

Animals, Brainstems, and Persistence

A Response to Olson

I. Introduction

In *The Human Animal* (1997), Eric Olson argues that we persist just in case our capacity to direct our life-sustaining functions—located in the brainstem—remains intact (pp. 89, 134, 140). That is, our persistence conditions are our *animal* persistence conditions. Olson calls this the Biological Approach; in contrast, the Psychological Approach holds that psychological relations of some sort are necessary and/or sufficient for persistence, a view he rejects (p. 17).¹

In this paper, I will explain Olson's Biological Approach and then argue that it is problematic given the results of two hypothetical cases. In Case (1), I imagine that if I were a brainstem in a vat I would retain my life-sustaining functions and therefore be said to persist by Olson's criteria; however, I will argue that I would *not* be an animal, which contradicts Olson's overall view of what we are. In Case (2) I claim that if I were frozen alive, while I would *not* persist according to Olson's criteria, my potential for life-sustaining functions would remain intact; this is problematic for his approach because I *would* persist upon being thawed.

II. Olson's View of What We Are

To understand Olson's view, it is useful to see what he thinks is wrong with the Psychological Approach. Firstly, it relies upon the notion that a person is what David Wiggins calls a "substance concept", where in fact Olson thinks a person is a "phase sortal". Secondly, it entails that we are not animals (p. 94), and thus that we were never fetuses (p. 80). Showing how the Biological Approach avoids these problems will illuminate aspects of Olson's view that are relevant to my two cases.

¹ For examples of the Psychological Approach, see Sydney Shoemaker (1970) and Derek Parfit (1984).

Firstly, Olson rejects Wiggins' claim that persons are substance concepts, or, roughly, distinct ontological kinds.² For Olson, "*person* [in the psychological sense] is not a substance concept, but a phase sort[al] like athlete" (p. 30). In support of this view, he states there may be former people (i.e., human vegetables) and potential people (i.e., human fetuses), or people that are not living things in the biological sense, such as angels or Cartesian egos (p. 30).

I think Olson means that if there can be potential and former persons, then person is a phase that human animals go through; and if non-biological persons exist, it is supposed to follow that "person" is not an ontological kind since many kinds of beings (non-biological, biological, etc.) would have person-phases. Personhood is a phase we go through in our animal careers (and, conceivably, that other types of beings could go through). There are many such phases—friend, athlete, student—which we may go through. The person phase of our lives is just one such phase, albeit one that matters very much to us.³ But "person" is not what we are ontologically. We are biological organisms who "persist under the same conditions as many non-people, such as human embryos and human vegetables", and even aardvarks and oysters: "Our substance concept—what we most fundamentally are—is not person, but *Homo sapiens* or *animal* or *living organism*" (p. 30). Thus, "animal" is our ontological kind.

Secondly, the Psychological Approach entails that we are *not essentially animals*: "Not only are we not essentially animals; we are not living organisms at all, even contingently" (p. 94). Olson asks us to consider the traditional transplant case, in which your cerebrum is removed from your body and placed in another body. Intuition supposedly tells you that you go where your cerebrum goes, and that the body left behind is not essential to you.⁴ This implies that we

² See Wiggins 1967, 1980.

³ I should note that Olson does *not* make claims about what matters in identity (p. 4). Putting the moral implications aside, he only claims that "all *human* people are animals" from which their persistence conditions follow (p. 17).

⁴ Regarding such cases, Olson says "it is hard to derive a coherent view of personal identity from" them (pp. 51-52).

are not essentially animals, again contradicting our rudimentary belief (according to Olson) that we are *at least* animals. Along the same lines, Olson considers the case where you lapse into a persistent vegetative state. Again, intuition may tell us that that is the end of *you*. Yet, a biological organism remains (p. 94), and the Psychological Approach cannot account for this because it holds that we are fundamentally psychological beings.

Furthermore, as fetuses we were human animals with no psychological status whatsoever. It follows that if *we* are essentially psychological beings [i.e., *persons*], then *we* were never fetuses: “You, the person, now share your space and your matter with a human animal, and it is the animal, *not you*, that started out as a fetus” (p. 80, my italics). Olson does not infer that supporters of psychological theories of persistence claim that the *body* which actualizes a person’s psychology was never a fetus; the claim is that *you*, the essentially psychological person, were never a fetus. This apparently contradicts our commonly held belief that we were all fetuses at one point. In contrast, there is no fetus problem for the Biological Approach, because it holds that we are essentially biological, not psychological, organisms. We start out as fetuses, usually go through a psychological—or personal—phase, and someday we may lose these psychological attributes, e.g., if we unfortunately lapse into a persistent vegetative state.

The Psychological Approach might be defended by arguing that our psychological attributes are *constituted* by our biological attributes (p. 96). On this view, our psychology is physically reducible to our biology (i.e., it is a physicalist view), yet persons are distinct ontological entities—psychological kinds—causally formed by their animal basis. But Olson thinks the Constitution View is unhelpful since it “does not alter the fact that the person and the animal are now composed of the same atoms arranged in the same way, and thus are perfect intrinsic duplicates of one another” (p. 101). So, how can the *same* molecular arrangement

produce two essentially different beings? Olson thinks it cannot, and hence the constitution view does not solve the problem of denying our biological essence.⁵ Therefore, we must abandon the Psychological Approach and recognize that “a human animal has the persistence conditions it has *by virtue of* being a human animal [...] and not by virtue of being a person or a human body or anything else” (p. 18), making our persistence conditions similar to other animals.

In effect, Olson reduces all questions of personal identity to biology.⁶ We may wonder if Olson’s thesis concerns *personal* identity.⁷ Recall that for Olson we are not essentially persons, but we do usually go through a phase in which we are persons. In asking what makes us persist over time, he addresses what makes us persist *as* animals. So, “a human person is anyone who relates to a human animal in the way you relate to that animal [...] no matter what our ultimate nature and our persistence conditions might be” (p. 125). In our case, our ultimate nature is our animal nature. But what *does* it take for a human animal, *qua* animal, to persist?

Olson thinks an organism or animal persists just in case its capacity to direct those vital functions that keep it biologically alive is not disrupted (pp. 89, 134, 140); this capacity resides in the brainstem (p. 140). There is nothing subjective about when you and I came into being—it is only an empirical question. And we go out of existence only when our biological life expires, so we can persist without psychological features (p. 110). For instance, Olson imagines a situation in which your head is detached from your body. He claims your detached head is a

⁵ Olson’s denial of the Constitution View contradicts, *prima facie*, his consent to the possibility of dual-aspect theory, where two kinds of phenomena are constituted by one underlying substance (p. 126). For an example of the constitution view, see Lynne Rudder Baker (2000); she addresses Olson’s arguments on pp. 191-7 and pp. 224-8.

⁶ Biology is the causal basis of all psychological features (p. 4), yet psychological features, and hence linguistic abilities, play *no* role in our persistence conditions for Olson. Therefore, his use of “I” and “we” is misleading. Olson thinks advocates of the Psychological Approach, in saying “we” and “I”, implicitly deny our animal nature; however, in discussing his view, Olson assumes that “we” and “I” (essentially psychological phenomena) get at our essentially biological nature.⁶ He takes full advantage of the ontological reach of these pronouns while denying that they show anything important for his opponents. For Olson’s discussion of the personal pronoun “I”, see pp. 89-90.

⁷ It is curious that Olson subtitles his book “Personal Identity without Psychology”. It seems psychology is necessary for the concept “person”/“personal”. So, he should not suggest that his theory is of “personal” identity.

living animal, despite the fact that it cannot remain alive for long without assistance; attached to the appropriate machine, your “head would be able to regulate its metabolic rate and wake-sleep cycle”, and it retains its autonomic nervous system (p. 133). The rest of your body is not a living animal, mainly because any system of life-support could not be controlled by the body (since the head is the only thing that can do this) (p. 135). Thus, Olson places the essence of you, your animal essence, in your head because your head contains your *brainstem*, the seat of direction of all life-functions.⁸ But this is problematic, as I will argue.

III. Two Problematic Cases for Olson’s View

Case (1) *Brainstem in a Vat (BSIV)*. Am I essentially my brainstem? I think so, given Olson’s view that my animal persistence conditions reside in my brainstem (pp. 140-142). As a result, his view contains a contradiction: my *animal* persistence conditions reside completely in my brainstem, yet on Olson’s own view of animal life I think that my brainstem by itself is not an animal.

Olson claims that if my brainstem were removed and replaced with another brainstem—even if the operation took just a thousandth of a second and I was not aware of the replacement—I would perish because I would not be the same animal (p. 141). Even in a similar case where my brainstem is gradually replaced by an inorganic replacement, such that there is never a period when my life-sustaining functions are left without a coordinating organ, I could not survive (pp. 141-2). This is because I would not be a biological organism, and therefore not a human animal. In contrast, I do persist if I have any other organ replaced, because none of the other organs are involved in directing vital functions.

⁸ Derek Parfit takes his version of the Psychological Approach to the point where the self or ‘I’ dissolves in a sea of psychological relations (see Parfit 1984, Part III). Similarly, Olson pushes his view to the point where the notion of an individual self reduces to a biological organism—there is no necessary self, just an animal. Elsewhere, Olson explicitly argues that we should abandon *all* talk of selves (see Olson 1998).

If I go where my brainstem goes, then it is conceivable that I could survive if scientists removed my brainstem and kept it functioning in a nutrient vat. But it seems that if I were a BSIV I could *not* legitimately be called an animal, and so I would not persist *as* a human animal, the very thing I am according to Olson! My *animal* persistence conditions are found in my brainstem, but is my brainstem an animal?—No, because I cannot subtract all of my actual bodily functions which my brainstem coordinates and still be an animal.

Not to understate the contradiction, on Olson's view what makes me a human animal is my brainstem, yet as a BSIV I would *not* be an animal on Olson's description of animal life. Olson thinks an animal is a living, metabolizing, complex, self-functioning, and future-oriented being (pp. 126-131). In this scenario, I agree that my BSIV meets the first three criteria (living, metabolizing, and complex) but I doubt that it fulfills the latter two. It is not self-functioning because it requires an appropriate support system (the vat, etc.). Note that Olson thinks that my bare brainstem—"bare" meaning *not* in a vat as in my imagined scenario—would persist for a few seconds, and so I would survive for those few seconds (pp. 140-42). To keep persisting beyond that requires external support, which could be provided by the vat; but then my brainstem would not function by itself and so would not be an animal on Olson's criteria.

Olson might respond that in his bare brainstem scenario the brainstem *is* self-functioning, and so meets that criterion of animal persistence. I agree, but it is still counter-intuitive to say that a brainstem by itself is an animal. Regardless of Olson's possible response, my point is that there is a possible situation—the BSIV scenario—in which the organ Olson privileges so much in our animal identity persists yet could not legitimately be considered an animal.

Furthermore, I question whether my BSIV would be future-oriented. This criticism applies equally well to the BSIV case as to the bare brainstem situation. It seems the brainstem is

only future-oriented insofar as it actually directs the functions it is charged with coordinating. For the brainstem does not do anything for its own future, but for the future of the animal *in toto*. An animal is more than just a capacity to direct its vital functions: it also includes the directing of the actual functions necessary to sustain life, such as heartbeat, breathing, digestion, etc. So I, a human animal, do not persist if my brainstem is kept alive in a vat, and therefore it is contradictory to hold that my brainstem alone is a persisting *animal*. A brainstem is just a component of an animal.

Given the apparent contradiction between his claim that human animals are essentially their brainstems (pp. 140-142) and his overall view of the nature of animals (pp. 126-131), I think Olson should not privilege the brainstem so heavily in his theory of persistence. By emphasizing the total animal—the capacity to direct vital-functions (i.e., the brainstem) plus the actual vital-functions found in the appropriate parts of the rest of the body—he could formulate a more robust set of persistence criteria.

Case (2) *Frozen Alive*. Recall that for Olson a human animal persists just in case its “capacity to direct” those vital functions that keep it biologically alive persists (p. 141). By “capacity” I do not think Olson means *potential* to direct vital functions, but the *actual* ability to direct vital functions. This is because the vital functions require active, continual direction. It is not a latent potentiality that an organism has to direct vital functions, but an active ability, since the vital functions must be active in order to provide their necessary function to the organism. So by “capacity to direct” Olson means an active power or ability possessed by a living organism—not a power that it could potentially have in actuality, but a power that it is actually using.

Armed with this distinction, suppose I am instantaneously frozen alive; I’m envisioning something similar to cryogenic freezing performed on me while I am living. Imagine that every

part of my body is completely frozen in a fraction of a second, such that the exact states of all my current activities—neuron activity, heartbeat, respiration, metabolism—are preserved simultaneously. According to Olson’s persistence criteria, I would *not* persist because my capacity to direct my vital functions would be disrupted. I claim that my potential to have life-sustaining functions remains intact, such that I could persist as the same human animal if I were thawed.

In this case, I agree with Olson that my capacity—*taken as an actually used ability*—to direct my vital functions is disrupted, and I am not alive in the normal sense of “alive”. But I do persist because my capacity—*taken as a potentiality for activity*—to direct my vital functions persists! I do not think Olson could deny that I would be the same animal upon being thawed from my deep-freeze status, since I would have the exact same brainstem (the seat of vital functions) as Olson requires. All that happens in this scenario is that my persistence is *temporarily suspended*; when the freezing process is reversed, every part of my body is simultaneously thawed. Assuming I am thawed before my frozen body is damaged, when I come out of deep-freeze my vital functions will persist without disruption. I would be the same animal; that is, I would be the same biological organism, but with a temporal gap in my persistence.

Based on this case, I suggest Olson at least needs to clarify his use of “capacity”. Though it is a semantic point, it is important lest his view remain open to counterexamples such as this. Olson should say that a human animal persists iff its *potential* to direct those vital functions that keep it biologically alive is not disrupted. Here Olson might object that I have not read his criteria (specifically, “capacity to direct”) in the full context of his argument. It is true that he phrases it in many different ways. For example, he gives a second, more technical definition of animal persistence: “If x is an animal at t and y exists at t^* , $x = y$ if and only if the vital functions

that y has at t^* are causally continuous in the appropriate way with those that x has at t " (p. 135). The problem here is that he does not specify what the "appropriate way" is nor does he explain what "causally continuous" means? But, my frozen self does seem to be causally continuous to some degree with my pre-frozen and post-frozen selves.

Olson also gives a third version of his account of what it means for animals to persist. He states that an animal survives as long as its vital functions are not *irreversibly stopped* (p. 89). It seems that in Case (2) my vital functions are not irreversibly stopped, for my frozen status can easily be reversed. If it is true that Olson would hold fast to this third version in resisting Case (2), then he at least needs to give one unified account of animal persistence conditions and clearly specify what it means for an animal to have the capacity to direct its vital functions.

IV. Conclusion

In sum, I have argued that Olson's account of our animal persistence conditions is problematic. In Case (2) I pointed out a scenario in which I have the potential to persist, even though my "capacity" (as Olson uses it) to direct my vital functions ceases. So, Olson should emphasize the *potential* to direct vital functions. Among other things, this would solve what David Hershenov (2002) calls "the embryo problem" that Olson's view faces: we were never embryos because at that stage we had no capacity to direct our vital functions. But we did have the potential to direct our vital functions. In case (1), I argued that Olson's claim that we are essentially our brainstems contradicts his overall claim that we are *animals*. It seems to me that a brainstem *is not* an animal, but part of an animal.⁹

⁹ I would like to thank my fellow graduate students at the University of Nebraska-Lincoln for help in revising this paper at the Graduate Student Colloquium.

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