

Too Many Animals, Too Many Thinkers

Kristin Seemuth Whaley

DRAFT

Abstract:

Animalism, the thesis that each of us is a human animal, is a prominent materialist account of what we are. Animalism is often motivated by an attractive line of reasoning, the Thinking Animal Argument. And, independently, animalism has been challenged by appeals to a metaphysical puzzle, the problem of the many. In this paper, I draw attention to the relationship between the Thinking Animal Argument and the problem of the many. I further argue that in virtue of this relationship, animalists are left in an unfortunate position: animalists cannot hold onto their most successful argument without undermining animalism itself.

1 Introduction

Kelly sits in a chair at her kitchen table, drinking a cup of coffee. She thinks about how much she hates mornings and how much she loves coffee. Looking up, she sees an animal in the mirror, but she has no guests and no pets. She's alone in her kitchen, alone with her thoughts. When she sees the reflection of the human animal sitting in her chair, holding her cup of coffee, she appears to see *herself*. These are familiar experiences and familiar items, we see many of them in our own kitchens when we sit at our tables, drinking coffee, and hating mornings.

Let's focus on Kelly and try to determine what kind of being she is. Kelly is a thinking thing, a coffee-drinker, and a morning-hater. She is the *only* thinking thing sitting in her chair drinking coffee and hating mornings. There is also an animal sitting in Kelly's chair, a human animal – a member of the species *Homo sapiens* – with a functioning nervous system, digestive system, and brain. If so, it is completely ordinary to hold that this human animal sitting in Kelly's chair is a thinking thing. After all, we ordinarily believe that human animals with functioning brains are thinking. If Kelly is sitting in her chair, thinking, and there is a human animal sitting in her chair, thinking, then the natural conclusion is that Kelly is the very coffee-drinking, morning-hating human animal sitting in her chair. It would be completely bizarre if there were more than one coffee-drinking morning-hater in Kelly's chair; surely there aren't *two* of those there. In the interest of preserving the judgment that there is a single thinker in Kelly's chair, we are prompted to conclude that Kelly is numerically identical to the very human animal she sees in the mirror.

Those who accept this conclusion endorse *animalism*, the view that each of us is a human animal. Animalism is motivated by the reasoning we just saw: animals are thinking things, we are thinking things, we don't find two thinkers for every human animal, so we, including Kelly, must be those animals. We find this reasoning in the so-called *Thinking Animal Argument* (TAA). Such an argument strikes us as attractive and plausible; its premises seem *obvious*. The (TAA), attractive though it may seem, is weakened when we consider the implications of a notorious puzzle in metaphysics: the *problem of the many*. Animalists do not uniquely bear the burden of trying to respond to the problem of the

many, but the animalists' burden is especially weighty, for they must not only resolve the problem but also retain motivation for animalism itself. In this paper I will demonstrate that the problem of the many requires animalists to make concessions that undermine the defense of their account. Specifically, I will advance a dilemma that leaves the animalist in an unfortunate position: either animalism cannot be motivated by its most successful argument, or animalism is false.

Now much has been said about both the problem of the many as a general metaphysical puzzle and its implications for personal ontological accounts. And much, too, has been said about the Thinking Animal Argument. What has not been sufficiently addressed is the nature of the relationship between the puzzle and the argument. As I will argue, the puzzle poses a unique threat for animalists who appeal to the (TAA). Although the problem of the many appears to threaten all materialist ontologies, its threat to animalism targets not only the animalist ontology but also the motivation for animalism itself. As a result, my argument likewise targets this motivation. Animalists must solve the problem of the many with an eye to how the solution affects the (TAA), and some solutions come at the expense of their best argument. In order to simultaneously resolve the puzzle and motivate their view, animalists might need to look elsewhere for an argument for animalism.

In §2 and §3, I show how the problem of the many threatens animalism and what the animalist must do to solve the puzzle. I will present the dilemma for the animalist in §4; if the animalist embraces a promising solution, then either animalism is false or its motivation is question begging. But without a solution, the animalist can no longer appeal to the most successful argument for animalism: the (TAA). While this does not suffice to show that animalism is false, it demonstrates the tension between responding to the problem of the many and defending the (TAA). In light of the problem of the many, animalists must either concede their thesis or give up reliance on the attractive Thinking Animal Argument.

2 The Thinking Animal Argument and the Problem of the Many

Animalists often rely on the Thinking Animal Argument to motivate the claim that we are human animals. Here's how it goes for Kelly, although we can reinstate it for any of us:

- (TAA 1) There is a human animal sitting in Kelly's chair.
- (TAA 2) Kelly is the only thinking being sitting in her chair.
- (TAA 3) The human animal sitting in her chair is thinking.
- (TAA 4) Hence, Kelly is that animal.¹

Animalists appeal to this argument because it seems so compelling. It certainly seems to be the case that there is a human animal in Kelly's chair. Further, it is easy to accept that Kelly is sitting in her chair, thinking, and nothing else in her chair is thinking. Plausibly, the thinker in her chair is the human animal. Animals certainly seem like the kinds of things that think; they have functioning brains. Together these entail that Kelly is the very human animal sitting in her chair. The argument is intended to generalize, resulting in the view that each of us is a human animal. While the argument is compelling, the truth of the second premise relies on the uniqueness of the thinker in question: Kelly, and Kelly alone, is the thinking being sitting in her chair. This seems utterly ordinary, but accepting the thinker's uniqueness depends on ruling out any thinker-candidates in Kelly's vicinity, which in turn will depend on a solution to the problem of the many.²

¹ Cf. Olson (2009).

² One instantiation of the problem of the many takes the form of the thinking parts problem; see Lowe (2001), Olson (2007, §9.3), and Parfit (2012). I instead focus more broadly on the general problem of the many and proposed solutions, including the proposed solution to the thinking parts problem, eliminativism.

The problem of the many poses a threat to the animalist ontology, but it also threatens the very motivation for animalism.³ Consider Kelly's table in highlighting the problem: Kelly's table, if it exists at all, is a material object, whose parts plausibly include wood, screws, and varnish. At a more basic level, these parts are composed of some atoms. Call the plurality of atoms that compose the object made of the wood, screws, and varnish, ' p_1 '. Then consider an object composed of all the atoms of p_1 minus a single atom. Call the plurality of atoms that compose this object, ' p_2 '. The object composed of p_2 seems equally qualified as the object composed of p_1 to be a table. Objects composed of millions of other similar pluralities also seem to have what it takes to compose tables. It would be arbitrary to identify only one of these candidates but none of the others as a table. The problem of the many arises: either there are millions of tables in Kelly's kitchen, or there are none.⁴

We can likewise instantiate the problem for Kelly. If Kelly is a human animal, then she is composed of some plurality of atoms. And there will be many other pluralities of atoms, differing by single atoms, that also plausibly compose human animals. Call two such pluralities ' k_1 ' and ' k_2 '; call the object composed of k_1 , 'Kelly-plus' and the object composed of k_2 , 'Kelly-minus'. Since these, and many other, pluralities seem equally qualified to compose thinking human animals, we should conclude that both Kelly-plus and Kelly-minus are thinking human animals, along with many others. The animalist cannot accept that *none* is a thinking human animal, and both Kelly-plus and Kelly-minus are equally good thinking animal candidates. Instead, given the problem of the many, it seems that there are many thinkers in Kelly's chair.

2.1 Responding to the Problem

In order to continue to appeal to the (TAA), the animalist must find a way to maintain the truth of the second premise by solving the problem of the many. There are three ways to respond to the problem. First, one might embrace the multitude of objects and accept that there are, for instance, millions of tables where we ordinarily take there to be just one.⁵ Even if this works for tables, the animalist cannot accept that there are millions of thinking animals where we take there to be just one. Second, one might argue that there are *no* such objects, for instance, no tables in Kelly's kitchen. This response is consistent with *eliminativism*, according to which there are far fewer material objects than we ordinarily take there to be.⁶ But the animalist will not go so far as to eliminate *animals*, so eliminating the offending objects will not solve the problem for Kelly. Instead, let us consider the third option.

One might take the third option and defend the claim that just one plurality compose the object in question, be it Kelly's table or a human animal. The animalist must do this successfully in order to defend (TAA 2), perhaps by endorsing the epistemic response or supervenience. The epistemic response involves maintaining that one, and only one, plurality of atoms in her kitchen compose a table, even if we don't know which.⁷ None of the other, nearly identical, pluralities compose a table.

³ For initial presentation, see Unger (1980). For discussion and purported solutions, see, e.g., van Inwagen (1990, Ch. 17), Lewis (1993), Lowe (1995), Markosian (1998), and McGee and McLaughlin (2000). For its application with respect to persons and/or thinkers, see, e.g., Hudson (2001, esp. Ch. 1, 4), Unger (2004), Olson (2004, 2016) and (2007, §9.3), Hershenov (2013), Sutton (2014b), and Yang (2015).

⁴ I've highlighted the problem as it arises for tables, but it applies to composite material objects in general.

⁵ For examples of those who would defend such a response, see e.g., Kim (1976, §3), Chisholm (1976, §3.4), Lewis (1993), Unger (2004, 203), and Williams (2006). For the difficulties of specifying conditions of composition, see van Inwagen (1990, Ch. 2).

⁶ For varieties of eliminativism, see van Inwagen (1990) and Merricks (2001).

⁷ This would follow Williamson's framework, labeled 'epistemicism' (1994).

We don't know which one composes the table, but it is not in virtue of there being no fact of the matter. Rather, if this strategy is correct, there is a fact of the matter as to which plurality compose the table, but we don't know which. If correct, there would not be millions of tables in Kelly's kitchen, nor would there be none. There would be exactly one. None of the other, nearly identical, pluralities compose a table.

A similar solution can be found in supervenience. The supervenience assessment of Kelly's table is as follows: there are many admissible ways of precisifying our word 'table', and each of these ways will apply to a single table-candidate. So, the precise meaning of 'table' under one precisification will apply to, for instance, the object composed of p_1 but no other object. The precise meaning of 'table' under a different precisification will apply to, for instance, the object composed of p_2 but no other object. On every admissible precisification of 'table', 'There is one table in Kelly's kitchen' will be true according to the supervenience; therefore it is true *simpliciter* that there is one table in Kelly's kitchen. Neither the epistemic nor supervenience response, then, requires accepting that there are millions of tables in her kitchen, or that there are none; there is exactly one. These strategies have been used to solve the problem for objects like tables. We will see, however, that they cannot be used to solve the problem for Kelly.

If either the epistemic response or supervenience is correct, then 'there is one thinker in Kelly's chair' is true. But consider the following case that illustrates the problem with these responses. According to the defenders of the epistemic response and supervenience, Kelly and Kelly-minus (whose composition differs from Kelly's by a single atom, say, on the toe) are not both thinkers. Suppose Kelly goes to the eye doctor, sees a blurry vision chart, and reports 'I think I need glasses'. At the same time, Kelly-minus likewise goes to the eye doctor, sees a blurry vision chart, and reports 'I think I need glasses'. Kelly and Kelly-minus will both be in representational states that have mental content. And they have the same brain and sense organs, so given the same external stimuli, Kelly's contentful state will be an intrinsic duplicate of Kelly-minus' contentful state. A difference of one single atom will not make any difference to the mental contents. It's bad enough, then, that we have two different subjects with a duplicated contentful state even if they are not both thinkers.

Even further, suppose we find a qualitative duplicate of Kelly-minus, call her Kelly-minus*. She is exactly like Kelly-minus, except she and Kelly are not overlapping at all. Kelly and Kelly-minus* both go to the eye doctor and report 'I think I need glasses'. They sit in an otherwise-empty waiting room while the doctor writes up their prescriptions. If the eye doctor says to her assistant, 'Both women think they need glasses', what she says is true. Even the supervenience and the defender of the epistemic response should grant this. In ordinary circumstances if we see two women sitting in a waiting room, we would speak correctly in saying, 'there are two thinkers in the waiting room'. So, on any admissible precisification of 'thinker', 'Both women think they need glasses' is true.

Suppose we find a precisification according to which 'Kelly thinks she needs glasses' is true but 'Kelly-minus* thinks she needs glasses' is false. This will then not be a precisification on which 'both women think they need glasses' is true. So, any precisification on which 'Kelly thinks she needs glasses' is true but 'Kelly-minus* thinks she needs glasses' is false will be inadmissible. Likewise, if we find a precisification according to which 'Kelly thinks she needs glasses' comes out false but 'Kelly-minus* thinks she needs glasses' comes out true, then 'both women think they need glasses' would be false. Any such precisification will be inadmissible as well. We likewise should not count as admissible any precisification on which both 'Kelly thinks she needs glasses' and 'Kelly-minus* thinks she needs

glasses' are false, for 'both women think they need glasses' would be false on this precisification, too. So, any admissible precisification, one on which 'both women think they need glasses' is true, will be a precisification on which both 'Kelly thinks she needs glasses' is true and 'Kelly-minus* thinks she needs glasses' is true. The defender of the epistemic response should also accept the truth of both statements.

If this is so, then 'Kelly-minus* is a thinker' is true if and only if 'Kelly is a thinker' is true. And since Kelly-minus* is an exact duplicate of Kelly-minus, then we should hold that 'Kelly-minus* is a thinker' is true if and only if 'Kelly-minus is a thinker' is true. Therefore, if the supervaluationist and the defender of the epistemic response want to grant that 'Kelly is a thinker' is true, they must grant that 'Kelly-minus is a thinker' is true also. This is a problem of too many thinkers. Supervaluationism and the epistemic response, then, fail to solve the problem of the many as it arises for thinkers. The animalist cannot use either to distinguish between many thinker-candidates and secure (TAA 2).

Pointing out that animalists require a solution to the problem of the many is not a new observation. But if animalists continue to use to their favored argument, then animalists must find a solution that accords with the appeal of the (TAA). The success of arguments for other ontologies, those that do not have a premise like (TAA 2), does not rely on the success of any particular solution to the problem of the many. But because the (TAA) relies on the uniqueness of the thinker in question, this uniqueness must already be established in order to defend the argument. As I will argue in §4, since the (TAA) serves as the primary motivation for animalism, its failure would be quite consequential. In light of the problem of the many, successfully motivating animalism with the (TAA) will require successfully motivating some other solution. Discussion of another possible solution highlights the dilemma for the animalist – if the animalist makes use of this solution as initially wielded, then animalism is false. If the animalist does not make use of this solution, then animalism cannot be motivated by its most successful argument.

3 The Elimination Principle: A Solution?

A solution to the problem of the many will yield the result that only a single thinker-candidate in Kelly's chair is Kelly. Since supervaluationism and the epistemic response do not solve the problem, we might instead appeal to an *elimination principle*. Concerning objects of some kind k , then

Elimination Principle (EP): If there are many k -candidates and x is the k -candidate that has no superfluous parts, then x is an object of kind k and no other candidate is.⁸

Superfluous parts are those parts which do not contribute to x 's characteristic profile, where

Characteristic Profile Principle (CP): For any property, p , p is part of x 's characteristic profile just in case x would cease to be a member of x 's primary kind if x ceases to have p .

Consider again Kelly's kitchen table, for illustration. Call the object composed of p_1 'Table-Plus' and the object composed of p_2 'Table-Minus'. By applying the elimination principle (EP), if Table-Plus is a table-candidate and Table-Plus has superfluous parts, then Table-Plus is not a table. An ink-stain that plays no role in making the object a table, for instance, would be a superfluous part. So, if Table-Minus is a table-candidate without an ink-stain and Table-Plus is a table-candidate with an ink-stain, then using an elimination principle yields that Table-Plus is not a table because it has superfluous parts. If all of Table-Minus' parts play a contributory role in the table's characteristic profile, then

⁸ Cf. Hudson (2007, 218).

Table-Minus is a table. The appeal to (EP) and the idea of a characteristic profile thus allows us to distinguish among the candidates and conclude that there is just a single table in Kelly's kitchen.

Use of the elimination principle might seem promising, but using (EP) will undermine the very case that the animalist is trying to make. If we apply (EP) to thinkers, like Kelly, then an application of (EP) would be:

(EP_{Kelly}): If there are many thinker-candidates and x is the thinker-candidate that has no superfluous parts, then x is a thinker and no other candidate is.

Since Kelly is the x in question, it is natural to apply (CP):

(CP_{Kelly}): For any property, p , p is part of Kelly's characteristic profile just in case Kelly would cease to be a thinker if she ceases to have p .

Kelly, then, by (EP_{Kelly}) and (CP_{Kelly}) is essentially a thinker, and parts that play no contributory role in her ability to think are superfluous parts. Her brain, for instance, is not a superfluous part; it plays a contributory role in her ability to think. But arbitrary skin cells, for instance, don't, so they are superfluous. The best candidate for being Kelly would not be an animal, then, contrary to the animalist's thesis.⁹ The human animal sitting in her chair has parts that play no contributory role in her characteristic profile – parts play no role in thinking. By (EP_{Kelly}) and (CP_{Kelly}), she is instead a material object that has at least the brain as a part but not parts like arms or legs. Since the animal has parts that are superfluous to the thinker, if we appeal to this elimination principle and characteristic profile principle, we will not get the result that the animalist wants – that Kelly is the very animal in her chair.¹⁰

Since (EP_{Kelly}) and (CP_{Kelly}) together yield the falsity of animalism, this initially-promising solution is unavailable to the animalist. Now some animalists will certainly reject (CP_{Kelly}) because they will not grant that Kelly is essentially a thinker.¹¹ Some accept that Kelly could continue to exist even if she has no mental life whatsoever. This objection from the animalist will be addressed in §4.1, but for now I will simply note that while animalism itself does not require that we have the ability to think essentially, the motivation for the (TAA) depends on our self-identification as thinkers to get off the ground. And, since many thought experiments are designed to reveal that we think the person goes with the mental life, e.g. Locke's thought experiment of the Prince and the Cobbler, I suggest that it is more natural to use (CP_{Kelly}) as a claim about Kelly as a thinker rather than some other primary kind.¹² By this natural application of (EP_{Kelly}) and (CP_{Kelly}), then, animalism is false. This highlights the dilemma for the animalist: if the animalist makes use of (EP), then animalism is false and, as I will further argue, if the animalist does not make use of (EP), then animalism cannot be motivated by its most successful argument.

3.1 The Viability of the Elimination Principle

⁹ This is Hudson's point, applied to our case (2007).

¹⁰ Licon, however, accepts that each of us is identical to a human brain in a defense of 'neural animalism'. Licon's version of "animalism," then, is not likewise, although it highlights that we, strictly speaking, are not animals on this view. We are instead, according to Licon, brains that have human animals associated with us (2013, esp. p. 68).

¹¹ Animalists who accept biological persistence conditions will do so; see Olson (1997) and van Inwagen (1990, §16). Others discuss the possibility psychological persistence conditions; see Sharpe (2015), Madden (2016), and Bailey (2017). Still others will deny that there are any criteria of persistence at all; see Merricks (1998). For discussion of varieties of animalism, see Bailey (2015) and Thornton (2016).

¹² For the Prince and the Cobbler case, see Locke (1979, II.xvii).

The animalist cannot avail herself of (EP_{Kelly}) and (CP_{Kelly}) to avoid the problem of the many since their use requires a rejection of animalism. But some have proposed that we should reject principles like (EP) because of their apparent failure in other cases. An elimination principle like (EP) might give us the wrong results when we apply it to, for instance, books.¹³

Suppose you look on your bookshelf, and you wonder how many books you have. You might look at some titles and see things like ‘*Material Beings*’, ‘*Crime and Punishment*’, and ‘*Calvin and Hobbes*’. You have at least three books. If you pick up only your copy of *Crime and Punishment*, then you’re holding one book. Now you might want to know what parts the book has, what its dimensions are, etc. There are many book-candidates that might be the referent of ‘*Crime and Punishment*’.¹⁴ There are (at least) four options:

1. Something composed of all the pages and the binding and the dustjacket (intuitively, what we call ‘book’).
2. Something composed of all the pages (including the blank ones).
3. Something composed of just the pages with writing on them.
4. Something composed of just the page-parts with writing on them (intuitively, something composed of just the pages with writing on them, minus their margins).¹⁵

In order to identify which of the candidates is *Crime and Punishment*, we might use an elimination principle: if x is the *Crime and Punishment*-candidate that has no superfluous parts, then x is *Crime and Punishment* and no other candidate is. The purpose of books is, arguably, to bear information. In this case, then, for some property, p , p is part of *Crime and Punishment*’s characteristic profile just in case *Crime and Punishment* would cease to be a book if p is lost. For books, including *Crime and Punishment*, when p is the property of bearing information, p is part of the book’s characteristic profile. Once we apply the elimination principle to books, we conclude that only candidate 4 is a book, since it accomplishes what books accomplish – bearing information – with the fewest parts. This application demonstrates that we should consider things like bindings and blank pages to be superfluous parts that play no contributory role in the information-bearing of the book.

But now we’ve gotten the wrong answer. It is important for being a book that the book bears information, but this case seems to demonstrate that it would be a mistake to think that the smallest book-candidate that gets the job done is *Crime and Punishment*. In this case, we (apparently mistakenly) assumed that if some property (information-bearing) is characteristic of books, then all of the parts of a book must play some contributory role in the information-bearing of the book. If this application of (EP) and (CP) yields the wrong results in this case, that is, if it entails that candidate 4 and not candidate 1 really is *Crime and Punishment*, then we have reason to be skeptical about the success of elimination principles. For it seems as if using elimination principles commits us to the false conclusion that things that have bindings and pages with margins are not books. Perhaps we’re getting the wrong answer with respect to which thinker-candidate is really Kelly as well when we appeal to (EP_{Kelly}) and (CP_{Kelly}).

3.2 Can we save (EP)?

In order to threaten animalism, the conjunction of an elimination principle and a characteristic profile principle must both be plausible and entail the falsity of animalism. The book case suggests that the

¹³ This example Bailey’s (2014a).

¹⁴ Setting aside worries related to literary ontology, take ‘*Crime and Punishment*’ to refer to *your copy* of *Crime and Punishment* hereafter.

¹⁵ See Bailey (2014a, 479).

elimination principle we're working with is not plausible. A defender of (EP) might offer suggestions as to how we can fortify the principle so it entails that candidate 1 is *Crime and Punishment*. She might pursue one of two options:

Option (i): reject that a book's characteristic profile includes only bearing information, or

Option (ii): argue that none of candidate 1's parts are superfluous to bearing information.

To pursue option (i), the defender of (EP) might suggest that bearing information is just part of what a book does. Books not only bear information but bear information in a certain format; books characteristically split information across multiple pages. Books characteristically contain these pages in a stable construction, complete with a binding. If we ripped out all the pages of *Crime and Punishment*, cut off all the white space, taped it back together, and rolled it up like a scroll, we no longer have a book, although we have all the information contained within *Crime and Punishment*. We would be missing some of the book's characteristic profile: bearing information in a certain format. More work would need to be done in order to specify exactly what that format is, but the case illustrates that it is not merely bearing information. Candidate 1, but not the other candidates, one might argue, is the only candidate that bears information in that particular format, so candidate 1 really is *Crime and Punishment*.

Or to pursue option (ii), the defender of (EP) might suggest that just bearing information is a book's sole characteristic feature. But, one might argue, things like blank pages and bindings contribute to the bearing of information. The blank pages situate the information relative to other pages and the cover. The binding contributes to the information maintaining its order. Absent these features, the book would not bear the information in the same way, so these so-called "superfluous" parts are not so superfluous. Pursuing option (ii) likewise allows us to both apply (EP) and maintain that candidate 1 is *Crime and Punishment*.

The options should give us pause before rejecting (EP) altogether. And recall that (EP) is supposed to rescue us from the threat of the problem of the many. Employing (EP) allows us to give a principled reason for thinking that there is a single best candidate for being the thinker in Kelly's chair, and it is false that there are either millions of objects equally qualified, or no object qualified, to be her. This at least gives us some reason to think we should keep (EP) around. We should now evaluate whether the animalist could use (EP) for her own purposes and ask what is at stake for the animalist if she abandons elimination principles altogether.

4 The Dilemma

If (EP_{Kelly}) and (CP_{Kelly}) are true, then animalism is false. The animalist can then pursue two routes forward: offer an alternative application of (EP) or reject use of (EP) altogether. As I will argue, alternative applications of (EP) can be defended only by begging the question. Rejecting use of (EP) altogether requires the animalist to let go of the commonsense appeal that the Thinking Animal Argument is supposed to have. Neither option leaves the animalist in a desirable position, for either animalism is false, or the (TAA) is unmotivated.

4.1 Alternative Applications of (EP)

Turning to the first horn of the dilemma, let us consider whether the animalist could repurpose (EP) and secure the desired result – that Kelly is an animal. Recall the strategies used in §3.2. In the books case, a defender of (EP) could either (i) reject that the characteristic profile of books includes only bearing information or (ii) argue that none of the intuitive candidate's parts were superfluous to bearing information. The animalist might try to pursue analogous options to defend animalism.

Instead of endorsing (CP_{Kelly}), the animalist might take option (i) and reject the idea that her primary kind is thinker. The animalist might instead propose something like the following:

(CP_{animal}): For any property, p , p is part of Kelly's characteristic profile just in case Kelly would cease to be a human animal if she ceases to have p .

Instead of appealing to thought as Kelly's characteristic feature, the animalist might suggest that her essential properties are properties characteristic of human animals.¹⁶ Then (EP_{Kelly}) and (CP_{animal}) would not entail that the smallest material object that enables thought is Kelly, since many parts of the human animal play a contributory role in the characteristic profile of human animals even if they play no contributory role in thought.¹⁷

This move allows the animalist to wield (EP) successfully, but it does not put the animalist in a favorable position in defending the (TAA). The (TAA) derives its force from the fact that we are *thinkers*, and this has such strong appeal because we conceive of ourselves as thinkers. When we conceive of ourselves as thinkers, we will assent to the truth of there being just one thinker in each of our chairs. The thinkers are *us*; *we* are the ones thinking our thoughts. And there cannot be more than one subject of our thoughts, and not many thinkers having qualitatively-identical thoughts. We must assent to these claims in order for the (TAA) to be successful, and the animalist relies on these self-conceptions. But, at the same time, the animalist asks us to *reject* commonsense judgments about our own persistence. If we are essentially biological animals and not thinkers, then we do not follow our psychologies in Lockean thought experiments. We instead stay with our bodies. Commonsense judgments about our persistence prompt us to endorse not only (TAA 2) but would also incline us toward a principle like (CP_{Kelly}).

The animalist, then, asks us to retain commonsense self-conceptions *at a time* in order to accept (TAA 2) and reject commonsense judgments about our persistence *through time* in order to deny (CP_{Kelly}) in favor of (CP_{animal}).¹⁸ The recipient may cling tightly to the fact that she is a thinker and look for resources to avoid the problem of the many. The animalist can provide only a question-begging application of (EP), according to which Kelly's characteristic profile is the profile of a human animal and not a thinker.¹⁹ While those who already endorse animalism may be perfectly satisfied with such a solution, it is not likely to win any animalist converts. Since the success of the (TAA) relies on a solution to the problem of the many, the animalist cannot both appeal to the (TAA) as motivation for animalism and simultaneously maintain the truth of (TAA 2) by appealing to something like (CP_{animal}).

Even with this modified (CP), however, animalism might still be false. It isn't the case that every single part of the human animal, such as a single eyebrow hair, plays a contributory role in the characteristic profile. But eyebrow hairs are parts of human animals, so an application modified in this way gains the animalist little ground. Once someone has endorsed animalism, it is certainly a respectable move

¹⁶ This might include properties like having a certain kind of DNA, being disposed to survive and reproduce, or keeping kin away from predators.

¹⁷ Cf. Madden (2016) for another take on characteristic features and their relation to persistence.

¹⁸ For critiques of animalists who try to retain self-conceptions both at a time and through time, see §4.3.

¹⁹ Even if the animalist proposed that we are essentially living beings rather than human animals, its defense will be question-begging.

to propose something like (CP_{animal}). But this move does not provide the animalist with the tools required to motivate the (TAA) in light of the problem of the many.²⁰

Another strategy would be to endorse an eliminativist ontology according to which material objects like organisms exist but no other composite objects (like brains or arms) exist.²¹ If the only composite objects that exist are organisms, then, if thinkers are composite objects, then thinkers are organisms. Then both psychological and biological features would be part of Kelly's characteristic profile. It has been argued that pursuing this strategy, too, requires the animalist to rely on question-begging support.²² In addition, accepting eliminativism is often a consequence of other metaphysical and ontological commitments and is not useful evidence to use in motivating the ontology itself. Since the animalist is trying to convince us that we are animals, building in a controversial claim about classes of composite objects might give us reason to be hesitant about endorsing animalism, absent additional arguments in favor of these controversial claims. So, even if the animalist can use a different application of (EP), it comes at the expense of begging the question. And even if it solves the problem, it still requires giving up reliance on the Thinking Animal Argument.

4.2 No Application of (EP)

Let us consider the second horn of the dilemma. Without appealing to something like (EP_{Kelly}) and (CP_{Kelly}), the animalist cannot maintain (TAA 2), 'Kelly is the only thinking being sitting in her chair'. (EP_{Kelly}) and (CP_{Kelly}) allowed us to exclude other objects from being thinker-candidates, avoiding the problem of too many thinkers. And while it certainly remains intuitive that Kelly is the only thinking being sitting in her chair, this is a claim that the animalist should not be permitted to appeal to unless it has already been established that Kelly is the human animal sitting in her chair and that the human animal is the only thinker. Once we're made aware of the nearby candidates, we're on unstable ground with respect to establishing the truth of (TAA 2). Absent an elimination principle, the only recourse an animalist has in response to the problem is question-begging. The animalist, then, can make claims like 'the human animal sitting in Kelly's chair is thinking' but not 'Kelly is the only thinking being sitting in her chair' without assuming that Kelly is that very animal and also eliminating the other thinker-candidates.

The animalist is in good company with defenders of other ontological accounts; the problem of too many thinkers does not uniquely threaten the animalist. The mere recognition that this problem arises does not demonstrate the falsity of animalism. But it does put the animalist in an unfortunate position with respect to motivating the view. Recall that the Thinking Animal Argument is supposed to have intuitive appeal. The argument seems so successful because it is just so easy to assent to the truth of the premises. If someone fairly new to personal ontology faces the (TAA), it is easy to be convinced that Kelly is identical to a human animal. But given that the animalist is aware of the problem of the many, this should threaten the defensibility of presenting the (TAA) as an intuitive, easy-to-accept

²⁰ Taking option (ii) involves accepting (CP_{Kelly}) and argue it entails that Kelly is an animal. The animalist would have to argue that no human animal part is superfluous to Kelly, and Kelly therefore is a human animal. This move is simply implausible, nor would it be pursued by those animalists who deny that we are essentially thinkers.

²¹ For defenses of ontologies like this, see van Inwagen (1990, §9, §12) and Merricks (2001, Ch. 4). For its use by animalists, see Olson (2007, §9.5) and Yang (2015). For critique of this strategy as it relates to the (TAA), see Zimmerman (2008) and Watson (2016). For a reply to Zimmerman, see Olson (2008, 38-42).

²² See Watson (2016).

argument. It would be disingenuous for the animalist to prompt someone to accept, for instance, (TAA 2) when the animalist *knows* that there are many other thinker-candidates around.

The reasoning that would establish the truth of (TAA 2) would then have to be something like the following, utilizing a new premise (NP):

(TAA 1) There is a human animal sitting in Kelly's chair.

(TAA 3) The human animal sitting in her chair is thinking.

(TAA 4) Kelly is that animal.

(NP) There is only one thinking being sitting in her chair.

(TAA 2) Hence, Kelly is the only thinking being sitting in her chair.

Now this may be a perfectly sound argument, and (NP) may help establish the truth of (TAA 2). But anyone who accepts this argument will already accept (TAA 4), the animalist thesis. So, in order to defend the (TAA), the animalist who does not want to appeal to (EP) requires some other strategy to establish that Kelly is the only thinking being in her chair. A neat way of doing that is by somehow making a case that organisms are the only things capable of thought.²³ But unless someone has already granted that he is identical to an organism, he will not assent to it being the case that only organisms can think, for he is thinking but may not believe that he is an organism. In this case, (TAA) would fail because it is question-begging. Solutions, even if they don't rely on (EP), might nonetheless depend on a commitment to animalism in order to solve the problem.

So, perhaps the animalist instead proposes a solution from the other direction: we don't need an elimination principle; we need a maximality principle. We can defend (TAA 2) and say that Kelly is the only thinking being in her chair if being a thinker is a maximal property.²⁴ Likewise, the animalist could suggest that being an animal is a maximal property: for anything that is an animal, there is no large proper part of that thing that is itself an animal.²⁵ If true, a maximality principle would provide the animalist with a method of distinguishing among many candidates and arriving at the conclusion that just one thing in Kelly's chair, the animal, is a thinker.

There are two problems with such a principle. First, in this case, we should resist the idea that a change entirely extrinsic to some entity results in a change to that entity's primary kind – the kind of thing that entity is essentially.²⁶ Plausibly, according to the animalist, our primary kind is animal, although the same problem will arise if our primary kind is thinker or person. So, in this case, consider Kelly and Kelly-minus, where Kelly has the property of being an animal according to the maximality principle and Kelly-minus is something composed of all the atoms that compose Kelly, minus a single atom, but does not have the property of being an animal. But if Kelly loses that single atom, then the thing composed of all the atoms that composed Kelly, minus that single atom, will come to be an animal. Kelly-minus, however, has undergone no change in this case but if being an animal is a maximal property, then Kelly-minus turns into an animal despite undergoing no intrinsic change.

²³ Animalists may give caveats allowing for the possibility that deities or angels may be capable of thought as well; cf. Olson (2009).

²⁴ Bailey defends the claim that being conscious is a maximal property (2014b, §3). I'll speak in terms of being a thinker, but we would arrive at the same place if we speak in terms of being conscious. Yang also discusses a maximality response (2015, §2). For discussion of maximality about other kinds of things, see Sider (2001).

²⁵ One might speak of parts that are "caught up in a life"; cf. van Inwagen (1990, esp. §17), or appeal to a hylomorphic account according to which only the maximal object has a substantial form; cf. Toner (2011, 2012).

²⁶ Cf. Johnston (2007) and Johnston (2016).

Before Kelly loses that single atom, Kelly-minus is some object but not an animal. Once Kelly loses that single atom, Kelly-minus becomes an animal, despite no intrinsic change.²⁷

The animalist might argue that Kelly-minus does not exist at all, and so it is false to say that Kelly-minus changes into an animal from a non-animal at some extrinsic change. Rather, if this is the case, the parts that we described as Kelly-minus' go from composing nothing to composing something at Kelly's loss of a single atom. This raises the second problem with the maximality principle as used by the animalist. In order to defend the claim that there is no such object as Kelly-minus, the animalist must argue that being a composite material object is a maximal property in general. For the animalist must secure the result that only the maximal candidate, Kelly, has the property of being a composite material object and no other nearby candidate does. In order to do this, the animalist would need some principle that prohibits composite objects from having large proper parts at all.

This, as a general principle, is false. Many things have the non-maximal property of being a composite material object.²⁸ A tile, for instance, can have another tile as a large proper part. So, even if Kelly-minus is not an animal, Kelly-minus might be some other kind of object. If Kelly has the property of being a composite object, then we should think that Kelly-minus has the property of being a composite object as well. And if Kelly-minus is an object, then some change, presence or absence of some atom, entirely extrinsic to Kelly-minus will affect whether Kelly-minus is an animal. Unless the animalist can either demonstrate that being an object is a maximal property or defend the idea that some object can turn into an animal despite undergoing no intrinsic change, then appealing to a maximality principle will not provide a solution to the problem of the many, either.

The animalist, then, cannot appeal to supervenience or an epistemic response to the problem of the many, as we saw in §2.1. Nor can the animalist make use of elimination principles or maximality principles. While these are not the only possible responses to the problem of the many, they represent the popular responses to the puzzle in this context. In the absence of these options, the animalist must then find some other solution to the problem of the many. Pointing out that animalists require a solution is not a new observation. But, crucially, in light of the foregoing discussion, if animalists are to continue to appeal to the favored argument, then the animalist must find a solution that accords with the intuitive, commonsense appeal of the (TAA) and does not rely on the truth of animalism for its success. The success of arguments for other views, those that do not rely on a premise like (TAA 2), then, does not rely on the success of any particular solution to the problem of the many. Because the (TAA) relies on the uniqueness of the thinker in question, this uniqueness must already be established in order to defend the argument. In light of the problem of the many, establishing the uniqueness of the thinker will come at a counterintuitive cost, and successfully motivating animalism with the (TAA) will require successfully motivating some other solution to the problem of the many.

4.3 Giving up the Thinking Animal Argument

Despite its attraction, there are well-known problems with animalism, including its apparent implications regarding our persistence. If Kelly's cerebrum is transplanted into a taller body, then, intuitively, Kelly is the taller animal with her old cerebrum, but animalism seems to accord most

²⁷ The same problem arises if we're speaking of Kelly as a thinker or as a person. It is implausible that Kelly-minus would come to be a thinker or a person despite no intrinsic change.

²⁸ See Sutton (2014a).

naturally with the claim that she is the cerebrum-less animal lying on the operating table.²⁹ A view that entails that we do not follow our cerebra in transplant cases is a profoundly counterintuitive view of what we are. Yet some animalists accept such a view and its counterintuitive commitments.³⁰

The Thinking Animal Argument provided strong countervailing evidence that could override the commonsense intuitions in cerebrum transplant cases. But without the (TAA), these intuitions threaten to tip the balance strongly against the animalist. Now it is, in principle, open to the animalist to say that we do follow our cerebra in transplant cases.³¹ Call those who say so psychological animalists. Commonsense intuitions in cerebrum transplant cases, then, are no evidence against this form of animalism, and loss of the (TAA) is not devastating to the psychological animalist.

But psychological animalists will have counterintuitive commitments of their own. While they do not say revisionary things about us, they will need to say revisionary things about animals. Psychological animalism requires a strange account of what it is to be the same animal over time. The psychological animalist says that Kelly is the very same animal as the pre-transplant animal, despite suddenly being taller and having new circulatory, digestive, and respiratory systems, along with other physical features beyond the cerebrum. And what should be said about the cerebrum-less animal that's left behind? Since Kelly, the animal, went with her cerebrum, perhaps it is not an animal at all. But human animals that suffer brain damage do not cease to be animals, and the cerebrum-less entity is not importantly different than human animals whose cerebra have stopped working entirely. For the sake of consistency, the psychological animalist should maintain that the cerebrum-less entity is, indeed, an animal. So, perhaps it is an animal that has just come into existence.³² But, for the reasons we saw in §4.2, removal of something entirely extrinsic to that animal cannot effect its existence, so this move is implausible. Another option is to hold that there have always been two animals, this cerebrum-less animal and Kelly. But if both Kelly and the animal existed prior to the transplant, then we arrive back at the problem of the many.³³ All of these options require concessions about what we ordinarily take animals to be. As a result, the psychological animalist trades in a profoundly counterintuitive view of what we are for a profoundly counterintuitive view of animals and their persistence.

All animalists, then, are saddled with some counterintuitive commitments in cerebrum transplant cases. These commitments are not devastating if counterbalanced by the force of the (TAA). Without the (TAA), they constitute a much more serious problem that demands strong countervailing evidence. While there have been attempts to defend psychological animalism or provide alternatives to the (TAA), the foregoing discussion shows that much more rides on their success than previously thought. They are not merely auxiliary issues; they should now be the key focus in assessing the viability of animalism.

4.4 Other Arguments for Animalism

A successful argument for animalism must satisfy two desiderata. First, it cannot force the animalist onto the horns of the same dilemma that arises for the Thinking Animal Argument; it cannot be

²⁹ For other discussions of this kind of case, see, e.g., van Inwagen (1990), Merricks (2001, 52), Toner (2011, 2014, §4), and Licon (2012, 2013, 2014).

³⁰ This accords with endorsement of biological rather than psychological persistence conditions, see Olson (1997) and, for a critique, Dupré (2014).

³¹ For this kind of response from the animalist, see Sharpe (2015), Madden (2016), and Bailey (2017, §10).

³² Sharpe (2015) would make this move, despite its apparent implausibility.

³³ Nor should the psychological animalist hold that some cerebrum-less entity has just turned into an animal, for this, too, results in the problem of the many; cf. §4.2.

hostage to a successful resolution of the problem of the many. Second, it must provide strong countervailing evidence that can tip the balance toward animalism in light of cerebrum transplant cases. It needs to alleviate the worries that come with the animalists' counterintuitive commitments in such cases.

Some recent arguments for animalism will, like the (TAA), give rise to the very same dilemma in response to the problem of the many. Consider a Causal Argument for Animalism (CAA) as it arises for Kelly while she drinks her coffee:

(CAA 1) Kelly causes the cup of coffee to move.

(CAA 2) Kelly is the only entity that causes the cup of coffee to move.

(CAA 3) The human animal in Kelly's chair causes the cup of coffee to move.

(CAA 4) Hence, Kelly is that human animal.³⁴

Arguments like the (CAA) rely on some feature or power that Kelly has uniquely and simultaneously shares with the human animal in her chair.³⁵ To avoid redundant attribution of this feature or power, we're prompted to conclude that Kelly and the human animal are one and the same. In order to motivate the uniqueness claims that factor in these arguments, we arrive at the very dilemma that must be avoided: animalists must either make use of some kind of elimination principle or find some other solution to the problem of the many. As a result, animalism is either false or cannot be motivated by the argument in question. So, these arguments fail to satisfy the first of the desiderata.

Animalists must then rely on other arguments. While it is beyond the scope of this paper to take on every alternative, I'll address two. Bailey argues that we have the very same interests as human animals, and we should favor animalism as a result.³⁶ Blatti has argued that if we accept that we ourselves are products of evolution, we should accept animalism for its accordance with facts about our evolutionary history.³⁷ Neither of these arguments relies on a uniqueness claim, so the first of the desiderata is met. Regarding the second, it is far from clear whether either argument constitutes the requisite strong case. As Bailey acknowledges, success of his argument depends on our having non-biological persistence conditions. But this comes at profound cost to the animalist in the form of counterintuitive accounts of animals and their persistence. And Gillett argues that Blatti's reasoning relies on a questionable claim about what kinds of entities can count as being evolutionary participants.³⁸ In both cases, more discussion is needed to determine whether these arguments can provide the strong countervailing evidence that is required to motivate animalism. All things considered, it remains to be seen whether these or other arguments can be defended in a way that satisfies both desiderata.

5 Conclusion

So, it is challenging to determine what kind of being Kelly is, beyond a thinker. Animalists will insist that she is an organism, a human animal, to be precise, a view motivated by the Thinking Animal Argument. The (TAA) is supposed to be convincing, with premises that are easy to accept. Most importantly, we easily assent to the claim, 'Kelly is the only thinker sitting in her chair'; what, other than Kelly, could be sitting in her chair and thinking? This seems obvious, and it relies on the fact that we conceive of ourselves *as thinkers*.

³⁴ Cf. Licon (2012).

³⁵ The (TAA) is one such argument; for others that have been proposed, see Merricks (2001, Ch.2 §IV and p. 86) and Licon (2012, 2013).

³⁶ See Bailey (2017).

³⁷ See Blatti (2012).

³⁸ See Gillett (2013).

The animalist appeals to this self-conception to demonstrate to us the truth of a premise in the argument. I have argued, however, that in order to fully motivate the argument, the animalist has to require us to simultaneously depend on this self-conception and reject it in deference to the animalist thesis. We must reject it because if we hold tightly onto our self-identification as thinkers, then we will not be able to both respond successfully to the problem of the many and maintain animalism – for being thinkers prompts us toward principles like (EP_{Kelly}) and (CP_{Kelly}), which entail the falsity of animalism. But once we reject our self-identification as thinkers, the Thinking Animal Argument becomes harder to accept.

The difficulty arises in virtue of the implausible moves that are required in order to maintain that there is just a single thinker in Kelly's chair, which we can see from the discussion of elimination principles. I have here shown that even repurposed elimination principles will not save the animalist, for they are plausible only once we've accepted animalism. As such, they cannot be used to motivate animalism. And other promising solutions to the problem of the many, like supervenience, an epistemic response, or maximality principles, will not be successful when applied to cases like Kelly's.

Without a good solution to the puzzle, the best argument for animalism, therefore, fails. As a result, the animalist must (i) provide a plausible elimination principle and understanding of characteristic profiles that neither requires a commitment to animalism nor entails the falsity of animalism, (ii) provide a non-question-begging solution to the problem of the many that accords with the intuitive appeal of the (TAA), or (iii) provide a more robust defense of other arguments for animalism. While alternative arguments are available, they have been complements to the Thinking Animal Argument, not replacements. And some of them depend on a uniqueness claim, similar to what we find in the (TAA), that cannot go presupposed in the absence of a solution to the problem of the many. The burden of motivating animalism, then, lies with a few recent arguments that need further examination or with new arguments that have yet to be proposed. Assessment of the relationship between the problem of the many and the Thinking Animal Argument, then, yields the result that animalism is either false or cannot be motivated by its most successful argument.

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