## Personal Identity and the Hybrid View: A Middle Way

Ι

Two of the main contenders in the debate about personal persistence over time are the neo-Lockean psychological continuity view (see e.g., Shoemaker 1970 and 2016, Noonan 2003) and animalism (see e.g., Olson 1997, 2003, Snowdon 2014).<sup>1</sup> Both are wrong.

The neo-Lockean psychological continuity view is a version of the complex view (Parfit 1982, 1984). According to this the fact of personal identity over time is nothing over and above those facts of observable and introspectible physical and/or psychological continuity which provide our only evidence for it. Animalism, as discussed here, is the thesis that *we* are biological animals and psychology is irrelevant to our identity (see Olson 1997: 4 'no sort of psychological continuity, with or without further physical qualifications, is either necessary or sufficient for us to persist through time' and Shoemaker 2016: 128). It is not an account of what (all) persons<sup>2</sup> are (it allows that there may be others, non-human, inorganic, even immaterial), nor an account of what personal persistence as such is (Olson 2015). Its relevance to the debate is rather that it is inconsistent (since we are persons) with certain accounts of personal persistence, and, in particular, with the neo-Lockean psychological account.

<sup>2</sup> By a 'person' I mean what Lowe (1991: 82) means by a 'self': a possible object of first-person reference.

<sup>&</sup>lt;sup>1</sup> There are others, e.g., the embodied mind account according to which persons are just small (brain-sized) parts of animals. The hybrid view to be defended here is intended to capture the best of what the neo-Lockean and the animalist have to offer.

The position I shall argue for, which I call, following Olson (2008), the hybrid view, is a form of complex view that takes (non-branching) psychological continuity as a sufficient but, *pace* the neo-Lockeans, not necessary condition for personal persistence.<sup>3</sup> It sides with the animalist in allowing that mere (non-branching) biological continuity is also sufficient. So I am, in a sense, a psychological continuity theorist. But I am also in a sense, a biological theorist, or as Olson put it, a new animalist (Olson 2015).

The hybrid view is sketched and rejected in the revised version of Olson's paper 'Was I ever a fetus?' (2008). He also criticises it under the heading of 'new animalism' in his (2015). Versions of it are also described and endorsed in recent papers by Langford (2014) and Madden (2016). I think Schechtman's (2014) recently developed Person Life View of personal identity, according to which we can survive either in a permanent vegetative state or in a simple transfer in accordance with a homeostatic cluster conception of personhood is another version of the view. But the version I defend is different from the one Olson attacks and Madden and I think Schechtman defends, and more specific than the one discussed by Langford. Versions of the hybrid approach are also at least hinted at in earlier work by Wiggins (1996) and McDowell (1997).<sup>4</sup>

<sup>3</sup> There is more than one version of the hybrid view. The parenthetical material in this sentence is unnecessary on the version I defend (the 'multiple occupancy' version – section VII) <sup>4</sup> Arguably, the hybrid view is not just a philosophical construction but accords with a natural, ordinary way of thinking. Belshaw (2015), writing for a general audience, says: 'Why think that there is any such thing as the essential me? Why not think, instead, we will try to make the best of whatever comings and goings we encounter? Let's say Jim gets hit by a car. When there's just a mindless body in a hospital bed, making the best of things involves allowing The reason for considering the hybrid proposal is that the two opposing positions mentioned, the neo-Lockean view and animalism, do not really explain satisfactorily the intuitions to which their opponents appeal.

The foetus problem – that, surely, you were once a foetus (Olson 2008, see also Baker 1999) – is solved by the animalist who says simply that each of us is an animal and was in an unproblematic sense a foetus. The animalist can also say that you may be at some point in the future (sorry) a human vegetable. The neo-Lockean cannot say these things without further explanation and has to admit that there is a sense in which they are not true. On the other hand the neo-Lockean can say that it is straightforwardly true that if your whole cerebrum is transplanted or put in a vat you will continue to exist and go where your cerebrum goes, taking your psychology with it (Shoemaker 2016). He can also allow the possibility of your losing all your biological parts gradually, having them replaced by inorganic parts while remaining conscious throughout. The animalist must deny these possibilities and say that it is only in some 'practical sense' (Olson 1997), maybe, that Shoemaker's Brownson, who has Brown's cerebrum and in consequence his psychology, though he has Robinson's body, is the same person as Brown (Shoemaker 1963). This goes against what most of us, untutored by animalists, want to say about these cases. This suggests a middle road. The neo-Lockean view is implausible because it entails

that Jim is still there, in a terrible condition. But when, as well as this body, there's some fabricated equivalent [maybe with Jim's transplanted cerebrum] sitting alongside, claiming not implausibly to be Jim and thanking the doctors for their efforts, we can do better. Both views – "animal" and "person" – suffer in the same way. They are too ambitious.'

that some sort of psychological continuity is necessary for your persistence, but you have no psychological continuity at all with the five-month-old foetus you once 'were' or the human vegetable you will perhaps become. The animalist view is implausible because it denies that even transplantation of your whole cerebrum with consequent transfer of all your psychology suffices for your persistence.

So the obvious thought is that there is a middle way. Accept a disjunctive view according to which you can persist either by psychological continuity or by biological continuity (Langford 2014). And this approach has a bonus. It can accommodate scenarios which should plausibly be described as cases of persistence which neither the neo-Lockean nor the animalist can accommodate. I start out as a foetus, have a period as a conscious being, continuing to be so through a cerebrum transplant and still end up eventually as a human vegetable.

The hybrid view should also be attractive to those who do not like the multiplication of entities neo-Lockeanism and animalism bring with them. Given the facts of human conception and foetal development the neo-Lockean has to acknowledge *two* coincident, presently physically indistinguishable, entities where you are now, even if not two thinkers, even if no brain transplant lies in your future. This is because the foetus which the animal now sitting in your chair was, lacked, at some early stage, any psychological continuity with you as you are now, and so, according to the neo-Lockean psychological continuity account of personal identity, cannot be identified with you. So the neo-Lockean must acknowledge a sense in which 'you are never truly alone' (Olson 2003). In the case of the animalist, he must deny that you go where your cerebrum goes when, the rest of your body having been destroyed, it is put in a vat and then transplanted. But since he insists that he has no commitment to the thesis that only animals can be conscious (since he acknowledges the

possibility of robotic thinkers, disembodied thinkers etc.) it will be hard for him to deny that something, something *numerically distinct* from you, is present and conscious where the cerebrum is in the vat, whether this conscious being existed earlier or is a new existent. The only obvious alternative for him is to say that there is thinking going on without a thinker (Olson 1997: 141-2, Johnston 2007). Of course, there are other options. Some (embodied mind theorists) might say that though the animal is no longer present you still are because you are the cerebrum (or something coincident with it) and always have been. But the animalist cannot say this.

The hybrid theorist, unlike his opponents, can deny these non-identities without concern. He has no reason to think that I am merely coincident with something else which was once a foetus and may later be a human vegetable. And he has no reason to think that in a cerebrum transfer with nothing left behind *two* conscious entities are involved.

# Ш

In fact, the hybrid approach is obligatory for anyone who accepts the deliverance of the transplant intuition – that, in virtue of the consequent psychological continuity, you go where your cerebrum goes – and also accepts that psychological continuity is not a necessary condition of persistence for the kind of thing we are because in some cases a purely biological relation suffices. Shoemaker (2016) avoids it only by distinguishing between animals in the sense in which he says that we and dogs<sup>5</sup> are animals and 'biological' animals

<sup>&</sup>lt;sup>5</sup> Of course, Shoemaker endorses the transplant intuition and also insists that it is just as powerful if we think of the cerebrum donor and recipient as non-human animals, e.g., dogs. So when Fido's cerebrum is transplanted with consequent transfer of psychology (either into the cranium of another dog or into that of another type of animal, eg., a (rather large) cat) he

(and, presumably, 'biological' human beings and 'biological' dogs – he does refer to 'canine' vegetables) for which psychological continuity is not a necessary condition of persistence because it is completely irrelevant. On the hybrid view there is no such distinction. The idea is that there is a single sort of thing, and neither biological continuity nor psychological continuity is necessary for the persistence of a thing of that sort. There are not, then, as Shoemaker says, two sorts of animal (or human beings or dogs): one, of which the members cannot survive complete psychological disruption, and a second, of which the members can. As noted earlier, on the hybrid view, we can first persist without any psychological continuity, and can in our final stage persist again without any psychological continuity, being throughout the same animal.

The idea that psychological continuity is not necessary for the persistence of an animal has been treated as unproblematic by everyone. So the reason for reading hints of the hybrid view into the writings of Wiggins and McDowell, as suggested in Section I, is their insistence that biological continuity, of the kind animalists do not accept is present in the puzzle cases championed by neo-Lockeans, is not necessary for animal persistence, together with their failure to insist, as Shoemaker does, that we must distinguish senses of 'animal'.

Thus McDowell suggests that this is something that can be recognised as a natural development of a Lockean position, once that is separated from the residual Cartesianism in Locke:

... we [can] read Locke's claim about the relevance of 'consciousness' to personal identity ... as describing a special feature of what continuation of life comes to for

says that Fido goes with the cerebrum. What is left behind is a 'biological' animal.

animals of a distinctive kind. (McDowell 1997:237, my italics)

Wiggins writes in a similar vein:

If transplantation [of cerebrum] really were possible, then would not the person follow the seat of consciousness? In that case does not the *animal* that the survivor is follow it too? (1996:246, my italics)

But given that the hybrid view has the obvious attractions sketched above, the question arises why these hints have not been followed up and why it has not been widely adopted before now. I think the main reason is that philosophers have failed to pay attention to the difference between the two versions of the hybrid view distinguished above, and to be discussed at length below.<sup>6</sup> They have, for good reason, rejected hybridism of the kind Olson attacks, and hence have also dismissed the version of hybridism I wish to defend.

## IV

Of course, the hybrid view needs much more elaboration than it has been given so far. But it is not an unfamiliar idea that a concept can be structured in this way. In fact, looking back to the puzzle of the Ship of Theseus (for a standard exposition see Noonan 2003: Chapter 7), we can note that it is the origin of the puzzle that the concept of a ship has just this structure. The initial intuitions are (i) that a ship can undergo a process of repair and replacement of parts so that no original part remains but the continuously repaired ship *is* the original ship, and (ii) that a ship can undergo a process of disassembly and reconstruction (by a plank hoarder or for transport overland) so that at the end, despite the discontinuity, the plank hoarder's ship *is* the original ship reassembled. It is also part of our intuitive concept that one and the same ship can undergo these processes successively: undergo repair and

<sup>&</sup>lt;sup>6</sup> Noonan (2003: 207-8) has a brief and obscure discussion of this difference.

replacement of parts and then be disassembled, transported overland and then reassembled (or the same processes in a different sequence).

This might seem puzzling. But this is just how we speak about ships. We take a hybrid view of them. We think that neither continuity of form persisting through possible gradual repair and replacement of parts, nor identity of material parts is necessary for persistence.

Of course, the cat has now been let out of the bag. We are hybridists about ships, but this is consistent with a 'best candidate' view (Shoemaker 1970, Parfit 1971) of the puzzle of the Ship of Theseus and with a 'multiple occupancy' story (Lewis 1976) conforming to Williams's so-called Only x and y principle (Noonan 2003: 13). We face the same choice if we take the hybrid view of our own identity. We must choose between a 'best candidate' version and a 'multiple occupancy' version. The position I argue for is a 'multiple occupancy' hybrid view that conforms to the Only x and y principle.

V

We can get a better view of what these options are by looking back at our options in the case of the Ship of Theseus.

In a version of the puzzling scenario the ship, as we can put it tendentiously, has been put into dry dock for a year and rebuilt piece by piece until every part is replaced. What has happened to the old planks? A rival of Theseus has taken them as they were replaced and hoarded them away and has now put them together to make a second ship. The two ships are now floating side-by-side on the water and an argument is raging between Theseus and the plank hoarder about which ship is the original Ship of Theseus, the continuously repaired ship or the plank hoarder's ship.

What the best candidate theory says is that the continuously repaired ship is the

original, adding plausibly that this is the best candidate. The plank hoarder's ship is a new existent which came into existence at some time after the origin of the Ship of Theseus. However, if the process of disassembly and reconstruction had taken place without repair and replacement of parts also going on, this would not have been so. Without that process of repair and replacement of parts the original ship would simply have undergone a process of disassembly and reconstruction. So the new ship which came into existence at the later date in the puzzling scenario would never have existed at all. Of course, if the process of hoarding and reconstruction had not taken place the history of the Ship of Theseus in the spatiotemporal region it occupies would have been exactly what it is in the puzzle situation since the ship undergoing repair and replacement of parts is the best candidate.

As for the idea that the plank hoarder's ship is a less good, but still rival, candidate for identity with the original ship, we can cash this out as follows. The rival candidates involved are strictly speaking not ships, but the hunks of matter constituting the continuously repaired ship and the plank hoarder's ship at the later time (Salmon 1982, Appendix 1). And what these are rivals for is not identity with the original Ship of Theseus but rather: *being at the later time the hunk of matter constituting the Ship of Theseus then*. (There cannot be 'rivals for identity is necessary.)

This story is inconsistent with the Only x and y principle. The thought this attempts to capture is that whether a later individual y is identical with an earlier individual x can depend only on facts about x and y and the relationship between them: it cannot depend upon facts about individuals other than x or y. Otherwise put, the thought it attempts to capture is that whether x is identical with y can only depend on the *intrinsic* relationship between them, it cannot be determined *extrinsically*. Because of the logical features of identity it is actually problematic that, as formulated, the Only x and y principle does capture this thought (see

Noonan 2003:130-1). A reformulation which arguably comes closer (abbreviated<sup>7</sup> from Noonan 2003:139) is this: If two events are parts of the history of a single entity of a kind in one situation, then they must also be parts of a single entity of the kind in any second situation in which both they and all the events which are parts of the history of the entity in the first situation remain present.

This formulation of the thought the Only x and y principle is intended to capture

<sup>7</sup> Noonan appeals to the notion of a 'mere Cambridge difference' between two scenarios with respect to what happens in a certain spatio-temporal region to explain event identity across possible worlds. He does so to try to capture the thought the Only x and y principle embodies that what is *causally* irrelevant to what goes on in a spatio-temporal region is irrelevant to the identities over time of things in that region. J. R. G. Williams (2013) introduces a closely related principle which I shall call the part-intrinsicality-of-kind principle: 'If a spatiotemporal region is exactly occupied by a thing of kind K, any duplicate (intrinsically identical) region is exactly occupied by a K or is part of a region exactly occupied by a K'. Here, of course, a region in one situation is intrinsically identical with a region in another just in case the situations differ in a mere Cambridge way with respect to what happens in the regions. This will serve our purposes equally well. The region in the non-puzzling disassembly-and-reconstruction situation is exactly occupied by a ship. So the corresponding region in the puzzling situation is exactly occupied by a ship or is a part of region exactly occupied by a ship. But it is not a proper part of a region exactly occupied by a ship. So it is a region exactly occupied by a ship. Mutatis mutandis for the region in which repair and replacement takes place. So there are two temporarily coincident ships in the puzzling situation.

brings out the inconsistency with the 'best candidate' story about the Ship of Theseus just told. This is so because all the events present in the non-puzzling situation in which there is disassembly and reconstruction, but no replacement of parts and repair, also occur in the puzzle situation in which the plank hoarder's ship is put together. But in the latter situation, according to the 'best candidate' story, they are not events in the history of a single ship, since the plank hoarder's ship is a new creation.

So believers in the Only x and y principle must reject the 'best candidate' story about the puzzle of the Ship of Theseus.

What they must say is that there are two ships, one that undergoes repair and replacement of parts, and one which undergoes disassembly and reconstruction. These share the same origin and an initial part of their history, they are initially 'multiple occupants' of a single spatiotemporal region. As used in the situation in which there is only repair and replacement the name 'The Ship of Theseus' names the one and only repaired ship. As used in the situation in which there is only repaired ship. As used in the situation in which there is only disassembly and reconstruction it names the one and only disassembled and reconstructed ship. Both these ships are present in the puzzle situation. Which of these it names in that situation, if any, is just a matter of which has the best claim to the title. That is the only sense in which we can speak of rival candidates if we accept the Only x and y principle. How many ships are present (counting by identity) originally depends on what happens later as in the standard multiple occupancy description of personal identity fission cases given by, for example, Lewis (1976) and Robinson (1985).

VI

Now we can return to the topic of personal identity. In the fission cases discussed in the literature (Parfit 1971, Noonan 2003), in which a person's cerebral hemispheres are divided and each transplanted into a different body, with consequent reduplicated transfer of

psychology, theorists of personal identity face the same choice as in the case of the Ship of Theseus. What we can now see is that hybrid theorists should regard the brain transplant case, in which a whole cerebrum is transferred into a cerebrum-free body, leaving the original, now cerebrum-free, body alive in a vegetative state, as a fission case, albeit one in which the two fission products do not differ merely in *degree* of one kind of continuity with the original, psychological or biological, but differ in *kind* of continuity (see Nozick 1983 for anticipation of this idea).

If the hybrid theorist rejects the Only x and y principle but says that the two kinds of continuity are in fact equally good, he must describe this case just as the non-branching psychological continuer theorist describes the original fission case. He must say that in this case the original person ceases to exist and two new people come into existence, but the original person would have continued to exist and have gone with the cerebrum if the living vegetable had not been left behind, and would have continued to exist and become a living vegetable if the cerebrum had been destroyed and not transplanted.

This does not sound like a plausible description of the case. The strong intuition here is that the cerebrum transfer, *even if* a human vegetable is left behind, preserves identity. But the hybrid theorist can accommodate this if he rejects the Only x and y principle, adopts a 'best candidate' approach and says that the two kinds of continuity are *not* equally good and that psychological continuity is in fact better.

Then he can say that the case is precisely analogous to the case of the Ship of Theseus. The hunk of matter constituting the cerebrum recipient is the best candidate, so the cerebrum recipient is identical with the original person and the cerebrum-free living vegetable is a new entity that came into existence with the cerebrum removal and transfer. But the living vegetable would have been the surviving person if the cerebrum had not been transplanted but merely destroyed.

One way of viewing this, Madden (2016) suggests, is by thinking of plant cutting and grafting. When a cutting is taken off a plant the cutting is a new existent which may develop in its own way; the original plant continues to exist without the cutting. It is easy to go along with this because the plant is much larger than the cutting. In the transplant case, because of the significance of the cerebrum in our lives, as the basis of our complex psychology, despite the greater mass of the cerebrum-free living vegetable it should be regarded as a mere cutting, despite appearance, hence a new existent. (Note that this way of thinking of the transplant does not cause similar resistance if we think of persons with a different mass distribution. Thus the Mekon in the *Eagle* comic strip *Dan Dare* has a huge brain, but a tiny body. It is intuitively overwhelmingly evident that the Mekon goes where his cerebrum goes.) This way of describing the transplant is appealing in that it captures what the neo-Lockean can say, and also captures the intuition the neo-Lockean cannot capture that if the cerebrum had merely been destroyed or decayed the person would have continued to exist as a human vegetable.

Endorsing this point of view also enables the hybrid theorist to say, as Madden notes, that when a cerebrum-free living vegetable whose cerebrum was previously destroyed (but whose lower brain was left undamaged) subsequently becomes the recipient of another transplanted cerebrum (this is the final stage of the 'attachment' phases of Shoemaker's Brown/Brownson case) the original person who had his cerebrum destroyed, but survived, ceases to exist when the new cerebrum is transplanted into his skull. He becomes a body donor. The single person present afterwards is the cerebrum donor.

The hybrid theorist who adopts the best candidate approach can account for this. He can say that the situation is a case of fusion, but the best candidate *predecessor* of the person

now present is the cerebrum donor; so the person that survived the loss of its cerebrum, in whose skull a new cerebrum has been placed, has now ceased to exist. Madden makes a horticultural comparison. When grafting takes place only the dominant plant, the recipient of the graft even if smaller, continues to exist, while the less dominant is absorbed.<sup>8</sup> In this way, I think, the hybrid theorist who adopts a 'best candidate' approach to personal identity can provide an account which combines the usual advertised attraction of the neo-Lockean view – that you go where your cerebrum goes – with the usual advertised attractions of animalism – that you were once a foetus and may, at some later time, enter into a permanent vegetative state.

<sup>8</sup> It is also a consequence of the 'best candidate' version of the hybrid view, if psychological continuity is regarded as providing a better candidate than mere biological continuity, that I might not exist at a future time even though someone at that time is both biologically continuous and psychogically connected with me as I am now and no one else is. (1) Suppose one of my brain hemispheres is transplanted into your skull to replace a damaged brain hemisphere. I continue to exist being both psychologically and biologically continuous with myself as I am now. (2) You continue to exist for the same reason. (3) Suppose now your remaining original brain hemisphere is destroyed. You continue to exist being biologically and psychologically continuous with yourself as you were before the destruction. (4) Suppose my one original brain hemisphere is now destroyed and I lapse into a persistent vegetative state. I continue to exist, my persistence ensured by biological continuity. (5) Finally, suppose your body is ravaged by cancer, and to save your life your remaining brain hemisphere is transplanted back into my skull. You continue to exist, your persistence escured by psychological continuity. I cease to exist, gua inferior plant.

And it is not, of course, vulnerable to the 'too many thinkers' argument (Olson 2003). As I sit here in this chair, there is just one thinker in the precise region I occupy, the hybrid theorist can say, just as the animalist can. I am alone. This thinker can persist either by psychological continuity or by biological continuity. But it will not persist in both ways simultaneously, so there are not two thinkers here now; nor will this thinker come to be in two places at once if the cerebrum is transplanted and a living human vegetable left behind. There will then be two people, but only one will be the original.

However, this development of the hybrid view is, of course, inconsistent with the Only x and y principle and has all the counter-intuitive features consequent on that spelled out by Williams (1956-7), Wiggins (1980), Noonan (2003) and Olson (2015). What I want to do is to see how the hybrid view can be defended if the Only x and y principle is accepted.

#### VII

If the Only x and y principle is accepted, the hybrid approach can accommodate the intuition that I was once a foetus and will perhaps someday become a human vegetable. And it can accommodate the intuition that if my cerebrum is removed and the empty-headed body destroyed, I continue to exist in virtue of psychological continuity.

The interesting case is once again the case in which the cerebrum is removed and transplanted and a living human vegetable left behind.

Thinking back again to the puzzle of the Ship of Theseus it is clear that the hybrid theorist who accepts the Only x and y principle must say that this is a case of multiple occupancy. Before the cerebrum removal two coincident people are present, one which goes with the cerebrum and one which is left behind as a living vegetable. This is, of course, how Shoemaker describes the case, except that that these are two animals, in different senses of 'animal'.9

But how can the hybrid theorist capture the intuition that *I* go with the cerebrum? The 'best candidate' theorist captures this because he says that I am in fact the only entity that *continues* to exist, and a new human vegetable comes into existence when the cerebrum is removed (just as the plank hoarder's ship is a new creation from the original parts of the Ship of Theseus). But how can the hybrid theorist say that I go with the cerebrum in the transplant case if there are originally two coincident people sharing a body?

Here we can go to the thought that neo-Lockeans who want to allow that biological animals can think (Noonan 2003, 2012, contrast Shoemaker 2016) develop, that the reference of 'I' is not guaranteed to be its user; a distinction has to be drawn between the 'I'-user and the object of first-person reference (see also Snowdon 2014: 247). The point of drawing this distinction is to answer the epistemological challenge with which Olson confronts the neo-Lockean, 'How do you know you are the person thinking correctly that it is a person and not the coincident animal thinking that it is a person?' (Olson 2003: 330). According to this kind of neo-Lockean view, when before the transplant the person and the animal think an 'I'- thought, the reference of that token 'I'-thought is the person who persists by psychological continuity, not the animal that persists by biological continuity (of course, both can refer to the animal, and will if they think a thought of the form 'the animal ...'). The multiple occupancy hybrid theorist can borrow this idea. When, before the transplant, there are two thinkers of an 'I'-thought, the reference of the 'I'-token is the one who persists from that point by psychological continuity. So the one that persists as a living vegetable does not in this situation before the transplant refer to itself when it says 'I'. So it speaks correctly when

<sup>&</sup>lt;sup>9</sup> And, I have suggested above he must think, different senses of 'human being'.

it says 'I will go with the cerebrum when it is transplanted'. Hence, the multiple occupancy hybrid theorist who endorses the Only x and y principle can account for the neo-Lockean intuition that you go where your brain goes by utilising the same resource as the one to which the neo-Lockean who, unlike Shoemaker, will not deny that biological animals think, must appeal. Thus, he can say, a token of 'I' uttered before the cerebrum transplant refers to the thinker whose history from then follows the path of psychological continuity, just as the reference of the name 'The Ship of Theseus' uttered before repair and replacement work begins is the ship whose history follows the path of repair-and-replacement.

In fact, this line of thought fits very well with the more general multiple occupancy approach. According to the multiple occupancy version of neo-Lockeanism, in the standard fission case, in which the two brain hemispheres of a single brain are divided and transplanted into different bodies with consequent reduplication of psychology, or in a botched case of 'teletransportation' in which two 'Captain Kirks' are beamed up to the *Enterprise*, the utterances of 'I' before the fission are not guaranteed determinate singular reference. Suppose one of the two later people ends up in a blue room and the other in a green. Call them, respectively 'Blue' and 'Green'.<sup>10</sup> Before the reduplication what is Blue

<sup>&</sup>lt;sup>10</sup> But could not Blue have ended up in the green room and Green in the blue? So why did Blue end up in the blue room? Explanation is de dicto. The explanation of why 23 is greater than 7 is not the same as the explanation of why the number of planets is greater than 7. The proposition at issue is that the one who ended up in the blue room ended up in the blue room. This is equivalent to the proposition that exactly one person ended up in the blue room, and that can be explained. This carries over, *mutatis mutandis*, to the question why in a cerebrum transplant with a living vegetable left behind the person that goes with the cerebrum goes

referring to when he says, simultaneously with Green, 'I am hungry'? Not himself alone since he has no way of uniquely identifying himself. The situation is entirely symmetrical. Either he fails to refer or, as Lewis (1976) says, he thinks a plural thought with the content 'We both ...' or 'At least one of us ...'. If he does not know what is going to happen most plausibly his thought has the content (to use Lewis's language now) 'the maximal sum of pairwise Rrelated person stages tokening this thought ...'. In this case he fails to refer since there are two such maximal sums. The case is really no different from the following. I use 'Tom', as I think, to refer to one of my acquaintances; in fact two twins, Dick and Harry, have been fooling me. So it is not the case that in this situation the persisting person Blue is successfully referring to Blue alone and the persisting person Green is successfully referring to Green alone.

So if there is going to be reduplication, but this is not known in advance, the 'I'thoughts of Blue and Green do not have determinate singular reference. On the other hand, if it is known, once again they do not have determinate singular reference, since they are plural. Now in the cerebrum transplant case, as the multiple occupancy hybrid theorist thinks of it, before the fission two people are present, one which will persist from that point by psychological continuity and one which will persist by biological continuity. There is an

with the cerebrum and not vice versa, though he can survive without psychological continuity and the other without biological continuity. Equally, it carries over to the question why in the Ship of Theseus case the ship that is repaired is the ship that is repaired and the disassembled and reconstructed ship is the disassembled and reconstructed ship though the repaired ship can survive disassembly and reconstruction and the disassembled and reconstructed ship can survive repair and replacement of parts. asymmetry. So the hybrid theorist can say that the one that persists by psychological continuity from that point can refer to itself using 'I' and the one that persists by biological continuity cannot (of course, as noted, both can refer to the one that persists by biological continuity using just that description). Given that the former does determinately refer to itself, the reference of the token of 'I' uttered pre-cerebrum transplant is determinately the one who persists by psychological continuity from then. Similarly, according to the multiple occupancy theorist in the Ship of Theseus scenario originally two ships coincide, but the reference of a token of the name 'The Ship of Theseus' uttered then is the ship that will be repaired, not the plank hoarder's ship.

To get another view on this we can think of the biological continuer as merely the 'fallback' reference. This is a concept Frege introduces to explain how in a logically perfect language reference is guaranteed. If 'the Sun' is defined as the brightest body in the sky its reference is not guaranteed. But if I define it as 'the brightest body in the sky or, if there is no such unique object, the number 0' I have a guaranteed but variable reference. Obviously, I can have a non-guaranteed variable reference if I define (though this would not suit Frege's purpose) 'the Sun' as 'the brightest body in the sky or, if there is no such unique object, the first dog ever born at sea'. 'I' according to the hybrid view as now explained has a nonguaranteed

but similarly variable reference. In symmetrical fission it fails to refer, but in the cerebrum transplant it refers to the person persisting by psychological continuity, and in the straightforward case in which there is no transplant but just decline into a persistent vegetative state it refers to the single person present who persists through the decline in virtue of biological continuity.<sup>11</sup>

The resistance to this will come from the thought that a thinker of an 'I'-thought is guaranteed to refer to himself. But if so, in the fission case, thought of as multiple occupancy, Blue and Green must refer to themselves. But we have seen above that once the general multiple occupancy approach is adopted, the plausible position is that their references are either indeterminate or plural.

Finally, we need to consider what the hybrid theorist can say about the case in which a cerebrum is transplanted into a living human vegetable which has survived the destruction of its own cerebrum. In this case, as we saw, a hybrid theorist who adopts a 'best candidate' approach can say that after the transplant the person who was previously the living human vegetable is no more (as Madden puts it, it was an inferior plant grafted on to a superior plant and absorbed).

Can the hybrid theorist who accepts the Only x and y principle say the same, and should he?

He can. What the defender of the Only x and y principle is committed to, as noted, is that *if two events are parts of the history of a single entity of a kind in one situation then they must also be parts of the history of a single entity of the kind in any second situation in which both they, and all the events which are parts of the history of the entity in the first situation, remain present.* 

So in the Ship of Theseus example, because there is a single ship present throughout in a situation where only disassembly and reconstruction but no part replacement and repair

<sup>&</sup>lt;sup>11</sup> Similarly, in the Ship of Theseus case the ship that follows the path of disassembly and reconstruction is the fallback reference.

take place so there must be a single ship present throughout in the puzzle situation located in the spatio-temporal region in which the plank-hoarder's activities go on. This must be so because in that spatio-temporal region in both situations *exactly* the same things are going on, *all* the events present in the former situation are present in the latter.

But the hybrid theorist, whose position is defined only by his denying the *necessity* of either psychological continuity or biological continuity for personal persistence, does not have to accept that a human vegetable which receives a new cerebrum continues to exist in any situation (whatever the provenance of the cerebrum), so his acceptance of the Only x and y principle does not require him to do so. That is, he does not have to accept that in any situation *there are two events which are parts of the history of a single continuing person which has had its cerebrum removed and replaced by another*. He can deny that a person can survive cerebrum replacement.

So the hybrid theorist who endorses the Only x and y principle can say, like the hybrid theorist who rejects it and adopts a 'best candidate' approach, that the human vegetable receiving a new cerebrum ceases to exist.

But he does not need to say this. Unlike the 'best candidate' hybrid theorist he can say that the human vegetable continues to exist with a new psychology. He can say this, of course, because he can say that both the 'body donor' and the 'cerebrum donor' continue to exist, but now coincide. So he can say about the Brown/Brownson case the following. When Brown's cerebrum is transplanted into Robinson's skull: (1) one person goes where Brown's cerebrum goes, (2) another is left behind where Brown's body is, (3) one goes where Robinson's cerebrum goes, (4) another is left behind minus a cerebrum and (5) when Brown's cerebrum is transplanted into this person's skull this person continues to exist and becomes coincident with the one which was moved with Brown's cerebrum. So the hybrid theorist who endorses the Only x and y principle does not have to accept, as the hybrid theorist who does not must, that a person ceases to exist when it is provided with a new organ of thought, though not when its original organ of thought is destroyed, which is what Madden's analogy with plant grafting amounts to. In short, the hybrid theorist who accepts the Only x and y principle has more options with respect to what to say about what Madden calls the final attachment phase of the Brown/Brownson case than the 'best candidate' hybrid theorist.

Of course, this freedom comes at a price. The hybrid theorist who accepts the Only x and y principle has to embrace a more plenitudinous ontology than the 'best candidate' hybrid theorist because he must say that in the transplant case, when the cerebrum is transplanted and a living vegetable left behind, two exactly coinciding thinkers are present before the transplant. But he does not have to accept that there are two coincident thinkers here now, where I am, since I will never have my cerebrum transplanted. But it is an embarrassment for the neo-Lockean that he must say that counting by numerical identity, *irrespective* of my future, there are two coincident thinkers here now, or else the animal here (in Shoemaker's sense of 'biological animal') does not think.<sup>12</sup> Neither type of hybrid theorist

<sup>12</sup> Shoemaker's view is that the 'biological' animal is not a thinker even though it is coincident with a human being or dog that is. This is because thinking is a 'thick' property not necessarily shared by coincident material objects. The non-identical coincidents will, however, share all their 'thin' properties. To make sense of the notion of a 'thick' property think of terminal brain cancer. If the dog has terminal brain cancer it does not follow that the coincident biological animal has. If the brain is transplanted the dog will still die, notwithstanding its new body, but the biological animal will persist, albeit in a permanent need say this. The power of Olson's 'two thinkers' argument is that faced with the bare question 'How many coinciding thinkers are in your chair now?', it seems absurd to say 'Two'. But, of course, there are well-known lines of thought about the 'problem of the many' which make it hard to deny that there are many thinkers 'in the vicinity of' the chair. Consider Geach's problem (1980: 215-18) of the 1,001 cats, or Lewis's (1993) variant. The cat is on the mat. The cat is shedding. There are many hairs which are neither determinately part of the cat nor determinately not. So there are many feline-like, massively overlapping entities on the mat. These are far too cat-like not to be cats. So there are many massively overlapping cats on the mat. But, of course, cats are thinkers. So there are many thinkers on the mat (even if there are not many cats; maybe it takes more to be a cat than a thinker). So *mutatis mutandis* there are many thinkers in my chair (my many chairs). An argument for animalism thus cannot just take it for granted that there is just one thinker here. However, it is hard to accept that there are two exactly coincident thinkers here just because the biological animal here once had a mindless foetal stage. But this is an entailment of the psychological continuity theory, unless it is denied, with Shoemaker, that biological animals think. Hence the power of Olson's argument against the psychological continuity theorist. However, the hybrid theory does not have this implausible entailment. So Olson's argument is an unconvincing objection to it. All it entails is that there are two coinciding thinkers where I am *if* I have a fission in my future. But confronted with the question 'How many coincident thinkers are there in your chair now, counting by numerical identity, given that sometime in the future you will, say, have your brain divided with the separated hemispheres transplanted into separate bodies?' it does not seem absurd to say 'Two', as the

vegetative state. Being a thinker, Shoemaker thinks, is like having terminal brain cancer.

literature on fission makes clear (Lewis 1976, Robinson 1985). Once this science-fictional possibility is made salient intuitions falter. Olson's 'two many thinkers' argument is thus powerful but limited. It is not a strong argument againt the hybrid theorist. It is a strong argument against the psychological continuity theorist because that entails that *just because* the (biological) animal here once had a mindless foetal stage it follows that I am coincident with a numerically distinct thinker, or else the biological animal is not a thinker. This is comparable to saying that just because the human being sitting over there had a pre-teen stage the teenager over there came into existence later, so that there are two numerically distinct sitters over there, or the human being is not after all a sitter. The hybrid theorist is not committed to this.<sup>13</sup>

Of course, it remains that the hybrid theorist who accepts the Only x and y principle must accept multiple occupancy in some situations in which the biological theorist will not, cases of cerebrum transfer with a living human vegetable left behind. However, I do not think that the biological theorist can regard this as a conclusive objection since the options available to him if he wishes to avoid multiple occupancy himself are arguably limited. This is so for two reasons. First, the reduplication problem, which is what brings to the fore the possibility of multiple occupancy and forces the choice between acceptance and

<sup>13</sup> In fact, Olson himself puts less weight on the 'too many thinkers' argument than his followers. He writes (Olson 2007: 52): 'Whether the constitution view [that human persons are constituted by non-identical human animals] is right largely depends on the truth of constitutionalism [the view that non-identical material things can stand in the relation of constitution]. ...If constitutionalism is true ... and if we are material things, it will be hard not to accept the constitution view.' rejection of the Only x and y principle, is not just a problem for neo-Lockeans and hybrid theorists. As Perry points out, it is a problem for any account of personal persistence which appeals to a conceivably duplicable relation (Perry 1976: 428, see also Noonan 2003: Ch. 7). And it is not just a problem about the persistence conditions of persons, but about the persistence conditions of *any* sort of thing (of course, the Only x and y principle and J.R.G. Williams's closely related 'part-intrinsically-of-kind' principle are general in formulation).<sup>14</sup> So it is a problem for biological theorists too. How can they exclude the existence of a relation related to the persistence of a biological animal as, according to the neo-Lockean, psychological continuity is related to personal persistence? That is, how can they exclude the existence of a relation which is conceivably duplicable but when instantiated without duplication suffices for the persistence of a biological animal? And they cannot easily reject the Only x and y principle and insist on the uniqueness requirement implicit in the 'best candidate' and 'no rival candidate' accounts. As Olson puts it, 'this [the Uniqueness Requirement] is a startling claim, but no one who accepts the Uniqueness Requirement does so because it sounds right' (1997: 49). So the possibility of multiple occupancy is not a problem the biological theorist can dismiss as a concern only for his opponents.

Indeed, it may be that there are actual cases involving dogs, mice and monkeys which pose a reduplication problem for the biological theorist. Documented experiments have been performed on them in which their heads have been severed, kept alive and transplanted onto the headless bodies of other animals. For all I know, in addition 'reduplication' experiments

<sup>&</sup>lt;sup>14</sup>Robinson (1985) presents the reduplication problem for one type of lower organism within an endurantist, three-dimensional, framework taken from Wiggins (1980). He argues for the multiple occupancy solution.

have been carried out in which their heads have been severed, kept alive and transplanted whilst support has *also* been provided to keep the headless remainder of the original animal in a functional state (this is envisaged by Campbell and McMahan 2016: 242, they call it The Severed Head Case). Now, would the preservation alive of the head have constituted the persistence of the original animal *if it alone* had been kept in a functional state, the headless remainder being discarded? When, in the actual experiments that have been documented, a monkey's head was kept alive and transplanted onto the decapitated body of another animal did that original monkey persist? Since the severed head contains the whole brain, including the brain stem of the original, it is hard for the biological theorist not to agree that this is the case. Now, would the preservation alive of the headless body have constituted the persistence of the original animal *if it alone* had been kept in a functional state, the head being discarded? Again, it is hard for the biological theorist not to agree given the medical fact that 'even in the absence of any brain at all, a human body can remain comprehensively functional for years with no more external life support than that required by many fully conscious and uncontroversially living human beings (Campbell and MacMahan 2016: 244, citing Shewman 1988: 36). Of course, the 'reduplication' situation envisaged by Campbell and McMahan, in which there are two later 'candidates' for identity with the (apparently) unique original unfortunate animal, is like the Ship of Theseus case. It is one in which the later individuals in fact stand in *different* relations to the original. The animalist *can* therefore favour one of these relations over the other and choose to insist either: that even in the documented situation in which there was no 'reduplication' and only the monkey head was kept alive, the original monkey did not persist or: that even in the hypothetical situation in which there is no 'reduplication', and only the headless (monkey) body remains at the later time, in a comprehensively functional state, the original biological animal (monkey) is no

more – and in the actual case examined by Sheehan (of the brain dead boy) no biological (human) animal has persisted for eighteen years. I leave it to the reader to consider how plausible it is for a philosopher who self-identifies as an animalist to choose to say either of these things. But if he wishes to say neither he is confronted with the reduplication problem. Should he accept the Only x and y principle and multiple occupancy in *the Severed Brain* Case?<sup>15</sup>

So possible reduplication cases and ones that for all that we know actually exist and are close cousins of documented non-duplication cases with dogs, monkeys and mice make the status of the Only x and y principle as much a problem for the biological theorist as for the hybrid theorist.

The second reason why biological theorists cannot just dismiss the possibility of multiple occupancy as no problem for them is the difficulty they, like their opponents, have in giving an account of vagueness in persistence which does not entail it.

<sup>15</sup> Campbell and McMahan conclude their discussion of the *Severed Head Case* with the statement: Animalism is false. I have not drawn this conclusion. First, if the animalist retains the Only x and y principle the choices identified in the text are available to him. Secondly, he can reject the Only x and y principle, regard the case as one of fission and adopt either a 'best candidate' or 'no rival candidate' approach. He can say, for example, that the preservation alive of the severed monkey head constitutes the persistence of the original monkey and the surviving headless monkey body is a new existent (or the other way round, or that both are new existents). In short, logically the same array of options is available to him as to the hybrid theorist. My point is just that what to say about the Only x and y principle is no less difficult a problem for the animalist than for his opponents.

I surely do know that there was no determinate first, and will be no determinate last, moment of my existence. Or at least, this is so on any of the three most popular theories of vagueness in persistence – linguistic supervaluationism, Williamson's epistemic account (1994) and the conception of persisting things as vague objects. The biological account of personal identity serves merely to make this more evident. Restricting our attention to these theories, if I am not a vague object, with temporally indeterminate boundaries, this can only be because there are several candidates for what I now denote by 'I', differing somewhat in their total temporal extents (linguistic supervaluationism and the epistemic view both legitimise the notion of 'candidate', though differently understood, of course). However, such candidates will have much in common – as much as do the temporarily coincident thinkers present if a cerebrum transplant lies in their future and the hybrid view is correct. So it is hard for the animalist to deny that all these candidates are thinkers – they all have what it takes. The obvious way for him to resist the move from vagueness in persistence to multiple occupancy is to say that people are vague objects. This is tempting, but hard. The topic of vague objects is fraught with difficulty.

In sum, here I wish only to note that the animalist can hardly take it as a conclusive objection against the hybrid theorist who embraces the Only x and y principle that he is committed to accepting that in some circumstances there is multiple occupancy.

#### VIII

I have introduced the hybrid view as an option for personal identity theorists distinct from the neo-Lockean approach and animalism and have identified my favourite version of this view, the 'multiple occupancy' version. I have explained how such a hybrid theorist can endorse the transplant intuition, which is the most striking piece of evidence speaking for the neo-Lockean psychological continuity theorist.

I have also explained how the hybrid theorist can also endorse, at least to the extent the animalist can (setting the matter of vague objects aside) the common-sense thought that at least some of us (in fact, all of us of my generation or any past generation) are, as Olson strikingly puts it, 'truly alone'.

Of course, not all of my opponents will be convinced. Many neo-Lockeans, I think, endorse their approach because it coheres with the transplant intuition and accept the consequences that they will never enter into a permanent vegetative state and never existed in the womb absent any psychological capacities merely *because* they are consequences. But for a second sort of neo-Lockean it is a primary datum that their existence cannot so extend beyond their psychology into their pasts and possible futures. Similarly, many animalists, I think, endorse their position mainly because of the immense appeal of Olson's thought that the alternative is to accept either that there are now at least twice as many thinkers on this planet as we thought, or that here and now I am coincident with a physically indistinguishable animal with a brain, and apparently everything else it takes to think, who is no more intelligent or sentient than a tree (Olson 2003: 328). But for a second sort of animalist it is a primary datum that no *animal* and so no thinker goes with the cerebrum, that squishy little organ, when it is transplanted.

Neo-Lockeans and animalists of the second sorts will not wish to endorse hybridism. It is not their cup of tea. But to neo-Lockeans and animalists of the first sorts, I suggest, hybridism, specifically the version of hybridism defended here, should be attractive. Anyway, it allows me to have what, from my point of view, is the best of both worlds.

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