

ANIMALS, IDENTITY AND PERSISTENCE

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A number of claims are closely connected with, though logically distinct from, animalism. One is that organisms cease to exist when they die. Two others concern the relation of the brain, or the brainstem, to animal life. One of these holds that the brainstem is necessary for life—more precisely, that (say) my cat's brainstem is necessary for my cat's life to continue. The other is that it is sufficient for life—more precisely, that so long as (say) my cat's brainstem continues to function, so too does my cat. I argue against these claims.

Are we animals? Many say yes. But these people are not therefore animalists. For animalists hold that we are essentially animals.¹ My psychology could travel elsewhere, and find itself in a new body. But I wouldn't have travelled, on the animalist view. And my psychology could be obliterated, as in PVS.² But if the animal that I am survives, then I survive. I am unpersuaded. Yet apart from just a couple of comments, I won't directly discuss any of this here. My present concern is only with certain further theses: first, that animals cease to exist when they die, second, that the brainstem is necessary for the animal's survival, and third, that the brainstem is sufficient for its survival. These further theses are distinct from one another and neither imply, nor are implied by animalism's core. So someone might accept, say, the claim about death, but not those about the brainstem. And someone might reject them all and still count himself an animalist. Even so, there are links here. Perhaps the best-known defender of animalism is also a prominent supporter of these further views. And, in what follows, I will focus on several of Eric Olson's contentions and claims. Moreover, animalism proper and these further theses all overlap, both in Olson's arguments and elsewhere, more than might be expected.³

A general issue here is a concern with precision. Animalism, against some rival accounts, offers a clear and well-defined answer to the question of what we are. The view that an animal's existence ends with death is in part motivated by the thought that an animal, in stark contrast to its remains, is a thing sharply drawn. And appeal to the brainstem connects here, promising crisp accounts both of animal survival and of animal identity. So anyone inclining to one of these views may well be drawn to others.

¹This is the neatest way quickly to characterize animalism, even though there is disagreement about its accuracy. Nichols [2009] puts it thus; Johannson [2007: 196] avoids commitment here, while Olson [2003: 321] expresses reservations about the essentialist claim.

²A persistent or, as some prefer, a permanent vegetative state. The differences can be ignored here.

³See Olson [1997, 2003, 2004]. For 'elsewhere' see note 7 below.

In the section below I discuss certain preliminaries. Ceasing when dying is the focus in §§2 and 3, and the brainstem theses in §§4 and 5, while in the final section I consider how far the main issues here might be more than merely verbal.

1.

There are no dead animals. An animal is an organism. And an organism is essentially a living thing. So when it dies it ceases to exist. These are some of Olson's views. It would be strange indeed to believe that when animals die the visible, bulky, weighty things that many of them are simply vanish, leaving empty space behind. Sometimes, of course, animals do just vanish, perhaps if they are too close to the centre of nuclear explosion. And they quite often vanish fairly soon after death, for example when eaten or cremated. But these are special cases, and easily explained. Olson agrees. He agrees too that often, and perhaps typically, you can find remains of animals after they die. And he is willing to describe these remains in familiar terms, for example as bodies or corpses. In denying that there are dead animals he puts forward no views at odds with these everyday beliefs.

Yet the view is strange nevertheless. The ordinary view about animals is that they persist through lengthy periods of time, and are first alive, and later dead. And the ordinary view about these terms is that they are intimately related—almost without exception, living things will later be dead, and dead things were earlier alive.⁴ Olson believes that animals are alive, and that they die, but he doesn't believe there are any dead animals. Does he believe there are any dead things at all? You can see, touch, weigh and smell the animal's remains, the body, or the corpse, and these things are certainly lifeless. But are they dead? Olson must think either that there are no dead things, or that dead things were never alive, or that there are some things that persist through time, and are first alive, and then later dead. Certainly, at least where animals are concerned, he rejects the last of these options. And mostly he avoids reference to dead bodies and dead corpses. But whether these corpses, things that come into existence just when animals die,⁵ are genuinely dead, or merely lifeless, is something on which he doesn't offer a clear view.

What about other things? Though the emphasis is on animals, this view is supposed to hold for organisms generally. Olson believes, then, that plants and trees similarly cease to exist with death. Though it's usually clear whether an animal is alive or dead, often, with plants and trees, this is far less clear. So someone might think the view is even stranger here. And there are organs, tissues, body parts. Olson clearly distinguishes between organs and organisms. But it isn't immediately clear whether he thinks things other

⁴Perhaps some things, for example angels, live for ever. Perhaps others, for example amoebae, cease to exist without dying. Perhaps, if the world began just five minutes ago, most dead things were never alive.

⁵Any reason for supposing that an animal must cease to exist when it dies is equally a reason for supposing that an animal's corpse comes into being when the animal dies' [2003: 272]. More recently [forthcoming] Olson has shown some sympathy with corpse eliminativism, the view that there are no corpses as such, but merely atoms arranged corpse-wise.

than organisms can be literally alive.⁶ If he thinks this is possible, then it seems he ought to think, also, that they too disappear when their conditions change, they become useless, and die. And there are artefacts. We talk about dead batteries, and televisions, about there being still some life in an old car, about the art of painting being dead, and about the end of a living tradition. In such contexts ‘life’ and ‘death’ are used metaphorically. Olson surely agrees. But it would be very odd to think that such things cease to exist when they lose their power and fail to function. So it looks as if the metaphorical uses of these terms preserve more of what we take to be their ordinary meaning, and the ordinary relations between meanings, than do their literal uses.

I’m going to call this strange view the *Disappearance Thesis*.⁷ You might think we have no need of this title, as another, the Termination Thesis, is already in regular use.⁸ But that, I think, is better reserved for the more familiar, and perhaps more widely supported, view that you and I and other people are things different from our bodies or animals, and that we cease to exist with, or sometimes before, death even while the bodies—the animals—continue. Both views have us vanishing at the latest with death. But one holds that psychologies end then, and claims we are those psychologies, while the other, even if strictly agnostic on what we are, fastens on animals or organisms generally, and maintains that they then disappear. These differences are substantial, and the controversial claims are differently located. So a new name is to be preferred.

2.

Why hold to this strange view? Consider first the arguments of *The Human Animal*.⁹ The way Olson arrives at the Disappearance Thesis is far from straightforward, and is as much concerned with questions of identity—which animal is this?—and boundaries—is this living thing an animal at all?—as with persistence—is this lifeless thing an animal still? So there’s a lot

⁶In *The Human Animal* [Olson 1997] he first seems to think not: ‘[W]e remove one of your kidneys and keep it “alive” . . .’ [130]. And, in contrast to organisms, ‘[t]he activities of the kidney’s parts are not coordinated in a way that tends to keep the kidney as a whole alive’ [130]. But then he refers to ‘hunks of living tissue—detached organs . . .’ [130], and again to ‘living tissue’ [135]. In correspondence he’s made clear he wants to ‘deny that an organ can be “alive” in the same sense as an organism’. I take it this means they are not literally alive. Why does all this matter? It bears heavily on §§4 and 5 below. (Note: here and throughout otherwise unattributed references are to Olson [1997]).

⁷Though strange, the view has had more than a handful of supporters. Aristotle and Locke are at least sympathetic. More recently see, as well as Olson, van Inwagen [1990], Merricks [2001], Hershenov [2005], and Johansson [2005]. But there are important differences here, already hinted at in the preceding discussion. Olson mostly seems to have no argument with the existence of non-organisms, corpses included. Johansson more firmly takes this ‘less radical’ line [2005: 61–5]. Both Merricks and van Inwagen deny that there are non-organisms. But while van Inwagen holds that there are organisms generally (and thus holds that the life/non-life distinction is important), Merricks is even more parsimonious, doubting whether mindless organisms should figure in an ontology [2001: 115]. These differences are not inconsiderable, and call for further discussion elsewhere.

⁸Mackie [1999: 234] and Johansson [2005: 43–8]. As Johansson notes, the term originates with Feldman [1992: 89]. And see his footnote [2005: 44] for a useful, though undifferentiated, list of so-called terminators.

⁹See [131–5]. Someone might wonder, given its complexity, whether this is really the right place to look for the argument. But Olson insists elsewhere that it is [2003: 269].

going on. Elsewhere, as we'll see, the arguments are less obscure. But we can start here, and with some amputations.

We cut off Tim's arm, attach it to one-armed Tom and hook it up so that it works. Olson thinks the resulting animal is Tom. He thinks, further, that an animal can survive the loss of an arm and, further still, that a detached arm is not itself an animal, or an organism. None of this is particularly controversial. But, according to Olson, it might be taken to suggest a position which is controversial, namely that if an animal is divided, and both parts are kept alive, then it persists as the larger of the two living parts.

Consideration of a second amputation shows that this is wrong. Here we cut off Tim's head and attach it to Tom's now headless body. Given that the head is about as big, and as heavy, as the arm, you might think, again, that the resulting animal is Tom. But, says Olson, it's Tim.¹⁰ Such a result will be familiar and welcome to many people. For many of us are disposed to a psychological view of personhood, and think that Tim goes where his psychology goes. But this, of course, is no part of any animalist programme, and no part of Olson's reasoning here. So it would be a mistake to accept his verdict on these grounds. Suppose Tim and Tom are both in PVS (see note 2), and the doctors have decided now to dispense with their names, preferring instead to refer to the still surviving animals as A and B. Olson's view is that if we swap the heads of these animals, their identities are also swapped—the bed that contained A now contains B, and *vice versa*. Why think this? Why think the head is importantly different from the arm?

Olson points out that, in fact, removing the head normally brings about the immediate death of an animal, while removing an arm is consistent with its remaining alive. And this because the life-sustaining and life-regulating mechanisms are contained in, or at least controlled by, the head. So cut off an arm and a living organism remains, but cut off a head, and, even if there are vestiges of life in certain of its parts, the organism immediately dies.¹¹

Intervention can often prevent death from occurring. Attach life support machines to Tim's head and it '*would* behave as', it '*seems to be*', a living organism [133]. And just as someone needing a dialysis machine is a debilitated human animal, so, when hooked up, 'Tim's detached head is a far more severely debilitated animal' [133]. But it's a living animal nonetheless. And Tim has survived. But now why not say the same of Tom's headless body? Clearly a conventional heart-lung machine won't do. We need here an as yet non-existent artificial brainstem. Yet Olson seems to believe that no matter how well the body then appears to function, it's still not a living organism. For, '[p]art of what makes something a living organism ... is its capacity to coordinate and regulate its metabolic and other vital functions' [133–4]. Coordination and functioning here are now

¹⁰Olson's discussion hereabouts mirrors to a considerable extent that of van Inwagen [1990: 169–81]. See also Parfit [2008: 199–202] for a similar position on the differences between heads and headless bodies.

¹¹There are two oddities here. First, the aim is to refute the larger living part view. But in this case there aren't two living parts. Indeed, central to Olson's argument is the denial that such division can occur. Second, we need to qualify the claim that removing the head brings about immediate death. Though he doesn't really want the cat out at this stage, the view needing to be accommodated has it that the head, rather than the body, is the organism. And thus the otherwise puzzling qualification, 'All of an organism's life-sustaining functions cease immediately when you remove (or at any rate destroy) the head' [132].

controlled not by the organism itself, but by the machine. And Olson insists that machines cannot be parts of organisms, even when, as in many actual cases, they are located wholly within organisms. ‘Thus, there is no animal made up of Tom’s headless remains together with some mechanical or electronic contraption’ [135]. And now, ‘All of this suggests that an animal persists . . . just in case its capacity to direct those vital functions that keep it biologically alive is not disrupted’ [135]. And so it suggests the Disappearance Thesis is true.

There’s something of the rabbit out of the hat about this, and it isn’t at all easy to see how such a suggestion is arrived at. Part of the problem, as I’ve indicated, is that Olson seems undecided here about his overall concern. Until the Disappearance Thesis is established it’s going to be one thing to argue that such and such isn’t an animal, another that it isn’t alive. But the comments on the divided animal allude to both concerns. Similarly, later: ‘Tom’s detached head-complement is no more a living organism than his severed arm is an organism’ [132]. Someone might agree with both claims, and yet still think the body here is an organism, though not now living. All of this is unfortunate, and doesn’t help clarify why Olson should think there are no dead animals. But, picking up on certain points he’s wanted to emphasize, let me indicate a couple of possible routes. I’ll call the first the *one-animal view*, the second the *non-composite view*. Both move us in the requisite direction, even though neither is ultimately successful.

Let’s agree that if you cut off Tom’s head, in contrast to his arm, the body will not, even for a moment, be a living organism. Let’s agree also that, suitably cosseted, the head might remain alive. Perhaps we can further agree, at least for now, and for the sake of argument, that this body cannot become a living organism by being attached to an artificial brain. But still we need to ask, is this body an organism? Is it a dead animal, even if headless? The one-animal view suggests not. Plausibly, if we cut an animal in two, there will be, as a result, at most one animal. And now you might think, if we cut an animal in two, and just the one part remains alive, then that part is the animal. So if the head remains alive, and the rest dies, then that is the animal. And then it follows that the headless and non-living body isn’t the animal. So it isn’t an animal at all. And now, further, whether the body is an animal can’t depend on what happens to the head. So even if the head is destroyed, still the headless body isn’t an animal.¹² This argument doesn’t achieve all that Olson wants. It doesn’t, for example, give us reason to deny that an intact lifeless body is a dead animal. Yet it might appear to be making some progress. But supposing only this modest aim, still the argument is seriously flawed. For even if the head remains alive, there isn’t any obvious reason to agree that it is the animal. Again, there’s a mistake to be avoided here. You might be tempted to think that Tom’s living head is Tom, and so think the human’s head is the human, the dog’s head the dog, and so on. But our understandable concerns with personhood, and psychology, are again getting in the way. No matter how important it is, the detached head isn’t clearly anything other than a living or

¹²See, of course, Williams [1973] for this sort of move.

‘living’ organ.¹³ So it isn’t an organism, isn’t an animal, and doesn’t, via the one-animal view, stand in the way of our thinking the body is the animal.

The non-composite view tries to make something of Olson’s insistence, noted above, that mechanical devices, no matter where located, are not part of an animal. No animal comprises organic and inorganic material. Suppose this is right. And suppose we agree with Olson, that a living organism is not only regulated, but is self-regulating. Then what is made up of an animal body and an artificial stem isn’t an animal. So there is no living organism, no living animal here. But grant this, and it’s still not clear why this weighty hunk of organic material, the body on the machine, isn’t an animal at all. And it remains a mystery as to how the Disappearance Thesis is arrived at.

I need to clarify one point before moving on. In relation to both views I’ve conceded to Olson that an artificial brain cannot transform a dead body into a living organism, and that a living thing must be self-regulating, rather than regulated from outside. But this was only to show that even with this raft of concessions the Disappearance Thesis is far from established. Unsurprisingly, I’ll have more to say about this self-regulating view below.

3.

Let’s consider what may be a more direct approach. What is an organism? Is it something that is essentially alive? If so, there are no dead organisms. If animals are organisms—and they are—then there are no dead animals. Evidently it’s not enough just to insist that organisms are essentially alive. That needs to emerge from a more detailed account. And Olson endeavours to provide such detail.

In *The Human Animal* he insists on the importance of metabolism: ‘Without a regular supply of energy and molecular raw materials (food) a living thing goes out like a light, unless it can shut down its metabolism and go into a dormant state ...’ [127]; on teleology: an organism’s parts are ‘connected together in such a way that each has a role in enabling the organism to achieve its ends—survival and reproduction. No part can fulfil its function without the others: the entire structure will collapse—the organism will die and decay—unless all or nearly all its parts do what they are supposed to do’ [128]; and, on organized complexity: even the simplest organisms have vast numbers of parts, ‘arranged in an extremely delicate and highly improbable way’ [128] and contain within themselves ‘a sort of plan’ containing ‘instructions’ for growth, development, repair and reproduction [129]. In ‘Animalism and the Corpse Problem’ he wants to identify the central distinction between living organisms on the one hand, and both corpses and artefacts on the other. Any such thing

¹³Suppose organs can be literally alive. Then animals can be divided into two or more living parts. The head is alive, but there is no evident reason to think it the animal. Suppose only organisms can be literally alive. Then if the head is alive it is the animal. But it may be merely ‘alive’.

maintains its form merely by virtue of the intrinsic stability of its materials. The stability of a living thing, by contrast, is dynamic. Matter constantly flows through it, in much the same way as it flows through a fountain. A living thing maintains its form—in particular the fine biochemical structure that makes it alive—only by engaging in constant activity: repairing damage, removing waste, fighting infection, acquiring and digesting food, and so on. All of this comes to an end when the organism dies. Matter ceases to flow. The repair stops. Decay sets in.

[Olson 2004: 269]

These accounts are complementary, with the detail in the first fleshing out the emphasis on dynamism in the second. And now from all this it emerges that:

The possession of a life appears to be what distinguishes organisms from non-organisms. If organisms are essentially organisms, or if nothing can be an organism at one time and a non-organism at another, then what it takes for an organism to persist ought to have something to do with its life. The proposal that comes most readily to mind is that an organism persists if its life persists, and perishes when its life ceases and cannot be restarted: that is, when it dies. That cannot be what it takes for a corpse to persist. So the persistence conditions for living organisms seem unlike those of corpses.¹⁴

[2004: 270]

If we are persuaded, then, that an organism continues to exist if and only if its life continues, then, and evidently, the dead are not organisms. For whatever it takes for a dead thing to continue to exist, it isn't the continuation of life. Should we be persuaded?

Some of the claims here are true, others true in part, still others, I think, not true at all. Surely, first, 'out like a light' overdramatizes, if not for animals at least for plants—when an oak tree dies, does it go 'out like a light'?¹⁵ second, the essentiality of nearly all parts is odd—it may be true of most animals in nature, but clearly we can, with help, survive the loss of arms, eyes, kidneys, and on Olson's view, everything below the neck, but isn't true of plants at all; and third, it's worth pointing out that the some of these 'instructions', e.g. for growth, or reproduction, are present only in some periods of an organism's life.

What of the contrast between living and non-living things? Perhaps it's exaggerated. Artefacts and machines might be dynamic, and involve flow, as the fountain example suggests.¹⁶ More importantly, so too might be corpses. For on the brain death account, to which Olson at least implicitly subscribes, someone might be dead even while they breathe, digest food,

¹⁴Note that this seems to allow, what he elsewhere denies, that there can be temporary interruptions to life, such that being alive and being dead are not, for organisms, exhaustive conditions.

¹⁵And he later acknowledges this: 'Of course, the death of an organism is not usually instantaneous' [2004: 270].

¹⁶See here Luper [1999; 2009: 19–24].

fight infection, or support the development of a foetus.¹⁷ And there will be pressure from the other side. As Olson acknowledges, a living organism might enter a dormant state, again either naturally or, as in cryonics, with our help. Perhaps there's room for doubt whether such organisms are then alive, but if they can return to life then they're not dead, and are organisms.¹⁸ We might push this further. What is food? If it's energy-supplying molecular raw material, then perhaps petrol is food for a car. And if systems are set up so that cars become self-repairing and self-replicating, then perhaps they too will be organisms. Unless it's a merely definitional point it seems odd to suggest that organisms must contain DNA.¹⁹ All this matters. For Olson needs the alleged contrasts here in order to ground his claim that organisms disappear with death. He insists that even though there are superficial resemblances—you can't always tell by looking whether a thing is dead or alive—at the level of microstructure the differences are sudden and profound. This is, I claim, far less clear than he makes out. But suppose it were clear. Even if being alive is a quite distinctive condition, present only in organisms, and even if organisms are essentially organisms, and the lines between these and other things sharp and well-defined, it still isn't going to be obvious why we should think they are essentially alive, or why they should be unable to survive change sudden and profound.²⁰

Suppose, then, we just stick with the paradigm cases, the healthy human being on the one hand, and the dead and buried body on the other. Are these, at least, subject to radically different persistence conditions, such that we can with some legitimacy describe them as different things? Olson has made one suggestion—an organism persists so long as its life continues. Anyone wanting to allow that there can be dead organisms is under some pressure to offer another. Here's one:

For any x that is an organism at time t and any y that exists at a later time t^* , $x = y$ if and only if y 's particles at t^* are arranged as they are at t^* in large part because of the activities of x 's life at the last time between t and t^* when that life was going on.

[2004: 270]

But, says Olson, a problem with this suggestion is that it implies an animal continues to exist after death even if no more than one finger survives. For surely the particles of the finger are arranged as they are because of the activities in the animal's life at the time just prior to its demise [2004: 271]. This is a good objection. In a discussion that closely parallels Olson's, Jens Johansson takes the objection a step further. Suppose two fingers survive.

¹⁷See, for discussion of claims made by neurologist Alan Shewmon on this controversial matter, McMahan [2002: 430] and Belshaw [2009: 223–6].

¹⁸Van Inwagen suggests we think of a frozen cat as 'a living corpse' [1990: 147]. I think it is neither living, nor a corpse.

¹⁹Olson has indicated, in correspondence, that he will allow we could, in principle, construct an organism even from metal parts. But then it becomes even harder to believe that the difference between an organism and a non-organismic artefact could be one of kind, rather than degree.

²⁰There is an ambiguity here—something that is essentially alive might be alive at some, or at all of the times at which it exists. Many would agree that organisms are essentially alive in the former sense. But the Disappearance Thesis demands the latter. See Johansson [2005: 56–66] for discussion.

Then each is identical to the animal that died. And '[t]his violates the transitivity of identity' [2005: 56]. It can be taken further still. Alice dies of a heart attack in the kitchen. She was baking. The cake survives. And its particles are arranged as they are in large part because of the activities in her life at the time of death. So she survives as the cake.

But there's nothing here against post-mortem existence. Though it allegedly represents positions occupied by Michael Ayers and David Mackie,²¹ it's hard to see this account as anything other than Olson's invention. And it isn't a good account. As the cake example makes clear, it allows that an organism can be identical with an obviously quite separate artefact.

Olson later suggests the account might be amended in such a way as to insist that y is also an organism. This, if it can be done, will take care of the finger and the cake. But suppose that about the last thing Betty did before she died was to genetically modify and then hatch a hen's egg. She survives as the chicken. Now you might think she's obviously not a chicken, and Alice obviously not a cake, at least in part because they are composed of totally different matter. But is this relevant? As Olson notes, a living thing standardly undergoes 'metabolic turnover' in such a way that no long-term stability of its parts is necessary for the same thing's survival. So it would be wrong to write matter-sharing into such a thing's persistence conditions. And, in avoiding this, the above suggestion seems to be on the right lines. This misses something of importance, however. The rival to the Disappearance Thesis wants to claim that animals can continue to exist after death. After death this metabolic turnover comes to an end. Plausibly, some persistence of particles is then involved. So consider instead:

For any x that is an animal and dies at t , and any y that exists at a later time t^* ,
 $x = y$ if the particles composing y at t^* are (most of) the very same particles
 that composed x at t , and are (mostly) arranged at t^* just as they were at t .

This differs from the earlier suggestion in two key respects. First, there is explicit reference to the animal's dying at t . So it isn't a highly general account of animal persistence.²² Second, it offers only a sufficient condition of something's surviving death, and so still allows that something might be a dead animal even if contains relatively few of the original particles, or particles differently arranged. But the claim here is that if the particles that constitute the remains of an animal very closely resemble, both in number and organization, the particles that made up the animal at the time of its death, then these remains just are the animal, rather than some further

²¹[Ayers 1991: 222–5; Mackie 1999: 236–9].

²²Contrast this view, then, with one considered by Mackie, that animals 'can continue to exist, even when they are irreparably broken (that is, dead) provided that they retain enough of their parts, in a sufficiently similar state of organisation' [1999: 238]. His is a more general account, applying to both the dead and the living. Is it any the worse for that? Given the aim is only to offer a sufficient condition of persistence then perhaps not. For even granting metabolic turnover, it's hard to imagine a situation where a thing having appropriately arranged animal parts isn't that animal. Olson objects (in correspondence) that my account implies that if Socrates' particles somehow come together today and take on Socratic form, then the philosopher is again among us. That could be blocked by insisting that the particles be appropriately organized throughout, but I see no reason to block it.

thing. This is, I think, what we ordinarily believe. So the suggestion implies that a dead animal can be identical with a living animal. It avoids the finger objection. And it counters Olson's proposal that an organism persists if and only if its life continues. But, of course, it takes issue with only one component in that proposal, leaving ample room for a disjunctive account, stating, roughly, that organism x is identical to y when either x and y share in a life or when y 's particles are most of x 's particles, and are arranged as they were when x died. That isn't, perhaps, as simple or as elegant an account of a thing's persistence as you might have hoped for, but it may, for all that, be more or less right. And what it suggests, I think, is that just as a person might best be seen as a phase in the life of a human being, rather than a separate thing, so being alive is similarly a phase in the history of an organism.²³

There's one further point to note here. I believe there are dead organisms, and dead animals. But in the suggestion given above I didn't stipulate that y be an organism. Of course it is, if it's identical to x , and, as stipulated, x is an animal. Is there any need to do so? And is there any difficulty here? Olson discusses this. As I noted above, he thinks that stipulating that y be an organism might get round the finger objection. But what is an organism?

Perhaps an organism is something that once *had* a life: a dead organism is something that was once a living organism. But that would make the account useless. In order to find out whether the lone finger is identical to the original organism, we should first have to know whether it was once a living organism. That is, we should have to know which non-living things were once living things. But that is just the point at issue, or at any rate a large part of it. If we knew which non-living things were once living things at all, it would be relatively easy to say *which* living things those non-living things once were.

[2004: 271]

And once the Disappearance Thesis is dropped, it becomes, Olson thinks, 'surprisingly difficult' to say why a lone finger shouldn't be considered a dead animal [2004: 271]. This is an odd claim, supported by a somewhat obscure argument. Surely it's perfectly clear that a finger isn't an animal, dead or alive. Surely, it might then be suggested, the finger, like the detached arm, isn't a dead animal, as it is, at best, an organ, or collection of organs, rather than an organism. So even if it could be 'alive' it couldn't be alive. But is it always so clear? Our ordinary view isn't that dead animals must be altogether intact. Sometimes, a collection of organs will do. Perhaps Olson's point, then, is not that we cannot be confident that a lone finger isn't an animal, but just that there will be some cases where the animal/non-animal distinction is vague. I'll agree. Perhaps a headless body is an animal while a mere torso isn't. Attach just one or two limbs, and we won't know what to say. But it's not at all clear what problems are generated by vagueness here.

²³Though it's useful, I don't want to be taken here as altogether buying into this substance/phase distinction. But Olson does, in arguing that we are animals rather than persons. See [1997: 27–31], Wiggins [1980: 23–7], Belshaw [2009: 201–4].

Nor, I think, are these problems just for the dead animal view. Olson accepts that there are corpses. But, as I've just implied, it is going to be difficult—though unsurprisingly—to say just when the remains of an animal constitute a corpse and when they don't.²⁴ And consider a broken watch. It isn't difficult to say why a mainspring alone isn't a watch. But it is difficult to say just how many connected watch parts are needed to make up a broken watch. It would be odd, however, to suggest, because of this, that, when irreparably broken, watches cease to exist. And it is odd to propose that as there are difficulties surrounding our survival of dissection, so the solution is to insist we cannot survive death.²⁵

A final comment. There are, I am suggesting, two key contentions in Olson's argument. The first is that the persistence conditions for living things are strikingly different from those of the non-living. The second, which perhaps implies but isn't implied by the first, is that living things, as opposed to the non-living, are clearly contoured.²⁶ We might agree that there is some vagueness about whether a lump of stuff is a (so-called) dead animal. But for Olson this marks a contrast with living things, where there is no corresponding vagueness. Both this view, and my reservations about it, will become clearer in the sections that follow.

4.

An animal ceases to exist, according to Olson, when it dies. I disagree. If most of the parts are there, in the same order, without interruption, then I think the same animal continues to exist. But of course I'll agree that an animal can go out of existence. And Olson will agree that an animal can survive some degree of change. Yet we disagree about much of the fine print here. For we disagree about the brainstem.²⁷

Olson holds to one strange view explicitly. This is that the survival of the functioning brainstem is necessary for an animal's, or a human animal's, persistence.²⁸ But we need to distinguish versions of this view. Many people believe that, in fact, the brainstem is necessary for life. They think that no

²⁴It is just this difficulty that in large part motivates corpse eliminativism. See Merricks [2001: 32–5].

²⁵These dissection difficulties affect, on my view, the living and the dead. Take a dead body or corpse. Remove bits. There comes a time, but just when is indeterminate, such that you no longer have a body or corpse. Still what you have are animal remains. Take a living animal. Under hospital conditions, with life support machines to hand, remove bits. There comes a time, but it is similarly indeterminate, when you no longer have a living animal. Still, what you have are living, or 'living' animal parts. Olson will, of course, utterly reject this. He will say the same living animal persists as long as the same Lockean life persists. But won't that also be subject to vagueness? Though this links with §5 below there isn't space to pursue this in detail [137–40].

²⁶On this point, and in this discussion more generally, Olson's position is close to van Inwagen's.

²⁷It's probably worth making some comment on the relation between the argument of these two sections and that of Chapter 4 of *What Are We?* Through an overall dispassionate appraisal of various answers to the title question, Olson makes evident that he very much favours the animal view over the brain view. But of course the brain view is the view that we are brains rather than animals. The somewhat contrasting view that I think can be fairly attributed to Olson is that we are animals and that human animals can be pared down to a mere brainstem. I might make a further comment here. While animalism generally, and the Disappearance Thesis in particular, are both much discussed elsewhere, it is in exploring the roles of different parts of the brain that Olson's contribution is most distinctive.

²⁸[1997: 140]. And see the preceding discussion [132–5]. Of course, many animals are brainless. The focus, in this and the following section, is on higher animals generally, and human animals in particular. However, it may be that Olson needs there to be—something I doubt he can have—some analogous organizing and

functional equivalent is, as yet, available. Suppose they are persuaded to accept Olson's point; animals disappear when they die. Then they will accept also a version of this view. But Olson believes, also, that neither the best imaginable artificial stem nor the closest matching natural stem will keep an animal in existence. Without the original stem, operating throughout, an animal ceases to be. It's here that his view is strange. He asks us to:

Imagine that surgeons destroy your brainstem and immediately replace it with a perfect duplicate. The result would be a human being who was both psychologically and biologically exactly like you, except for the scars. Isn't it evident that he would be you, and hence that you could survive the replacement of your brainstem? And not only because he would be psychologically continuous with you, with plenty of physical continuity thrown in for good measure. He also seems to be the same animal as you. It doesn't seem that we necessarily kill an animal by destroying and replacing its brainstem. The same Lockean life continues without interruption. No lifeless corpse results. Doesn't this show that my account of what it takes for an animal to persist is wrong?

[140]

Unsurprisingly, it's claimed to show nothing of the kind. Take out the brainstem, and even if it's straightaway replaced, with normal service then resumed, there is, according to Olson, a gap in the biological life. Given that gap, the animal has ceased to exist. No brainstem replacement, in one and the same animal, is possible.

This is an odd argument. Suppose you think that an animal ceases to exist when it dies. Suppose you think, as well, that an animal dies when the critical life functions first fail to operate, and not just when this failure is irreversible. And suppose you think, further, that no thing can have two beginnings of existence. All of these claims are controversial. But accept them and still the argument doesn't go through. For you'll still need to be persuaded that a brainstem replacement necessitates some gap in the performance of the life-functions and at least a very short period, perhaps no more than 'a thousandth of a second' of, as Olson puts it, 'metabolic anarchy' [140]. You'll need to be persuaded, that is, that what we've been asked to imagine—an immediate, interruptionless replacement—is just not possible. But there needn't be a gap. We're in the sci-fi world here, and in my version of that world the scientists can hook you up to some clunking hospital-size brainstem machine before detaching, excising, destroying and then replacing, with a more manageable model, your own stem. So there is no loss of function, even for a thousandth of a second. So the animal doesn't die, and doesn't cease to exist.

There's a further point. Olson's argument here is concerned with brainstem replacements. They allegedly bring about the non-existence of

at least the original animal. But this is a red herring. For the argument appears to rule out, as well, certain sorts of brainstem repair.²⁹ It suggests that scientists can't remove your faulty brainstem, repair it, and then replace it. Nor can they simply unhook your brainstem and then rehook it just a thousandth of a second later. All the work in the argument is done by disallowing gaps in existence, and none at all by the identity, or otherwise, of the brainstem.

But then the argument shifts gear and appeal to the identity of the brainstem kicks in. Even if the replacement is gradual, so that there is no gap in either consciousness or in other life-functions, still the animal won't survive, at least if the replacement stem is made of some inorganic material: 'For something with an inorganic brainstem, I argued, could not be an animal at all' [142]. And now if this is right, then Olson's claims are better supported. For if your stem is even gradually replaced with something inorganic then there is, at least at or near the end of that process, no animal present, and so, assuming you are an animal, you don't survive. And if you are even for a moment hooked up to a stem machine, while your own stem is repaired, then, for that moment, you cease to exist. And if there cannot be two beginnings of existence then replacing your own stem is thereafter a waste of a time.

But is it right? Remember the non-composite view. The thought here is that artificial parts, even though permanently embedded, are no more 'caught up in your metabolism' than is the dialysis machine of the kidney patient. I might accept this. I might accept, that is, that a machine cannot really be part of an animal. So there is no animal composed of natural parts and an artificial stem. But even so, Olson's conclusion is far from established. That this artificial stem is no part of an animal doesn't at all show there is no animal present. That my pacemaker is no part of an animal doesn't show that I am not now a living animal. And even acknowledging the difference between the pacemaker and the stem—the latter regulates the functioning of the organism as a whole, while the former merely prompts the heart—it is still far from clear that there is anything other than a practical difficulty in sustaining an animal with an artificial stem. There is a response here, but it isn't clearly successful. The response is to insist on the difference between a self-regulating though mechanically assisted animal—the one with the pacemaker—and a mechanically-regulated collection of mechanical and animal parts—the amalgam of an otherwise intact body with the artificial stem. But this difference is significant only if we allow, without further argument, a jump from a very plausible position—a living organism is a complex regulated system, and not just a collection of parts—to one much less plausible—a living organism has to be self-regulating, or regulated from within. That might seem plausible, if you think of the non-self-regulating as wholly and not altogether satisfactorily controlled from without, as when someone brain-dead is ventilated for organ donation purposes.³⁰ But if you allow non-self-regulation to include the imaginary

²⁹I say 'appears'. But see §5 below.

³⁰Although as noted above (n. 17) this standard view of the condition of the brain-dead is increasingly contested.

brainstem replacement, with no gap in functioning, and no discernible performance differences—this thing looks like, acts like and claims to be Tom—then its plausibility falls away.

There are further cases to consider, curiously neglected in Olson's discussion. Imagine the replacement is seamless, so that there is no loss of life functions, and the new stem is organic. Let's suppose it's taken from an animal of the same biological kind, or perhaps even from the animal's twin. In one version the replacement occurs slowly, part by part, so that the animal is always supported by one virtually complete organic stem. In the other the second stem is hooked up alongside the first so that for a short time the animal is doubly supported, after which the first stem is removed.

What should we say is happening here? Of course, I have no problem in thinking that provided the operation goes well, the same living animal will survive throughout. But what will Olson think? He might think that here, too, we have merely a collection of animal parts. For given the facts about the ongoing potential rejection of alien organs, this stem too will be not much more 'caught up in the metabolic processes going on' [135] in the animal, than will be a mechanical replacement. Setting this problem aside, what options remain? It might be said that a) you do here survive the operation, or b) there is a new animal present, one that didn't previously exist, or c) the identity of the animal is determined by the identity of the replacement brainstem.

Could Olson agree that you do survive in this case? It is unclear. Even though he mostly seems to say that your original brainstem is necessary for your survival, the suggestion that closes the discussion seems to be only that some or other natural stem is needed. It may be that this is his considered view. But, as will soon emerge, there are reasons to doubt this and to opt instead for c).

In sum, although the claim that some sort of brainstem is necessary for life is, in higher animals, reasonably plausible, less so are the claims that this stem must be organic and that the stem determines identity. But suppose these claims are in place, and are defensible. Then there are seemingly clear answers to whether a thing is a living animal, and to which particular animal it is. And, further, there will appear to be support for the one-animal view. This assumes, of course, that it will be clear whether or not the stem is alive, just which stem it is, and that stems are not themselves divisible. None of this, however, has any bearing on plant life, or on the claim that organisms generally disappear when they die.

5.

A further strange view is never, so far as I can tell, explicitly stated. But it is strongly implied by much that has been said. This is that the functioning brainstem is sufficient for an animal's survival. No further parts are needed.

Why think this? Certainly, what is necessary for a thing's survival will be at least a part of what is sufficient for its survival. So if, as Olson apparently believes, the brainstem is necessary for an animal's continuing to exist, then

if anything—any collection of organs—is sufficient, the brainstem will figure there. But now only the brainstem is necessary. All further parts are expendable. Take any of them, any other organ you want, and it will be clear that the animal can survive without that part. And so the brainstem is sufficient for an animal's survival.

There are two problems here. The first is about expendable parts. Some parts can be lost, and not replaced, without issuing a threat to life. Others are such that if they're not replaced, or their function in some way sustained, then we die. Perhaps it's true that we cannot live without a brainstem, and true also that, at least currently, the brainstem cannot be substituted by machines. So at least a brainstem is necessary. But this argument shows at most that a brainstem is necessary for life. So far as existence goes this organ looks to be on a par with any others. The organism can survive without it.

Suppose we do focus just on life. There's a second problem. Even supposing the brainstem is uniquely necessary for life, there is still no reason to suppose it sufficient. For even if every other part of the animal is individually expendable it doesn't follow that they are collectively expendable. So even if a living animal can be pared down to a considerable degree, it doesn't follow it can be pared right down to just the brainstem. The point here is not that this degree of paring down threatens life—let's allow that brainstems, like hearts, kidneys, fingers can be sustained on machines—but rather that it threatens the existence of the animal or organism. For a living brainstem is no more a living organism than is a living kidney.

Here Olson may disagree. He may think that organism-sustaining paring down can plainly occur, and that there is no clear limit to how far it can occur, short of the brainstem. He does think, as we've seen, that you could be pared down to your head and yet still survive, still be 'a debilitated human animal', a 'living organism' [133]. But, given the lack of emphasis on consciousness, it's not clear how the differences between a head, a whole brain, and the stem alone can be of any relevance. So even if he isn't explicit on this point, there are reasons for supposing that he does hold the stem to be sufficient for survival.³¹

There are countervailing reasons and, first, need for a clarification. Could Olson think that your functioning brainstem is an organism without thinking that it's you? This might be denied on the grounds that paring down cannot affect the identity of the organism concerned. But should we think that? A statue can be pared down, and remain a statue throughout, but after a certain stage it will have been turned into a different statue. And Olson believes that while an organism's organs are not themselves organisms, these organs contain cells that are organisms. So presumably someone could engage in radical but life-sustaining paring down the result of which is an organism—a solitary cell—with which you are not identical. Yet, unlike any single cell, the stem is necessary for your survival. So it may be that the stem just is a pared down version of the original organism, and

³¹Yet in correspondence Olson has denied, though as he says, without confidence, that we might be pared down this far.

so is you. The countervailing reasons fall out of this. Olson has insisted that an organism displays metabolic activity, has a complex structure, a teleology, and so on. Does the stem alone fit the bill? It needs energy but doesn't itself digest food. It self-regulates but cannot reproduce. Perhaps it isn't an organism after all. But then, on similar grounds, neither is the head.

Suppose Olson does believe that the survival of your brainstem is sufficient for your survival. Then we need to revisit the material of the previous section. Begin with brainstem repair. I said that on Olson's view about gaps your existence would be compromised. If the body and the stem are disconnected, even for a thousandth of a second, then you cease to exist. But if the brainstem is you then this isn't right. They take out the stem, do the repairs, replace it, maintaining its functioning throughout. You survive, even if functioning in the rest of your body is lost during the operation. But if functioning in the stem itself is lost, even for moment, you cease to exist, no matter what the state of the body. And consider now the different versions of seamless replacement. In one the new stem is inserted piecemeal, in the second the replacement is wholesale. If the identity of the brainstem determines the identity of the animal then you survive in neither case. But in the first of these no one survives, and plausibly a new animal comes into existence, while in the second someone does. If that stem was in your twin's head, then he survives. This is odd. I assume that the particularities of the brainstem, unlike those of the brain as a whole, needn't have any evident effect on the body in which it is housed. And in both versions of this last case there is, throughout, no loss of consciousness or integrated life functions. The suggestion that one living animal should cease to exist, either gradually or in an instant, and—even though there are no discernible differences in appearance or behaviour or beliefs—be replaced by another, is somewhat unmotivated.

One final point. Suppose you are pared down to a mere brainstem. I deny that this is an animal. If you are an animal, then this stem isn't you. Suppose, instead, you are pared down to a whole brain. Again, I deny this is an animal. But I think it may be you. For I'm not yet persuaded that you are an animal. If Tim's head survives, and is hooked to machines in such a way that it can react to input, provide decipherable output, and does this without too much evident distress, then I'm inclined to say that the psychology continues, and that Tim survives. But a living head is an integrated collection of organs, and neither an organism, nor an animal.³²

6.

The view that the remains of animals are not themselves animals will, as Olson acknowledges, seem far-fetched. But is it? He suggests not. For, 'a ghost town is not a town, a dry lake is not a lake, a tin soldier is not a

³²Olson might appear to have two sympathizers here. Both van Inwagen [1990: 169–81] and more recently and more surprisingly Parfit [2008: 200–2] claim to support animalism and this paring down view. But they both emphasize consciousness. So while they may well identify conditions under which you survive, they're further from Olson's account than might first appear.

soldier, and a dead person is not a person' [136]. It might be tempting to argue about these examples, perhaps in different ways, and perhaps noting in the last that 'person' is rather more loaded than would be, say, 'cat'. And then it might be tempting, after further reflection, to think the issues here are merely verbal. A ghost town is certainly a town *qua* collection of buildings, and certainly not a town *qua* human community. A dry lake is a sizeable depression where water used to be, even if there is no water there at the moment. And a so-called dead animal is closely related, in uncontroversial ways, to a once living animal, even if between the two there are undoubtedly a number of important differences, and even if the moment of death brings with it some undeniable intrinsic change. Indeed, it's hard to see how the disputants can be at odds about any of the more basic facts on which this animal question might seem to depend. But then it's going to be difficult to resist the suspicion that there is no genuine issue here at all, and nothing more than a fruitless disagreement about what we should call this thing.

Suppose there is indeed such a suspicion. Olson's opponents might begin to think that, ultimately trivial or not, they can win the argument. For certainly we almost all do speak, and for many centuries have spoken, as if there are, genuinely, dead animals, and as if the very same things continue to exist over the life/death divide. So if the debate is simply about the proper use of ordinary terms, Olson may well be wrong-footed.³³

But is this all there is to it? Olson evidently thinks not. For 'I suspect that organisms do cease to exist when they die' [2004: 269]. Now to some this will appear puzzling. How can there be any real mystery about this, any room for a position that doesn't just fall out from the relevant ordinary level facts about objects—when they die animals don't leave a vacuum, or immediately change shape—and about the everyday use of ordinary terms—we certainly mostly speak as if there are, uncontroversially, dead animals—all of which are straightforwardly accessible to us? Olson seems to believe there are further facts, deeper and somewhat hidden, that are consonant with but not wholly implied by facts of this familiar kind. And they are the ones that count.³⁴

This is evidenced elsewhere. Consider, just for a moment, the central animalist thesis. Are we persons, or animals? Do we track our psychologies, or our organisms? In arguing for animalism Olson insists that '[t]here *must* be some sort of thing that we are. If there is anything sitting in your chair, it must have some basic properties or other'.³⁵ But a friend of relative identity might doubt this, thinking that some properties are basic to the thing *qua* person, others to the thing *qua* animal, and thinking, as well, that beyond

³³Feldman makes bullish appeals to ordinary language about dead animals [1992: 93–5]. Olson [forthcoming] and Johansson [2005: 63] are unimpressed.

³⁴My scepticism about there being in this way further facts resembles Parfit's. See his [2008: 202–3] for a recent statement. Interestingly it resembles too some of the dialectic for eliminativism. Merricks supposes we play some Sorites game with a seeming David statue: 'We annihilate one of the atoms arranged David-wise and ask God whether *David* still exists. God replies that once we know a particular atom has been annihilated, and the others left in place, *we know everything there is to know*. There is no further fact as to whether *David* persisted through the episode, for *David* was never there to begin with' [2001: 34–5]. Do I want to agree there are no statues? I have no real argument with global eliminativism, only a suspicion that the statues/no statues debate is itself empty. My argument starts when it becomes piecemeal, and it's claimed that organisms, or animals, or human beings, are different.

³⁵[2003: 322–3]. See also his [2007: 13–14].

noting the various ground level facts involved, and our varying sets of interests and concerns, there is little more to say. Again, though, Olson, and metaphysicians more generally, seem to think there are further and deeper facts of the matter to be uncovered.³⁶

One important component here is the belief in the ultimate availability of clear and hard-edged accounts of what at least at first seem to be complex and puzzling issues.³⁷ Everyone thinks there is something that we are, but not everyone thinks that what we are is fundamentally always and everywhere the same. Everyone thinks there are organisms, but not everyone thinks there is a firm divide between organisms and other things. Nor does everyone think the persistence of animals as corpses depends on whether ‘an acceptable account of animal identity’ [2004: 271] is available, and permits this. For many, that is, there is no difficulty in thinking that we can access large numbers of clear and incontrovertible facts, even while there is no overall matrix or structure into which such facts can be fitted. But for those not so disposed, for those who ‘enjoy metaphysics’ [2003: 323] it may be that Olson’s views are the best there are. If there really is just a single sort of thing that we are, it may be that we are animals. If there has to be a sharp line between organisms and other things, it may be we should believe that organisms cease to exist with death.³⁸ If there’s a clear end point to paring down, it may be with the brainstem. And so on. But, as is perhaps evident in what has passed, I am altogether sceptical about such claims.³⁹ ‘Animal’ is an everyday term with familiar and well-established uses. It is far clearer that there are dead animals than that we need a theory of the organism. And it is, I think, far clearer that the detached but ‘living’ head should strike us as rather horrible than that it either is or is not an animal.⁴⁰

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³⁶See Olson [2002: final paragraph]: ‘Which view of personal identity one finds attractive is likely to depend on one’s general metaphysical beliefs’.

³⁷The Biological Approach ... can provide a unified account of the persistence conditions of all living organisms’ [1997: 123].

³⁸For some different, messier, and perhaps more biologically informed views of organisms see Wilson [2000], Luper [2009: 11–18] and Wilson [unpublished]. And for worries that Olson won’t be able to maintain his view that ‘ship’ is vague in a way that ‘animal’ is not, see Zimmerman [2008].

³⁹For more on this see Belshaw [2009: 197–218].

⁴⁰My thanks to Eric Olson, Carolyn Price, and Andrew Ward for their detailed and helpful comments on ancestors of this paper. My thanks also to two referees for this journal.

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