intellective soul; (3) other animals are the same over time only in the way that a river is, in virtue of “the continuous succession of their parts.” Here, however, Buridan offers a clearer rationale for these conclusions. Other animals can remain numerically the same only in the third and weakest sense because at most “lesser and fewer” of their parts endure through change. Not their soul (or at any rate not most of their soul), because “in the case of material forms – that is, those drawn from the potentiality of matter – the form does not pass from matter to matter” (*In Gen. et cor.* I.13, p. 190). It is then only human beings, among animals, that can be said to persist in the second way, in virtue of retaining their principal part.

Buridan is also clear about why human beings cannot be totally the same through growth and decay. To gain or lose parts would violate the indiscernibility of identicals:

Let that which yesterday was precisely Socrates be *a*, and let that which is added to it, by which it grows, be called *b*. It is obvious that now Socrates is composed of *a* and *b*. Therefore Socrates is not totally the same as *a*, and nevertheless yesterday he was totally the same as that *a*. Therefore it is clear that Socrates now is not totally the same as Socrates was yesterday. (*ibid.*, p. 189)

This argument is sound if and only if one assumes the part–whole identity thesis. Without it, one can insist that Socrates today is not just the composite of the integral parts *a* and *b*, but that he is some further thing, *c*, which is in fact what Socrates was yesterday as well. Buridan is well aware that he needs this as a premise: the first preliminary argument of the *quaestio*

had ran as follows: “The whole is its parts, as is commonly said; but the parts do not remain the same – rather, they come and go; therefore the question is false” (ibid., p. 188). Buridan expressly endorses this argument, and indeed the more complex argument above (in terms of *a* and *b*) is just an elaboration on this simpler template.

Given such arguments, Buridan sees no option other than to retreat to a weaker notion of sameness to account for the diachronic identity of human beings. Interestingly, however, he makes an effort to suggest that this sort of weaker identity is sufficient for our being the same over time *simpliciter*. For after spelling out his account of our partial identity in virtue of our rational soul, he adds: “from this we can conclude that, speaking unconditionally and without qualification (*simpliciter et sine addito*), a human being remains the same from the start of his life up to the end, because we are accustomed to denominate a thing unconditionally and without qualification on the basis of its most principal part” (ibid., p. 190). This is evidently not to say that we in fact remain numerically the same in the strongest sense – he had just made it quite clear that we do not. The point instead seems to be that one can truly say, without qualification, that the same human being exists from birth until death, just because *this is the way we talk*. Buridan’s insistence on this point is reminiscent of Ockham’s puzzling insistence, seemingly contrary to what he had just been saying, that “someone certainly is said to be numerically the same human being.” Buridan, unlike Ockham, explains why he insists on this point – or, at any rate, he explains the philosophical rationale for it. What both Ockham and Buridan leave unsaid is why they feel the need to insist on the point. That reason would seem to be the shadow of 1277, when the bishop of Paris had condemned the thesis “that through nutrition a human being can be made numerically and individually distinct” (n. 114). The thirteenth-century figure who defended this thesis is unknown to us now. Clearly, though, by returning to this contentious issue,

Ockham and Buridan were courting controversy. To try to inoculate themselves against censure, each insists that – contrary to what their views would seem to imply – in fact it is strictly true, without qualification, that a human being remains the same through time. What Buridan’s discussion makes clear, however, is that this is one of those instances where the way we talk does not correspond with the metaphysical facts on the ground (see §6.4). It is perfectly legitimate to say, without qualification, that Socrates persists through change – this is legitimate, because our customary idioms allow it. From a metaphysical point of view, however, such claims are liable to mislead, if they are understood as entailing that Socrates wholly survives.<sup>1</sup>

So far we have seen two approaches to identity through change: either to deny part–whole identity, and postulate that the substance is something distinct from the sum of its parts, or else to concede that material substances do not totally endure through growth. Buridan’s explicit discussion inspired a series of subsequent treatments of these issues that explore a wider range of options. One such option, which scholastic authors could scarcely have missed, is to treat changeable material substances as successive rather than permanent entities. As we saw in Chapter 18, permanent entities exist all at once, whereas successive entities exist in virtue of having distinct parts spread out through time. The paradigmatic examples of successive entities are motion and time. But given that many material substances consist in a sequence of parts that come and go, it is obvious – at least from the scholastic perspective – that such things might themselves better be understood as successive entities. What we actually have here is a range of cases, as pseudo-Marsilius of Inghen explains, in a discussion plainly inspired by Buridan:

It should be noted that three *differentiae* of natural things are found.

- First, there are some natural things that endure (*manent*) in virtue of the permanence of all their

- 3 parts at once – without any addition, change, or subtraction being made. Examples are the sun, the  
 heavens and other such parts of the heavens.
- Then there are other beings whose parts in no way endure at once. These entities instead consist in  
 6 a continuous succession of their parts, one after another. Examples are time, motion, and other  
 things of this sort.
  - Third, there are some beings in between these two, which endure in virtue of the permanence of  
 9 some of their parts, while other parts succeed one another either through generation and  
 corruption or through addition and subtraction. Examples are animals, plants, and elemental  
 mixtures of this sort. (*In Phys.* I.10, f. 9vb)

This usefully systematizes a range of different cases. Since heavenly bodies were thought to be unchanging, they are said to endure in the first, most complete sense. We might add that the human soul also endures in this way. Why not the whole human being? For authors like Scotus and Suárez, who treat the whole as something over and above its parts (see §? above), the composite whole might aptly be put into this first class – not of course because its parts do not change, but because a change to its parts does not make *it* endure any less. This does violence to pseudo-Marsilius’s way of conceiving the situation, however, because he accepts the part–whole identity thesis, and so takes it that change to the part makes for a difference in how the whole endures. Accordingly, from this passage he immediately goes on to introduce Buridan’s three degrees of diachronic identity, and endorses Buridan’s diagnosis of what to say about human beings and other animals. Because all animals gain and lose parts, they can at best partly survive.

The second of the above *differentiae* is of course the class of successive entities. To say that their parts are in continuous succession is evidently to say that no part ever endures. Every part has merely instantaneous existence. Whether this is the right way to think about the nature of time and motion is a difficult issue, since it is quite unclear what the parts of time

and motion are (see §18.3), but this at any rate seems to be how pseudo-Marsilius thinks of the situation. This is made quite explicit in Nicole Oresme, who seems to have been the source for this aspect of pseudo-Marsilius's account. (Although Oresme is not ordinarily counted as one of the nominalists, his views are often quite similar to those of Buridan and others associated with nominalism in mid-fourteenth-century Paris.) On Oresme's very brief recital of this three-way distinction, to be "successive *simpliciter*" is to be such that "nothing of it that is in one part of time was in the preceding part of time" (*In Gen. et cor.* I.13, p. 115). This makes clear why scholastic authors do not want to treat animals as successive entities. Whereas a true successive entity has nothing permanent about it, animals – no matter how quickly they gain and lose parts – do at least have some measure of permanence in those parts. The parts endure at least for a little while. Hence pseudo-Marsilius (line 8 above) positions animals halfway between being fully permanent and fully successive, as what we might call semi-permanent.

In effect, this further three-way distinction imposes on Buridan's account a more fine-grained structure. Instead of simply distinguishing between things that gain and lose parts and things that do not, we can now distinguish between things that gradually have their parts replaced and things that are wholly replaced at every instant. All our authors take animals to be of the first kind. As we saw in §18.4, however, Oresme explicitly argues that it would be *possible* for a human being to be a fully successive entity, if God were to create a human substance for an instant and then, immediately thereafter, create another human substance, and so on for the duration of that being's life. How we know we are in fact not like that is a difficult question that Oresme, and also Albert of Saxony, show some sensitivity to, even if, as we saw in that earlier discussion, they ultimately could not take the possibility seriously. Here it will have to suffice simply to observe that considerations of growth are scarcely enough to justify the radical idea that animals are wholly successive entities, unless one supposes that our growth

and decay is so constant and rampant that no part of us ever endures over any space of time.

Both pseudo-Marsilius and Oresme think that animals and other semi-permanent entities can be said to be the same through time. But whereas pseudo-Marsilius simply follows Buridan's account, Oresme takes a somewhat different view, by drawing a further distinction between those semi-permanent entities whose matter is completely replaced over time and those that retain some core matter for their whole life. This makes no difference to the human case: like Buridan, Oresme agrees that human beings should be said to endure in virtue of the endurance of their principal part, the soul. But Oresme rejects the idea that other animals should be compared to a river:

The first conclusion is that in the case of merely successive entities there is not the same thing today as there was before. Instead, the whole taken categorically is a single continuum. Nor likewise [is there the same thing today as there was before] in the case of things all the parts of which are succeeded by other new parts. So there is not the same water of the Seine now that there was two years ago. (*In Gen. et cor.* I.13, p. 116)

The passage begins by ruling out diachronic identity for purely successive entities. Oresme does not thereby mean to deny that such entities exist. We can properly speak of a single motion, and use 'the whole' categorically so that it refers to the temporally extended thing that is a continuous event. His point is just that there is nothing in that event that is the same today as it was yesterday, which is precisely why, for Oresme, it counts as a successive rather than a permanent entity. This much of the passage is perhaps not very controversial: there is no sign that Buridan, for instance, intended his third kind of identity to apply to purely successive entities. More interesting is what Oresme says next in the above passage: that cases of mixed permanence also do not display diachronic identity if they are cases of complete replacement. So whereas Buridan contended that a river counts as the same over time in virtue of its parts being replaced in continuous succession, Oresme contends that

this is not enough: that some of the parts must be the same throughout the process. He illustrates this notion with the already famous Ship of Theseus (ibid., obj. 5 & ad 5). As soon as part of the ship has been replaced, we can no longer say that it is totally the same, but only that it is partly the same. As more parts are moved, it comes to be less and less the same. So far, this agrees with Buridan's account. But whereas Buridan thinks that a river or a ship can survive the complete replacement of its parts, provided the replacement occurs in continuous succession, Oresme argues that as soon as that ship loses the last of its original parts, it is no longer the same ship. Living things, however, are not like that, because Oresme adheres to the standard view of his time that some kernel of the material parts of a living things endures throughout its life.

The view Oresme arrives at is in a way fairly banal: he thinks that entities display total diachronic identity if they gain or lose no parts at all, and that they display partial diachronic identity if they lose some but not all of their parts. The more parts they retain, and the more important those parts are, the more appropriate it is to say that the thing endures. Questions of identity thus become extremely easy: even easier than on the more conventional Aristotelian approach sketched in §1. But can it be this easy to solve the puzzle of the Ship of Theseus? One cost of this approach is that it requires accepting the rather surprising result that as soon as a thing loses even the slightest part, it is no longer wholly the same as it was. But this can just look like common sense, given that Oresme – like both Ockham and Buridan – can quickly affirm that the thing is of course *mostly* the same as it was. Thus to the objection that on his account the removal of one hair of fleece from a hat would make the hat something different, Oresme serenely replies that “this hat is not that which it was before, but for the most part it is the hat it was before, and so we are accustomed to say that it is the same but not totally” (*In Phys.* I.7).

Interestingly, and contrary to the pattern we have seen so often, Oresme, Buridan, and others can talk this way not because they invoke additional metaphysical parts in their ontology, but because they refuse to do so. For authors who postulate the whole as something over and above its parts, it is hard to make sense of this breezy insistence that the ship or the hat is partly the same and partly different. For on such a view one seems forced to give an up-or-down answer to the question of identity: either that whole that is the ship is the same or it is not. In contrast, if the whole just is its parts, then if only some of the parts endure it seems just obvious that only some of the ship endures. This is perhaps an attractive feature of the account, so long as one is thinking of ships, hats, and other artifacts. But here is another cost of the view: one has to say that the dog that grew up from a puppy, or even the man who grew up from a boy, is only partly the same thing that it was. Whereas it seems obvious, at least pre-theoretically, that your dog is the very same dog you brought home as a puppy, and your boy the very same boy you brought home as a baby, none of the authors we are considering can allow this. In strict metaphysical fact, living things can at best be only partly the same as they once were.

Perhaps it is because of this cost that, before embracing this option, Oresme considers in some detail another: that we simply accept that one single thing can be many things in succession. Here is how Oresme understands this:

Now, as for the solution to these difficulties [regarding identity through change], there are several ways of speaking. One is that just as one thing is many things separately at the same time, so too one thing is many things successively. The first, to be sure, is possible only supernaturally, in the divine, but the second is true naturally. And so Socrates, who is now certain parts, will later – he himself – be other parts, whereas before he was still other parts. It is in this way that some say that a human being who is now a body and a soul will after death be only a soul. (*In Gen. et cor.* I.13, p. 113)

With this in hand, Oresme goes on to solve the sorts of puzzles that we saw Buridan

consider above, regarding, for instance, how the same Socrates can gain a part, so that if yesterday Socrates was *a*, then today he is *a* and *b*. On the proposed account, the answer is simple: what was *a* just is, today, *a* and *b*. Crucially, Oresme is not saying that the whole is something over and over its parts – that there is a single, unchanging thing that is Socrates that wholly exists yesterday and today. Rather, he concedes that what we have here is “many things successively” (line 3). He *has* to say this, because he had announced at the start of the question that he would treat the part–whole identity thesis as axiomatic – a “manifest truth that everyone properly disposed grants by distinct instinct,” though he admits there are arguments against the thesis that he does not know how to answer (*ibid.*).

The idea, then, is that many things in succession can just be one single thing. The model Oresme offers for this sort of account is the supernatural case of one thing’s being, at the same time, many things. Oresme does not say exactly which supernatural case he has in mind. He cannot be thinking of the rational soul’s holomeric existence in the body, because he expressly limits this case to “the divine” (line 3). He also does not seem to have in mind God’s holomeric omnipresence, or Christ’s holomeric presence in many Eucharistic hosts at the same time, because these are not in any sense cases of one thing’s being many things. The only case I know of that makes sense here is the case of the Trinity, where one God is at once the three divine persons. (This is how Albert of Saxony later understands the example.) It is no doubt discouraging to get the Holy Trinity as an analogue to how material substances naturally persist through change, but at least this helps make clear what Oresme is offering us: the view boldly maintains the position that seems on its face to be contradictory: that many things can be, over time, one thing. Although it *would* be contradictory for Socrates to be *a* and *b* and at the same time to be just *a* (for instance, for Socrates both to have his little finger and not have it) there is in fact no contradiction in this occurring over time. In effect

– although Oresme does not say this – he is suggesting we reject the indiscernibility of identicals in diachronic cases. It is not contradictory for the same thing to have ten fingers and not have ten fingers, provided the having and the not-having occur at different times. Ten-fingered-Socrates can be the very same thing as nine-fingered-Socrates, over time. This is what I take him to mean, at least, when he makes the cryptic remark that “one thing is many things successively” (lines 2-3).

This is not a proposal that we are supposed to like, or that Oresme himself likes. The comparison to the Trinity is surely *intended* to be discouraging. Oresme is telling us that we can make the problem of identity through change go away only if we suppose that the sort of mystery the faith postulates in the Godhead is one that is found all the time in the natural realm. One thing just is many things, in defiance of the apparent dictates of logic. Oresme spends some time showing how, if one does go down this road, the puzzles of change over time all disappear. But he ends on a negative note, by showing how this view threatens to prove too much. The view, he says, “cannot be generally true” (*ibid.*, p. 115), because if it were we would have to say that the water of the Seine exists perpetually. Moreover, a house could exist forever, through unlimited change, as could a ship. Are these results unacceptable? Oresme’s concern seems to be that on the present view we would have to say that the river or the ship is *wholly* the same, even if *all* its parts are replaced. Although, as noted earlier, this result may seem attractive in the case of Socrates, Oresme finds it quite counterintuitive in the case of non-living things. Accordingly, although he never expressly disavows this approach to diachronic identity, he “sets it aside” at this point, and turns instead to the framework for partial identity that Buridan had articulated.<sup>2</sup>

<sup>1</sup> Buridan offers the same account, more briefly, at *In De an.* II.7 (ed. Sobol, p. 100) *In Meta.* VII.12, much briefer [haven’t looked at]. *In De an.* III.6 is also relevant, and quite interesting, although the discussion there is

focused narrowly on the identity of the separated soul. The preliminary objections to *In Phys.* 1.10 also indicate that Buridan's position is motivated by the part-whole identity thesis.

For further discussion of Buridan see Pluta, "Buridan's Theory of Identity," which offers both extended paraphrases and a slightly revised version of some of the texts, based on the best manuscripts. (My translation of *In Phys.* I.10 largely follows Pluta's revisions.)

Buridan's account is followed nearly verbatim by Marsilius of Inghen, *In Gen. et cor.* I.12. For a rather different and very interesting discussion, from a advocate of realism, see Paul of Venice, *Summa phil. nat.*, *De gen. et cor.* 15. Paul follows Buridan's general approach in that he focuses on endurance in virtue of the endurance of a principal part. But because he accepts that substantial forms are transferable through material change, he is able to apply this account much more widely than Buridan is, with interesting results.

<sup>2</sup> Oresme makes particularly clear the central role of the two complicating theses I described in the previous section. They turn up as the second and third of his four preliminary principles: "... praemitto aliqua pro principiis observanda. Primum est quod idem animal manet a principio vitae usque ad finem et idem homo. Secundum est quod totum integrale est idem quod suae partes integrales nec est aliqua res superaddita... Tertio, suppono quod forma materialis non potest esse sine materia nec potest transire de materia in materiam. Quarto, suppono quod animal est compositum ex materia et forma, scilicet ex anima et corpore" (*In De gen. et cor.* I.13, pp. 112-13). With respect to the first two theses, Oresme makes the remarkable observation that he accepts them without knowing how to resolve the arguments that get made against them: "tamen non propter rationes quarum non video solutiones negare presumam tam manifestas veritates, quae naturali instinctu ab omnibus bene dispositis conceduntur" (*ibid.*).

Although the account in *In Gen. et cor.* I.13 seems to be Oresme's most detailed treatment of these issues, it should be considered next to the fairly extensive discussion in *In Phys.* I.7. The insistence, in Oresme and others, that some kernel of matter endures throughout the life of a living thing has roots in earlier theological discussions. Peter Lombard, for instance, argues that there is an enduring kernel of matter that passes from Adam into every member of the human species (*Sent.* II.30).

Oresme's suggestion that one thing can be many things over time is repeated in much the same terms by Albert of Saxony and, briefly, by pseudo-Marsilius (*In Phys.* I.10). Albert's two extensive discussions, although following Oresme very closely, add a few more useful details: "...possumus imaginari quod sicut supernaturaliter una res numero est plures res numero – scilicet pater, filius et spiritus sanctus – ita naturaliter una res numero potest esse successive plures res numero, quamvis non simul" (*In Gen. et cor.* I.10, f. 138rb); "...imaginor quod, sicut supernaturaliter una res numero est plures res numero, ita naturaliter una res numero est successive plures res numero, ita quod una res numero [om. *est*] corruptibilis, quamvis non simul sit plures res numero, tamen bene successive" (*In Phys.* I.8, p. 126).

#### 29.4. A Range of Options

Although the mainstream of scholastic thought did not worry very much about diachronic identity, we have seen that the issue could be a highly problematic one, even for an Aristotelian, given certain not-implausible assumptions. As doubts over the hylomorphic framework grew, over the latter part of our four centuries, the issues raised by the nominalists became increasingly pressing. As in other domains, one can find later developments foreshadowed in Nicholas of Autrecourt, back in the first half of the fourteenth century. Autrecourt's proto-corpusecularism leads him to the permanence

thesis: that naturally speaking nothing ever comes into or goes out of existence (§28.2). This is of course one way of dealing with the problem of diachronic identity, supposing one is willing to embrace the radical conclusion that there are no complex, corruptible material entities. Such a theory does not inevitably lead to giving up on the existence of persisting human beings, because they can be identified with their incorruptible souls. This is the view that David Gorlaeus – another proponent of a radically revisionary account – would articulate at the start of the seventeenth century (§28.4). Autrecourt, however, is unwilling to concede even this much to commonsense ontology. He contends that although we speak as if an old man is the same as a boy, in fact this is not true. Without even bothering to cite the obvious sorts of changes in material composition that had concerned Ockham, Buridan, and Oresme, Autrecourt seems to assume tacitly that the only hope of accounting for human diachronic identity is in terms of something like sameness of soul, a hypothesis he then resists by showing how the various “powers” of a boy and an old man differ. Although his remarks here are quite compressed, his point seems to be that such differences in powers undermine whatever sort of psychic continuity one might want to postulate as accounting for the enduring individual. Autrecourt pays special attention to the power of memory, where one might suppose there is some sort of notable sameness over time. Even here, however, there is no sameness: to remember is for one power to conceive of objects that had in the past been conceived of by a distinct power. What gives the illusion of sameness is the continuity of such powers: “because the change of powers is continuously toward some very close state, [the individual] is always said to be numerically the same. This would perhaps not be so if a one-year-old boy were suddenly made old” (*Tractatus* p. 252). Yet even if such continuity leads us to speak of identity, in actual fact there is none.

This conclusion leads Autrecourt into a very interesting discussion of the practical

implications of his conclusion. He admits that although we punish someone for having committed a crime in the past, “from a strictly rational perspective, it is true to say that he who is punished is not guilty” (ibid.). Similarly, although we fear death, we are wrong to think of death as the end of a single, persisting substance. But this is not to say that our attitudes are misguided. Our fears of punishment and death are natural to us, and beneficial, because if we had no concern for future punishments the results for society would be dire. Hence “such fear is endowed by nature so as to account for one’s resisting sin” (ibid.). Likewise, although death is not what we take it to be, it is an evil: “the evil is that a well-made connection of beings is dissolved.” Accordingly, “if it were not feared, many evils and many homicides would be committed” (ibid.). So although our attitudes toward the past and future might seem to be grounded in a false metaphysics, nature has in fact disposed us to conceive of the situation in the way that is most beneficial.

As is usual with Autrecourt’s ideas, they gained little traction until much later. It is only in the later sixteenth century that such radical ideas about diachronic identity begin to appear with some frequency. Montaigne’s “Apology for Raymond Sebond” (1580) quotes Plutarch at length on the changeability of all material things (*Complete Essays* pp. 455-56). Francisco Sanches’s *Quod nihil scitur* (1576) makes a similar point in a more philosophically rigorous context:

Between coming to be and passing away, how many changes take place? Countless. Among living things there is constant nourishment, growth, maturity, and then decline, generation, the variation among offspring, change, decay, addition, development of character, actions, work of different sorts –  
 3 contraries very often even within the same individual. In all, no rest. Nor is it surprising that some held the view that it cannot be said of any one human being, after one hour, that he is the same one  
 6 he was an hour ago. This view should not be entirely rejected; indeed, it may be true. For so indivisible is identity that if you were to add or take away from any given thing one single bit (*punctum*)

9 of it, it would no longer be entirely (*omnino*) the same thing. ... “I know,” you say, “that the individual thing is always the same for as long as the same form remains; for it is from that form that the thing is said to be some one thing....” But what I held was that, for identity, *nothing* must be changed; otherwise the thing is not entirely the same. (pp. 126/228)

Although it is not clear whom Sanches has in mind when he speaks of those who deny human diachronic identity (lines 4-6), the parallels with the nominalists are certainly striking. Like them, Sanches insists on the indiscernibility of identicals: this is what it means to remark that “for identity, *nothing* must be changed” (line 10; emphasis added). He moreover takes this to have just the consequences that Buridan and others had claimed: endorsing mereological essentialism (line 7-8), he contends that any change to the parts entails a change to the whole. Furthermore, again like the nominalists, he describes this as showing that the thing is not “entirely the same” (line 8), as if what one has in such cases is mere partial identity.

For present purposes there is not much more to be said about Sanches, and even less about Montaigne, because both of these authors use these remarks about diachronic identity merely to make a skeptical point: that our knowledge of the material realm is so feeble that we do not even know when things come into and go out of existence. Given that our present focus is on authors who have a positive *theory* of diachronic identity, we must move on, into the seventeenth century. Few of the post-scholastic authors who have figured in earlier chapters have much to say about identity through change. This is particularly striking in Descartes’s case, given his metaphysical sophistication. Although his interpreters have certainly tried to find a theory of diachronic identity for material substances in his thought, it seems safe to say at a minimum that he has no well-developed account to offer. Although this reasons behind this can be only a matter of speculation, to my mind it again reflects his disinterest in preserving anything like a theory of substance. Given his blithe promiscuity

regarding what counts as a substance at a time (see §28.5), one would naturally expect him to be little concerned with what counts as the same substance over time. Having left behind substantial forms and other such metaphysical fantasies, Descartes seems to think it best not even to attempt a story about how the material world can be tied into neat little packages.

This sort of atheoretical quietism can be counted as one kind of seventeenth-century approach to the problem of diachronic identity. A second approach is the radically revisionary views of Gorlaeus or, earlier, Autrecourt, according to which the only things that exist are permanent. Their atomism might be paired with Spinoza's subsequent monism, a view that as always must be left just beyond the horizon of the present study. Also lying just out of sight is a third sort of view, that of Leibniz, who thinks that questions of individuation – synchronic and diachronic – can be handled only by postulating something like the metaphysical entities of the scholastics. In what remains of this chapter I wish to consider what seems on its face to be a fourth sort of option, first suggested by Hobbes and then spelled out in similar terms by Locke. According to this option, the problem of diachronic identity admits of a solution (contra quietism) that preserves our commonsense ontology (contra radicalism), but without requiring any sort of quasi-scholastic metaphysical parts (contra Leibniz). What one needs to see, according to both Hobbes and Locke, is that questions of identity through time depend on how one describes the thing in question.

For Autrecourt's views on identity, see <<??>>.

There are interesting questions regarding how Descartes might be able to account for the diachronic identity of the mind, as well as the synchronic individuation of one mind from another. The issues here interact with how one conceives of the relation between substances and modes in his theory (see chs. 8 and 13). For an interesting attempt to sort some of these issues out, see McCann <<on file>>.

Descartes's scattered remarks on the diachronic identity of bodies point in various directions. The correspondence with Mesland has suggested to some that the human body is individuated diachronically by the mind (???; see §24.5 and §25.6). A letter to Mersenne, discussing the identity of modes over time, makes a surprising appeal to something that looks like relative identity, arguing that one and the same mode can be conceived in three ways – qua bread, qua air, and qua intermediary – and that its identity depends on which way we take it (IV:164).

A fuller discussion of debates over diachronic identity over our period would need to take into account the

many discussions of whether the same thing can go out of existence and then come back into existence. An early example can be found in Giles of Orleans, who holds that according to philosophy that is never possible, but that the faith teaches otherwise, in the case of human beings, whose bodies are resurrected after death (*In Gen. et cor.* I.22). Buridan reaches the same conclusion (*In Gen. et cor.* I.24), as does Oresme, who uses the occasion to argue for the essentiality of origins (*In Gen. et cor.* I.9-10). For discussion of these and other texts, see Caroti, “Generatio potest auferri” and Braakhuis, “Possibility of Returning.” One finds this issue returning to prominence in the seventeenth century, for instance in Thomas White, who argues that an individual could come back into existence only if the rest of the universe were exactly as it was when that thing first came into existence (*De mundo* pp. 108-15). It is this discussion that seems originally to have motivated Hobbes’s discussion of diachronic identity.

### 29.5. Hobbes’s Radicalism

Hobbes’s *De corpore* (begun ca. 1643; publ. 1655) squarely addresses the issue of diachronic identity for material substances, describing “a great controversy among philosophers concerning the principle of individuation” that arises from “comparing the same body to itself at different times” (11.7). He proceeds to sketch what he takes to be the three standard views on the subject: that substances are individuated by matter; that they are individuated by form; and that they are individuated by accidents. This would be not bad as an account of scholastic theories of synchronic individuation: what makes this substance distinct from that one, at a particular time. As Hobbes ought to have recognized, however, two of these three options have nothing to do with diachronic identity. It was obvious to all the scholastics that both matter and accidents can only make trouble for a theory of identity through change – they cannot be part of the solution, given that these are the very things whose change needs to be accounted for. Hobbes may not care that he is distorting scholastic views, however, because this way of setting things out is quite conducive to articulating his own theory. For he thinks that a theory of diachronic identity needs to take account of both form and matter, and that neglecting either leads to contradiction. Introducing the familiar case of the Ship of Theseus, Hobbes makes an ingenious argument. On one hand, he says, it seems clear that one can replace the parts of the ship one by one,

even up to the point of eventually replacing all the parts, without the ship's losing its identity. But, on the other hand, suppose one collects all the discarded pieces, and builds a ship with it. It seems clear that this too would count as the same Ship of Theseus, and so "we would have two ships that are numerically the same, which is completely absurd" (ibid.). From this he concludes that "the principle of individuation should be judged to come not always from matter alone, nor always from form alone" (ibid.).

Where does that leave us? Hobbes immediately makes an extremely interesting proposal, which deserves to be quoted in full:

We must instead consider by what name anything is called, when we inquire concerning its identity. For it makes a great difference to ask concerning Socrates whether he is the same human being or  
 3 whether he is the same body. For his body, when he is old, cannot be the same it was when he was an infant, by reason of the difference of magnitude; for one body always has one and the same magnitude. He can, however, be the same human being.

6 So whenever the name by which it is asked whether a thing is the same as it was is imposed on the basis of the matter only, then, if the matter is the same, it is the same individual:

- as the water that was in the sea is the same that is afterwards in the cloud;
- 9 • and a body is always the same, whether the parts of it be put together or dispersed; or whether it be congealed or dissolved.

If, however, the name is imposed on the basis of such a form as is the principle of motion, then as  
 12 long as that principle remains, it will be the same individual:

- as it will be the same human being whose actions and thoughts are all derived from one and the same principle of motion – namely, from that principle that was in his generation;
- 15 • and that will be the same river that flows from one and the same source, whether the same water, or other water, or something other than water flows from there;
- and it will be one city, whose acts continually derive from one and the same institution,  
 18 whether there be the same human beings in it or different ones.

Lastly, if the name is imposed on the basis of some accident, then the identity of the thing will depend

upon the matter; for, by the taking away and adding of matter, accidents are destroyed and new ones  
 21 are generated that are not the same numerically.

- Thus a ship, by which is signified matter so figured, will be the same if the matter is the same; but if no part of the matter is the same, then it is an entirely distinct ship, numerically;  
 24 and if part of the matter remains and part is lost, then the ship will be partly the same, and partly distinct. (*De corpore* 11.7)

The core of Hobbes's idea is to analyze questions of diachronic identity in terms of the names under which we ask the question. If asking about Socrates's identity over time, for instance, one may ask whether he is the same human being or the same body, and arrive at two different answers (lines 2-5). Hobbes runs through the three cases set out above – same in matter, same in form, same in accident – but in fact the last (lines 19-25) collapses into the first, on his analysis, and so I will set it aside.

Many sorts of questions about identity, according to Hobbes, depend on sameness of matter. When we ask “Is it the same water?” or “Is it the same body?” (lines 8-10), we get an affirmative answer provided that the matter is entirely the same. Hobbes's views in this respect are strikingly similar to those of the nominalists, in that he shares three of their key principles:

1. Mereological essentialism
2. The part–whole identity thesis
3. A tolerance for partial sameness

Hobbes commits himself to the last of these in lines 22-25 above. The first and second claims are made explicit in a closely parallel discussion from his *De mundo* (1642), an unpublished response to Thomas White that looks to have served in effect as the first draft of this discussion from the *De corpore*. The *De mundo* remarks:

Suppose it is asked of any body – for instance a ship – whether it is the same *being* or *body* that it was

before. In that case, since the name 'being' and 'body' pick out nothing other than the matter, it  
 3 follows that if the matter is the same as it was before, so that no part of it has been cast off, nor has  
 any new matter been added, it will be numerically the same being and numerically the same body as it  
 was before. If, on the other hand, some part of the prior matter has been cast off or another part has  
 6 been added, then that ship will be another being or another body. For a body cannot be numerically  
 the same whose parts are not all the same, since all the parts together are the same as the whole. (12.3)

The first six lines do not add anything to the picture of the *De corpore* passage, other than that  
 'being' is another of the names that trigger a focus on material sameness. (Shortly, however,  
 we will see why Hobbes might have had reason to give up this claim.) The last sentence gives  
 us something new: it both identifies a necessary condition for material sameness (sameness  
 of parts) and provides a quick rationale for that condition (the part–whole identity thesis).

Although the similarities with the earlier nominalists are striking, I am unsure  
 whether they are Hobbes's source, even indirectly, given that these are views he might well  
 have arrived at on his own. For as soon as one decides to embrace the part–whole identity  
 thesis, it is not hard to see that identity in the strictest sense leads to mereological  
 essentialism and, at the same time, leaves room for the notion of partial sameness. Now it  
 may seem that these remarks do not fully account for the degree of continuity we have  
 found among these texts. For it is quite striking that change of parts is always the focus of  
 these discussions, rather than qualitative change. From the Hellenistic era, through the  
 Nominales of the twelfth century, the nominalists of the fourteenth, Sanches in the  
 sixteenth, and now onto Hobbes in the seventeenth, what motivates problems of diachronic  
 identity is the gain and loss of parts. No one, in contrast, seems worried about the analogous  
 argument from qualitative change: that today Socrates is tan, whereas last winter he was pale,  
 and that consequently he is not the same person. On its face, this version of the argument is  
 neither more nor less plausible than the argument from growth, but for the authors we are

considering only the argument from growth and decay has any appeal. This is clear in the long passage from Hobbes's *De corpore* quoted above, where the gain or loss of a part violates identity, but yet "a body is always the same, whether the parts of it be put together or dispersed; or whether it be congealed or dissolved" (lines 9-10). On Hobbes's view, then, the same body can gain and lose accidents, but cannot gain and lose parts. And when one considers that on Hobbes's reductive corpuscularian approach all the qualities of a thing arise from such facts about how the parts are "together" or "dispersed," one sees that this remark has the quite general consequence that qualitative change is compatible with identity, whereas mereological change is not.

To a modern eye, this may seem baffling. On reflection, however, the reasons for it are clear. Throughout our period, accidental changes are the wrong sort of change to motivate worries about diachronic identity, because accidents are either nothing at all, as on Hobbes's view (see §7.1, §10.1), or else are extrinsic to the substance on its standard thin construal (§6.1). On the latter approach, pale Socrates is a *per accidens* composite, and it is an uninteresting fact that such composites are in constant flux. No one cares about telling a unifying story about *their* identity over time. Indeed, one of the payoffs of the substance–accident distinction, as we saw most clearly in Descartes's case (§8.2, §13.6), is that it offers a clear story about how substances persist through accidental change. The lesson of this chapter, however, is that that strategy works for only some kinds of accidental change: change that involves the gain or loss of accidental forms. Growth and decay are quite a different story, because here what is gained or lost is a part of the thin substance itself. The idea we have seen periodically surfacing from antiquity all the way to Hobbes and beyond is that in such cases, strictly speaking, there is no persisting whole.

Here, however, is where Hobbes seems to have something new to say. For whereas

the nominalist approach was to concede that, strictly speaking, there is no diachronic identity through mereological change, Hobbes does not seem to say that. Instead, he says that whether this is the right answer depends on how we describe the situation, and that under certain descriptions it is true to say that the thing persists. So we can talk about the same human being persisting through time as the same human being (and analogously for a river or a city), in virtue of there being the same form that is the “principle of motion” (lines 11-18 of the *De corpore* passage). I will not here try to understand what Hobbes means by formal sameness and how this notion might be reconciled with his strict, anti-hylomorphic corpuscularianism. Evidently, ‘form’ is being used in such an extended sense here that it has little in common with scholastic views. It is noteworthy, however, that the earlier *De mundo* discussion, although very closely parallel in many respects, understands sameness in form differently, in terms of continuity: thus a river remains the same river in virtue of the “unity of its flow, which is a single continuous motion,” and a human being is the same human being “on account of the unity of the flow by which matter is expelled and reintegrated” (12.4). This is of course precisely the idea that the nominalists tried to exploit. One can perhaps see, however, why Hobbes might have shifted away from continuity toward sameness of source. Consider a Colorado river that goes dry in the fall and runs again in the spring. Some living things are more like that than we usually recognize. Think here not of an oak tree, but of, say, an iris, which survives the winter only in its rhizome, underground.

There are many such details worth investigating in Hobbes’s account, but here I will confine my attention to the most general question of what it means to make questions of diachronic identity relative to the names we use. It is natural to suppose that Hobbes is committing himself here to the existence of both a human body (*corpus*) and a human being (*homo*), insisting that we make precise which one we are talking about, so that we know

which identity conditions to apply. In the context of Hobbes's broader metaphysics, however, it is quite clear that nothing could be farther from what he has in mind. As we saw in §27.5, Hobbes is a fervent anti-essentialist, according to whom both accidental and essential predicates are simply names for different ways of conceiving a thing. Hence to use our different names as the basis for drawing a distinction between different things would be from Hobbes's perspective the worst sort of mistake. Indeed, he explicitly remarks in the *Leviathan*, in the context of criticizing scholastic theory of essences, that "when we saw *a man is a living body*, we mean not that the *man* is one thing, the *living body* another, and the *is* or *being* a third, but that the *man* and the *living body* is the same thing, because the consequence *if he be a man, he is a living body* is a true consequence, signified by that word *is*" (46.17). Clearly, then, Hobbes does not mean to license a distinction between human beings and their bodies. Yet if we do not draw such a distinction, how are we to decide which of the two criteria Hobbes offers us is the *right* one – in the sense of being the one that holds of the thing itself? His answer, as we saw already in §28.4, is that neither is correct. Hobbes's commitment to the doctrine of strict permanence requires him to say that, in strict metaphysical fact, nothing naturally begins or ceases to exist. And indeed his most categorical statement of strict permanence comes in the *De mundo* immediately after the discussion of diachronic identity: "a being (*ens*) cannot naturally go out of existence. For even if a ship or a plank ceases to be a ship and a plank, it nonetheless never naturally ceases to be a being" (12.5). Given that 'being' serves here as Hobbes's term for the incorruptible thing in itself, one can understand why, as noted earlier, the *De corpore* omits that term from its list of those that point toward the mereological essentialist criterion of identity. Aside from that detail, however, this insistence on strict permanence does not undermine what Hobbes had just been saying about the various criteria for diachronic identity, because that discussion should be read as

holding *merely* for our names and concepts. By couching the discussion in terms of the names we use, Hobbes means to signal that he is not talking about how the world is. We have the concept of a ship, a river, a body, a human being, and we can give an analysis of the conditions under which that concept is satisfied. In actual fact, however, nothing goes into or out of existence. A ship is a more-or-less temporary aggregation of various pieces of matter, and a human being is another such aggregation. These are ways we construe the world, based on its appearances. Thus, in Hobbes's own words, "a body can neither be generated nor destroyed, but only appear to us in one way and then another, under different images, and consequently be named in one way and then another." (*De corpore* 8.20).

What on its face seemed to be a new way of thinking about identity thus turns out to be merely a variant on a more familiar view – not the nominalist doctrine of strict versus partial identity, but rather the radical revisionism of Autrecourt and Gorlaeus. Hobbes has a theory about how to understand our ordinary ways of talking about identity through change, but he abandons any vestige of a commonsense ontology.

There is little secondary literature on Hobbes's theory of diachronic identity. For some brief remarks, see Ayers, *Locke* II:212, and Thiel, "Individuation" pp. 236-37.