

Journal of Cognition and Neuroethics

Holism, Narrative, and Paradox: New Criteria for Settling Disputes in Personal Identity

Jaron J. Cheung 

The State University of New York at Buffalo

Biography

Jaron J. Cheung is currently a PhD student in philosophy at the University at Buffalo, SUNY. His research interests are in metaphysics (especially personal identity, perception, ontology, and time), social and political philosophy, ethics and moral psychology, applied ontology, philosophy of race, philosophy of education, and philosophy of religion.

Acknowledgments

I am indebted to David Hershenov for providing extensive and insightful comments on multiple drafts of this paper. Moreover, I owe my gratitude to those at the 2023 Persons Conference, hosted by the Center for Cognition and Neuroethics at the University of Michigan—Flint, where this paper was first presented, and Peihong (Karl) Xie and Finn Wilson for providing helpful feedback during the final stages of revision.

Publication Details

Journal of Cognition and Neuroethics (ISSN: 2166-5087). September, 2023. Volume 9, Issue 2.

Citation

Cheung, Jaron J. 2023. "Holism, Narrative, and Paradox: New Criteria for Settling Disputes in Personal Identity." *Journal of Cognition and Neuroethics* 9 (2): 1–20.

Holism, Narrative, and Paradox: New Criteria for Settling Disputes in Personal Identity

Jaron J. Cheung

Abstract

This paper introduces three new criteria that a theory of personal identity ought to satisfy: (1) *material holism*, (2) *narrative unity*, and (3) *narrative integrity*. *Material holism* guards against the undesirable consequence of positing the person as part and existentially distinct from the organismal whole, of which it is dependent and interconnected. *Narrative unity* ensures that continuity between the beginning, middle, and end of a human life is sufficiently accounted for. *Narrative integrity* secures fidelity and congruence between each part and the whole, the whole to each part. Jeff McMahan's Embodied Mind Account (*EM*) fails to satisfy each of these. On McMahan's account, human persons and human organisms are distinct entities, human persons come into existence after its human organism, and human persons may go out of existence before their human organism. Moreover, fetuses, infants, the congenitally severely cognitively impaired, those with severe dementia, and the comatose are non-persons. A theory of personal identity that incorporates *holism* and *narrative* can provide a better explanation of human existence, life and death, and the identity paradox of dicephalic twins. If accepted, *EM* must either be rejected or ameliorated, and the new criteria ought to be incorporated in contemporary research of personal identity.

Keywords

Personal Identity, Criteria, Material Holism, Narrative Unity, Narrative Integrity, Animalism, Embodied Mind Account, Dicephalic Twins

What does it mean to be human? Debates on what kind of beings humans are essentially or fundamentally have primarily terminated between two rival traditions in contemporary philosophy: animalism and psychologism. Broadly speaking, animalism represents a cluster of views that identify human persons with human animals—or that we are essentially human organisms—and psychologism, a cluster of views that identify human persons with a psychological criterion—or that we are essentially psychological beings. In Jeff McMahan's, *The Ethics of Killing: Problems at the Margins of Life*, McMahan issues the *challenge of dicephalus*, a case of twins conjoined below the neck and sharing what seems to be one body, to conclude that human persons are distinct from their human organism. Upon analysis, McMahan determines that animalism cannot sufficiently account for the identity paradox, a puzzle of the relationship between the person and the animal found in the case of dicephalic twins, Abigail and Brittany Hensel, and recommends his Embodied Mind Account to settle the metaphysical problems of what human persons are and their persistence conditions over time. As a consequent,

McMahan's account leads him to conclude that: (1) human persons are distinct from human organisms, (2) human persons come into existence after its human organism, (3) human persons may go out of existence before their human organism, and (4) early abortion is permissible up to 20 weeks because there is no human person that is harmed.

In this paper, I contend that McMahan's Embodied Mind Account fails to adequately capture what humans are and erroneously reduces persons to mere psychological capacities, i.e. the minimal capacity for thought and sentience. On McMahan's account, fetuses, infants, the congenitally severely cognitively impaired, those with severe dementia, and the comatose are non-persons. Although McMahan's account embraces brain continuity (i.e. physical and minimal functional continuity of cerebral structures) as a criterion for personal identity over time, it simultaneously prescribes narrative discontinuity (i.e. discontinuity between the beginning, middle, and end of human existence). As such, McMahan's account provides a fragmented and incomplete picture of human life.

In order to show this, I introduce three new criteria that a theory of personal identity ought to satisfy: (1) *material holism*, (2) *narrative unity*, and (3) *narrative integrity*. *Material holism* guards against the undesirable consequence of positing the person as part and as existentially distinct from the organismal whole, of which it is intimately dependent and interconnected. *Narrative unity* ensures that continuity between the beginning, middle, and end of a human life is sufficiently accounted for. *Narrative integrity* secures fidelity and congruence between each part and the whole, the whole to each part. (I will detail these criteria in a later section of this paper.) McMahan's Embodied Mind Account does not satisfy the aforementioned and thereby leads him to conclude that there exists multiple overlapping entities, i.e. human persons overlapping human organisms, and moral prescriptions for abortion grounded by psychologism. A theory of personal identity that incorporates holism and narrative identity can provide a better explanation of human existence, life and death, and the paradox of the Hensel twins. As a result of what follows, if what I show in this paper is true, McMahan's Embodied Mind Account and subsequent moral prescription for early abortion must either be rejected or ameliorated.

It is important to note that McMahan also appeals to the cerebrum transplant thought experiment to argue for the intuition that persons are not identical to their organism. As it is beyond the scope of this paper, I will not treat McMahan's cerebrum transplant thought experiment here.

If this paper is successful in resolving the *challenge of dicephalus* in a way that suggests persons are animals or something else, McMahan's cerebrum transplant scenario

would still have need to be sufficiently addressed. I will maintain this thesis in five parts: (I) The Challenge of Dicephalus: Abigail and Brittany Hensel, (II) The Embodied Mind Account, Existence, and Abortion, (III) Inverse Excurses—The Challenge of Craniopagus: Krista and Tatiana Hogan, (IV) Holism, Narrative, and Personal Identity, and (V) Closing, Paradox, and Hensel Twins Revisited.

I. The Challenge of Dicephalus: Abigail and Brittany Hensel

There is another challenge to the view that we are organisms that need not appeal to examples drawn from science fiction but instead focuses on an actual, though extremely rare, condition known as *dicephalus*. Dicephalus (from Greek roots, meaning “two-headedness”) occurs when a human zygote divides incompletely, resulting in twins conjoined below the neck. In dicephalic twinning, as in other forms of twinning, it is clear that there are two people. In a case featured in a recent issue of *Life* magazine, Abigail and Brittany Hensel present a spectacle of two heads sprouting from a single torso; yet no one doubts that they are separate and distinct little girls. Each has her own private mental life and her own character, each feels sensations only on her own side of the body, and each has exclusive control over the limbs on her side... But, although Abigail and Brittany are two different persons, there seems to be only one organism between them. If so, then neither girl is identical with that organism. For they cannot both be identical with the organism, as that would imply that they were identical with each other, which they are not. (McMahan 2002, 35)

McMahan issues the *challenge of dicephalus* to those who countenance the animalist view that human persons and human animals are identical. Departing from brain and cerebrum transplantation cases, McMahan invokes the real-life case of Abigail and Brittany Hensel to make the claim that human persons are distinct from their human organism. Although the Hensel twins “have two hearts and two stomachs, they share three lungs, have a single liver, a single small intestine, a single large intestine, a single urinary system, and a single reproductive system” (McMahan 2002, 36). These “organs are packaged together within a single rib cage and function together in a harmoniously coordinated manner” (McMahan 2002, 36). Thus, the Hensel twins having two heads

arising out of a single body, according to McMahan, is an example of two distinct human persons in one human organism.

For those who hold that we are essentially human organisms, in order to determine what might be the most plausible explanation of the Hensel twins personal identity status, McMahan considers what he thinks are the only three possible options: (1) dicephalic twins constitute a single organism and therefore can be at most one person—a person with a divided mind, (2) dicephalic twins constitute a single organism with two distinct minds, and (3) dicephalic twins are actually two distinct though overlapping organisms (2002, 35–36). McMahan asserts that (1) and (2) are unacceptable for the same reasons: that both claims deny that either Hensel twin can be a separate and independently existing thing (2002, 36). The third claim, which McMahan believes is most promising, is not satisfactory as it is like “the claim that a plane with duplicate control mechanisms for a pilot and copilot is really two distinct but overlapping planes” (2002, 37). McMahan thinks that in cases of dicephalus, in opposition to the view that there are two distinct overlapping organisms, there is a single biological life that supports the existence and thus the lives of two distinct persons (2002, 37). As such, McMahan believes that the *challenge of dicephalus* as presented by the Hensel twins, seems to be a “clear case in which there are two persons who coexist with and are supported by a single organism” and “that there are two persons present, one per cerebrum” (2002, 39). It is here that McMahan makes the further conclusion that as the dicephalic twins are not a different kind of entity from ourselves, or that a different account of personal identity applies to them, we are not essentially organisms either (2002, 39). We too are parts of organisms. That is, we non-twins stand to organisms in the same relationship as the dicephalic girls. Thus, McMahan rejects the view that we are essentially human organisms and moves into considering the Psychological Account of Personal Identity—the view that we are essentially psychological beings.

II. The Embodied Mind Account of Egoistic Concern, Existence, and Abortion

The Embodied Mind Account of Egoistic Concern (hereafter Embodied Mind Account) was developed out of careful analysis of and an amelioration of the Psychological Account of Personal Identity (McMahan 2002, 39–88). According to McMahan’s account, *we are essentially embodied minds* (2002, 68). The criterion of personal identity across time on this account is physical and minimal functional continuity of the parts of

brain that produce thought, where “physical continuity of an organ such as the brain requires either the continued existence of the same constituent matter or the gradual, incremental replacement of the constituent matter over time” and “functional continuity involves the retention of the brain’s basic psychological capacities” (McMahan 2002, 68). What is meant here by basic psychological capacities is the *capacity for consciousness* and the different capacities that come with consciousness, e.g. pain, pleasure, etc. For what provides “the basis for egoistic concern about the future, is continuity or sameness of consciousness”, that is, “the continuity of the *capacity for consciousness*, so that the renewed appearance of conscious states following a period of unconsciousness is always the reappearance of the same consciousness, or the same mind” (McMahan 2002, 67). Thus, “the relation that is constitutive of identity—sufficient physical and functional continuity of the areas of the brain in which consciousness is realized in order for those areas to retain the capacity to support consciousness—is both a necessary and a sufficient condition of a minimal degree of rational egoistic concern” (McMahan 2002, 79).

Rational egoistic concern is important for the Embodied Mind Account because it is a requisite for McMahan’s *Time-Relative Interests Account*, with which he uses in part to determine the goodness and badness of life and death and the permissibility of abortion. For McMahan, rational egoistic concern about some event within one’s own future life is a function of two factors: “first, the value, positive or negative, that the event would have for one at the time when it would occur, and second, the extent to which the prudential unity relations would hold between oneself now and oneself at the later time when the event would occur” (2002, 79–80). Prudential unity relations are characterized in part by psychological connectedness and continuity, which McMahan identifies with organizational or structural continuity, i.e. the “preservation of those configurations of tissue that underlie the connections and continuities among the *contents* of an individual’s mental life over time” (2002, 68; 74). Organizational and structural continuity, prudential unity relations, and psychological connectedness and continuity are not required criteria for McMahan’s account of personal identity, but they are important for grounding rational egoistic concern and identifying what matters in a human person’s life, including one’s time-relative interests. One’s interests, in the sense that McMahan uses it, is to “have an interest in something for one’s well-being to be engaged with it” (2002, 80). The present time-relative interests of an individual “are what one has egoistic reason to care about *now*” and “are always, as the label is intended to suggest, relativized to one’s state at a time” (McMahan 2002, 80). In order to determine the strength of one’s present time-relative interests in the possibilities of one’s future life, we would undertake a discounting operation where the value of future events that one would have within

one's life at the time they would occur are "multiplied by a number (either 1 or a positive fraction) representing the strength of the prudential unity relations between oneself now and oneself at those times when the events would occur" (McMahan 2002, 80). Having established a basic foundation and terms for personal identity and in identifying what matters in a human person's life according to the Embodied Mind Account, let us now turn to what a person is and when they come into existence.

To be a *person*, "one must have the capacity for self-consciousness and perhaps, a mental life with a high degree of unity" (McMahan 2002, 90). "Person" is a term that refers to what we essentially are in a generic way (McMahan 2002, 90). McMahan is unclear about when a person generally arises along the timeline of a human organism's development. However, McMahan takes the human person to be a phase sortal, a kind to which an individual may belong through only part of its history (2002, 7; 24). Prior to a person's existence, along the timeline of a person's development, there is what might be called the *mindless*, i.e. the fetus at 0-20 weeks, and the *minimally minded*, i.e. the fetus 20 weeks through birth to infancy. The person arises at some time after the minimally minded is developed to a sufficient degree which would satisfy the conditions of personhood. After a person phases out of existence, it is also possible for there to be the minimally minded and mindless post-person. For example, the minimally minded post-person could be a result of progressively worsening Alzheimer's or brain damage, while the mindless post-person could be a result of severe dementia or those who have become irreversibly comatose.

What is important to note is that the fetus at 0-20 weeks and the congenitally severely cognitively impaired never acquired the status of persons and those with severe dementia and the comatose, such as those in a persistent vegetative state or those who suffered brain trauma, have lost their status as persons because they either never acquired or no longer have the capacity for consciousness or lack a mental life with a high degree of unity. Counter to common intuitions about what qualifies as a person, the Embodied Mind Account says that the aforementioned are not persons and possess an inferior moral status. McMahan alludes to this in his preface:

Among those beings whose nature arguably entails a moral status inferior to our own are animals, human embryos and fetuses, newborn infants, anencephalic infants, congenitally severely retarded human beings, human beings who have suffered severe brain damage or dementia, and human beings who have become irreversibly comatose.

These are all beings that are in one way or another “at the margins.”
(2002, vii)

There are at least two ways that McMahan identifies which beings possess a moral status inferior to our own and their subsequent moral treatment: (1) the Embodied Mind Account’s criterion of personal identity, i.e. the presence of physical and minimal functional continuity of cerebral structures, to determine moral status and (2) the *Time-Relative Interests Account* to determine moral treatment.

On the first strategy McMahan employs, if a being doesn’t satisfy the criterion of personal identity, then there is no person to kill. McMahan writes that “we do not begin to exist until our organisms develop the capacity to generate consciousness” (2002, 267). Thus, those beings that do not possess consciousness, in particular, fetuses at 0-20 weeks, are not persons and possess an inferior moral status. (McMahan notes that consciousness, at earliest, may develop at 20 weeks or roughly 5 months and that early abortion is thus performed prior to 20 weeks [2002, 268].) McMahan elucidates: “An early abortion does not kill anyone; it merely prevents someone from coming into existence. In this respect, it is relevantly like contraception and wholly unlike the killing of a person. For there is, again, no one there to be killed” (2002, 267).

As such, early abortion is permissible because there is no one there to be harmed by killing. On the Embodied Mind Account, this logic extends to other human beings that do not qualify as persons, such as the congenitally severely cognitively impaired, the severely demented, and the comatose, which may seriously offend common intuition and sensibility.

But what if there are human beings that do possess minimal consciousness and qualify at least as minimally minded? Although, we will not delve deeply into McMahan’s second strategy which utilizes the Time-Relative Interests Account, it would be helpful for us to see the logical conclusions of the Embodied Mind Account. McMahan observes that “there are some human beings whose psychological capacities are no more advanced than those of certain animals”: (1) fetuses at 20 weeks and on and infants, (2) those with acquired cognitive deficits (e.g. those who have suffered brain damage or dementia), and (3) congenitally severely cognitively impaired human beings (2002, 204). Due to their “rudimentary cognitive and emotional capacities, human beings of all three types have a comparatively weak time-relative interest in continuing to live” (McMahan 2002, 204). The pregnant woman with a fetus at 20 weeks and on may have a later abortion because the fetus’s time-relative interest is so minimally tied to their future, that the mother’s time-relative interests in not being pregnant outweighs the fetus’s (McMahan

2002, 293–294). Members of the second and third groups of human beings—those with acquired cognitive deficits and the congenitally severely cognitively impaired—have such weak relations with themselves in the future that the “Time-Relative Interest Account implies that it would be no more seriously wrong, other things being equal, to kill a human being of one of these two types than it would be to kill an animal with comparable psychological capacities... Very few people will find this a welcome conclusion” (McMahan 2002, 205).

As mentioned from the outset, we will delimit our inquiry to the case of early abortion which permits an abortion of a fetus at 0-20 weeks. Recall that according to McMahan, “these abortions merely prevent someone like you or me from existing... there is no one there to be killed” (2002, 268). As 99 percent of all abortions are performed prior to 20 weeks (McMahan 2002, 268), focusing our analysis on early abortion and McMahan’s theory of personal identity which grounds its permissibility will be our task. What is of interest to us is whether McMahan’s Embodied Mind Account of Identity sufficiently captures what human persons are. For if McMahan’s criterion for personal identity is wrong, then it follows that the Embodied Mind Account must either be rejected or ameliorated and consequently, its prescription for the permissibility of early abortion must be as well. Moreover, I suspect that this would have implications for McMahan’s Time-Relative Interest Account and the aforementioned conclusions regarding the inferior moral status of human beings on the margins and the permissibility of their being killed (although I will not treat this in this paper). Even further, a pressing concern is the personal identity and moral status of fetus and infants, the congenitally severely cognitively impaired, those with severe dementia, and the comatose. If the Embodied Mind Account is correct, then it follows that because consciousness and a high degree of mental unity is not present in these beings, then these beings are not persons. This claim, offensive to many, goes against ordinary intuitions about the personal identity and moral status of such beings. As such, it is a welcome task to critically analyze the *challenge of dicephalus* and the Embodied Mind Account. To begin, we must briefly consider an inverse challenge to the Embodied Mind Account, the *challenge of cephalothoracopagus janiceps*.

III. Inverse Excurses—The Challenge of Craniopagus: Krista and Tatiana Hogan

The Hogan girls, Krista and Tatiana... share part of their brains and this leads to what seems to be a sharing of some thoughts. If one is pricked by a needle drawing blood, the other winces. If one drinks something delicious, the other verbally expresses her pleasure... The girls' relatives have even suggested that their shared thoughts go beyond the sensual. If one is looking at the television while the other's line of vision doesn't include the television, the latter might still laugh at something that stimulated only the eyes of the former. It doesn't seem that the girls ever suffer ambiguous self-reference, each twin unaware whether she is Tatiana or Krista. There are instead two minds engaged in a sort of "telepathic eavesdropping." One would say "ouch" when the other was pinched out of sight because the message would be sent via the shared parts of their brains. (Hershenov 2013, 204–205)

The *challenge of craniopagus* is an inverse case of the dicephalic conjoined twins, Abigail and Brittany Hensel. Where dicephalic twins are conjoined below the neck and share an organism, craniopagus twins are conjoined above the neck at the cranium, with some cases sharing part of their brain. For our purposes, we are interested in the latter, craniopagus conjoined twins that share part of their brains. As McMahan invoked the real-life case of dicephalic conjoined twins, Abigail and Brittany Hensel, let us briefly consider the real-life case of craniopagus twins, Krista and Tatiana Hogan.

The *Problem of Too Many Thinkers* is often charged against psychological views of identity by animalists. For example, animalist Eric Olson "maintains that if the person is spatially coincident but numerically distinct from the animal, then provided that the person can use its brain to think, so too can the physically indistinguishable animal" (Hershenov 2013, 203). Thus, according to the Problem of Too Many Thinkers the psychological identity theorist seems to posit multiple thinkers in the same organism. McMahan thinks differently, however, and replies that the Embodied Mind Account avoids the problem because "it is the brain-sized person who truly thinks, while the animal thinks only in a derivative sense in virtue of having a thinking proper part" (Hershenov 2013, 203). In the case of dicephalic conjoined twins, McMahan's Embodied Mind Account may prove advantageous because it would identify dicephalic twins as two brain-sized persons in one organism, potentially solving the personal identity paradox.

Yet, if the Hogan twins successfully present the groundwork for an inverse challenge to the psychological identity theorist, then it follows that there is warrant for the inverse claim that human persons are not brain-size parts of human organisms.

The Hogan twins share a thalamus, which connects to both of their brainstems. Although the thalamus works directly in tandem with the activity of the cerebrum and is believed to be involved with the activity of consciousness, the Hogan twins do not directly share a partially overlapping cerebrum. In order to present a plausible case of craniopagus twins that would Pose a Problem of Too Many Thinkers for psychological identity theorists like McMahan, David Hershenov tweaks the Hogan twins case to a different case of conjoined twins with partially overlapping cerebra (2013, 204–205). In Hershenov’s adjusted case example of “Hogan-like” twins, the conjoined twins qualify as sharing partially overlapping cerebra which renders them spatially coincident and being reduced to a condition of sharing all their thinking parts (2013, 204–205). In the adjusted Hogan-like twins case, the unshared parts are destroyed and each thinker becomes smaller and spatially coincident with the other. It is here the Embodied Mind Account of Identity encounters an inverse challenge and problem: How many thinking persons are there even though they share the same neurology and generate consciousness from the same shared cerebra? (Hershenov 2013, 204–205). Recall that the Embodied Mind Account’s criterion for personal identity is physical and minimal functional continuity of cerebral structures. In the case of Hogan-like twins, the Embodied Mind Account would have to admit that there are two thinking persons that have their mental life and consciousness generated by the same shared cerebral structures (Hershenov 2013, 205). Yet, if there is only one shared cerebral structure, how can two distinct thinking persons emerge from the same neurology? It appears that not only does a Problem of Too Many Thinkers arise, the adjusted Hogan-like craniopagus twins case also provides McMahan with an inverse-like problem that he challenges the animalist with in the case of dicephalic conjoined twins.

If the Embodied Mind Account’s criterion for personal identity admits that there are two thinking persons that share the same cerebral structures, then a similar inverse charge of the kind that McMahan issues against animalists in the *challenge of dicephalus* also arises against the Embodied Mind Account theorist. Recall the *challenge of dicephalus* reformulated as a conditional: If there are two distinct persons (two distinct cerebrums, one per person) and one shared human organism, then persons are existentially distinct from the human organism. Against the Embodied Mind Account theorist, an inverse-like *challenge of craniopagus* (i.e. the adjusted Hogan-like twins case) formulated as a conditional is: If there are two distinct bodies, two distinct minds exemplified

by diverging brain activity (one per body), and one shared cerebral structure (where unshared parts are destroyed and each thinker becomes spatially coincident with the another), then there are two thinkers present that arise from the same cerebral structure. The Embodied Mind Account theorist would have to admit that in the case of the Hogan-like twins, there are two thinking persons that arise from the same shared cerebra, which is an inverse problem that McMahan charges against the animalist in the case of dicephalic twins. Recall that McMahan was not convinced that the dicephalic twins could be two distinct overlapping organisms and instead thought the most plausible view was that there are two distinct persons that coexist in one organism. A similar problem exists for the Embodied Mind Account theorist—either Hogan-like twins exist as two distinct persons that arise out of overlapping cerebral structures or there are two distinct persons that coexist in one shared cerebrum. Yet, as we have already identified that this poses the Problem of Too Many Thinkers (and it would be true for each case), it seems that in being charitable to the Embodied Mind Account theorist, the most plausible alternative would be that Hogan-like twins are a case of a single shared cerebrum with a divided mind. This seems implausible, however, because with this explanation the individuated minds of both Hogan-like twins would be lost, thereby losing the force behind the theory that we are essentially embodied minds that arise from individuated physical and minimal functional continuity of cerebral structures. This shows that at the very least, there are plausible reasons that warrant suspicion of the Embodied Mind Account's criterion of personal identity, as well as reason to seek alternative accounts of personal identity that better preserve our intuitions about what we are. Moreover, although this brief excursus does not solve the identity paradox of dicephalic and craniopagus twins (and it does not claim to), the adjusted case of Hogan-like twins weakens the advantage McMahan claims over animalism in his appeal to intuitions about personal identity and the dicephalus. To appease the dissatisfaction that has left us wanting, we must consider new criteria for settling disputes in personal identity that can better point us in the right direction.

IV. Holism, Narrative, and Personal Identity

In this section, I will briefly set forth a preliminary account, although not comprehensive, of *narrative identity* and its parts relevant to our task. Against this backdrop, we will be able to grasp what both *holism* and *narrative* have to offer in developing three new criteria for settling disputes in personal identity: (1) *material holism*, (2) *narrative unity*, and (3) *narrative integrity*. The following subsections will

have focused evaluative questions that any theory of personal identity must satisfy to adequately capture what and who we are.

Narrative identity in relation to questions of personal identity and characterization possess four features that are of interest to us: (1) humans are story-telling animals (MacIntyre 2007, 216), (2) the lives of persons are narrative in form (Schechtman 1996, 93–135) (3) narrative identity is co-constructed individually and communally (Schechtman 2014, 89–109), and (4) narrative identity may render paradox intelligible within a cohesive, continuous, and unified whole (Ricoeur 1992, 113–168). Story-telling is a praxis central to human existence. So fundamental to human praxis is the telling of narrative that it is arguable that perhaps all of theory, including philosophical inquiry on personal identity, is mediated through it.

Narratives have a beginning, middle, and end and a human's narrative identity is co-constructed between the individual (i.e. self-creating reflexive consciousness and utterance) and the individual's community (i.e. third-person identifying referential utterance) (Ricoeur 1992, 50–55). Marya Schechtman identifies this co-constructive practice between the individual and the individual's community by identifying three features of narrative construction: (1) self-narratives are generated from the first-person perspective, (2) an identity-constituting narrative is not just a story you have about yourself but also the stories others tell about you, and (3) those without the wherewithal to narrate their own lives (e.g. infants and those with cognitive deficits) can be identified through narratives created by others (2014, 103–104). In practice, this looks like a mother and father speaking to a fetus in the womb expressing excitement for their eventual arrival, addressing infants and young children as if they will eventually possess forensic capacities though they do not have them yet, and treating dementia patients and those that are comatose as the continuation of a particular narrative (e.g. visiting dementia and comatose patients, overseeing their care, supplying them with their favorite things from the past) (Schechtman 2014, 104–105). On the narrative view, the boundaries of what constitutes personhood may be extended in a much more egalitarian sense than what the Embodied Mind Account allows for.

Finally, narrative identity has the unique capability of rendering contradiction and paradox intelligible within a cohesive, continuous, and unified narrative whole. According to Paul Ricoeur, what marks and is characteristic of all narrative composition is discordant concordance (1992, 141). Narrative succeeds in bringing together the discordant properties of one's life into a unified concordant whole. What are contradictory facts in one's story may be rendered intelligible when considering the cohesive, continuous, and unified narrative whole. This does not mean, however, that all narratives are true. A

narrative might be partly or wholly fiction. Nonetheless, the mechanism of narrative is robust enough to make intelligible paradox in a human person's life.

With this brief introduction to narrative identity, let us now turn to considering the three new criteria that any theory of personal identity ought to satisfy.

IV.I Material Holism

Does this theory provide a sufficient account of the dependent and interconnected parts of the whole, such that the parts cannot exist independently of the whole?

Let us define *holism* as the theory that dependent and interconnected parts of a whole cannot exist independently of the whole. There are at least two kinds of holism that would be good for our purposes to identify as possible criterion: *narrative holism* and *material holism*. Narrative holism is concerned with the parts of a story that are dependent and interconnected to the whole story. Material holism is concerned with the parts of a material being that are dependent on and interconnected to the whole being. Material in this sense are all the biophysical matter that constitutes a being. We will be concerned with the latter, *material holism*. Paraphrased then with material holism in mind, our evaluative question becomes: *Does this theory provide a sufficient account of the dependent and interconnected material parts of the whole material being, such that the material parts cannot exist independently of the whole material being?*

McMahan attempts to explain the relationship between the person and organism as mere part to the whole. In an analysis of two case analogies, (1) a tree that grows a particular limb and (2) blowing a horn in a car, McMahan concludes that "a whole (the organism) has certain properties by virtue of having a part (the mind or person) that has those properties" (McMahan 2002, 92). McMahan writes:

Suppose, for the sake of comparison, that over a certain period of time the only part of a tree that grows is a particular limb. When this limb grows, the tree grows. The tree grows by virtue of having a part that grows. A property of the part— growth—is in this instance necessarily a property of the whole. There are thus two things that are growing: the limb and the tree of which it is a part. Similarly, when I blow the horn in my car, the horn makes a noise but so does the car. There

are two things that have the property of emitting a noise: the horn and the car of which it is a part... These analogies help elucidate the sense in which there are two conscious entities present where I am. My organism is conscious only in a derivative sense, only by virtue of having a conscious part. (McMahan 2002, 92)

McMahan's construal of these analogies fails to recognize that the part (the mind or person) cannot come to exist without the whole (the organism). Similarly, the limb cannot come to exist without the tree, nor can the horn (if it is electric) make a noise without being plugged into the electrical source that exists in the car. In trying to make sense of the part to the whole, McMahan does not address how the part (the mind or person) that is both dependent and interconnected to the whole (the organism) can come to exist without the organism. If the mind or person truly was in its own distinct existential category, it seems that it would be able to arise without the organism. Yet, this is not so. The mind or person cannot come to existence without the organism, nor can it be sustained without the organism.

A reformulation of the material holism criterion question for the Embodied Mind Account theorist could be: *Is it possible for the person as part of the organism to arise outside the organism?* As we have seen, the Embodied Mind Account theorist countenances the person as existentially distinct from the organism. However, they would also have to admit that it is not possible for a person to come into existence without the biological processes made possible by and mediated through the organism (e.g. the cellular, metabolic, cardiovascular, respiratory, and immune systems, amongst others). Such biological processes make possible the conditions for living and eventually consciousness and thinking. On the Embodied Mind Account, the material part that the person arises from, i.e. the cerebrum, is reliant on the material whole, i.e. the organism, and its processes to be developed. The cerebrum cannot be abstracted as independent from the organism, it is intimately interconnected with the whole body. Thus, the Embodied Mind Account cannot satisfy the criterion of material holism as it posits that the brain-sized person that arises from the cerebrum is independent and existentially distinct from the organism. If the Embodied Mind Account does not satisfy the criterion of material holism, then it proffers an erroneous relationship between the material part to the material whole.

IV.II Narrative Unity

Does the theory sufficiently preserve narrative continuity, cohesion, and unity between the beginning, middle, and end of human existence?

McMahan's account allows for persons to exist after their organism comes to exist, to go out of existence in the middle of their narrative and return (e.g. those that temporarily lose basic physical and minimal functional continuity of the parts of the brain that produce thought from causes such as brain trauma or disease and regain them), and to go out of existence before their organism ceases to exist (e.g. severe dementia patients, brain trauma, the comatose). Fetuses and infants do not count as persons or one of us because they lack the consciousness and/or high degree of mental unity that would grant them personhood. On the Embodied Mind Account, it seems that we must say that if we are essentially embodied minds, then our beginnings occur much later than our organisms come to exist, we may pop in and out of existence even though our organism is still living, and we may "die" before our organism does. Yet, what if we are not essentially embodied minds, rather we are something else?

Maureen Condic writes that human organismal life begins immediately upon sperm-egg fusion. The zygote, a one-cell human organism, which forms directly after sperm-egg fusion, functions immediately to direct its own development. The zygote behaves as "an *organism* that is undergoing a self-directed process of maturation" (Condic 2013, 48). Condic writes: "An organism is distinct from a cell because all parts of an organism act together in a coordinated manner to preserve the life, health, and *continued development* of the organism as a whole" (2013, 48). In other words, the zygote is not merely a single-celled entity, nor even an eventual clump of cells. Rather, the zygote exhibits coordinated and regulatory "organismal behavior from the moment of sperm-egg fusion onward" (Condic 2013, 48). If we are essentially biological organisms, as the animalist claims, there would be greater narrative continuity, cohesion, and unity regarding what we essentially are throughout the timeline of a human life. The animalist need not worry about two entities overlapping one organism, there is simply one living and thinking animal, and would have no problems satisfying the narrative unity criterion.

The Embodied Mind Account theorist, however, has trouble with satisfying the narrative unity criterion. As the Embodied Mind Account fails to adequately satisfy the material holism criterion (by abstracting the part as independent from the whole), it then fails to adequately capture what we essentially are by claiming a false relation. If the Embodied Mind Account fails to adequately capture what we essentially are,

then the account implicitly prescribes narrative discontinuity. As we have seen in the Embodied Mind Account, narrative discontinuity is evidenced by its theoretical commitments leading it to the claim that beings such as infants, congenitally severely cognitively impaired, those with severe dementia, and the comatose lose their status as not qualifying essentially as “one of us.” This goes against common intuition, practice, and human sociality and describes a fragmented picture of human life. Yet, this is a consequence of the Embodied Mind Account and its commitments. Thus, so far we have seen that the Embodied Mind Account does not satisfy the material holism and the narrative unity criteria. Let us now consider the final criterion, narrative integrity.

IV.III Narrative Integrity

Is the theory descriptively honest and the relevant parts congruent with the whole and the whole to its relevant parts?

At first glance, this criterion might seem similar to the material holism criterion, however, this criterion is concerned with the overall integrity of the theory, that is, of whether the relevant parts are descriptively honest and congruent with the whole and the whole to its relevant parts. In the *challenge of dicephalus*, McMahan collapsed the Hensel twins individuated organs (e.g. two hearts and two stomachs, one per twin) into the narrative description that the Hensel twins coexisted and shared one harmonious organism. By making this interpretive jump to collapsing the individuated organs that belonged to each Hensel twin to a single shared organism, McMahan’s account of the dicephalic twins showcases a lack of narrative integrity. McMahan’s argument for rejecting animalism depended on the claim that the *challenge of dicephalus* really represents two distinct persons coexisting in one organism. Yet, if there are distinct organs that are not shared between the twins, then it does not follow that there really exists solely one organism. Rather, it is more appropriate to say that the Hensel twins each have their own heart and stomach, while sharing a set of organs. In maintaining that the dicephalic twins are really overlapping organisms, animalist Matthew Liao remarks: “each twin has her own stomach and heart; they have distinct brainstems and distinct spines that are only joined at the hips; and they have partially distinct organs that are united. This suggests that in fact, there are two organisms here although they are not fully independent organisms” (2006, 340).

Although Liao presents plausible reasons for dicephalic twins being overlapping organisms, it remains an open question about what the status of dicephalic twins actually are with respect to its mind, personhood, and organism. However, what could be said is that the Embodied Mind Account relies on the interpretation that dicephalic twins are a case of two persons that share a single organism and therefore narrates biological features of the dicephalic twins (i.e. distinct and unshared organs belonging to each twin) as collapsing into a singular shared organismal entity. The upshot of this strategy is that it helps McMahan's claim that persons are distinct from their organism. The downside is that there may be features left out that are important for us to continue discourse about what the personal identity status of dicephalic twins really are.

The *challenge of dicephalus* is McMahan's central real-life case example that he invokes to ground the justification for his Embodied Mind Account. Nevertheless, even without the charge of a lack of narrative integrity with regard to dicephalic twins, McMahan's Embodied Mind Account still does not satisfy the criterion of narrative integrity. As we have seen, the criteria of material holism and narrative unity are not satisfied and therefore, as the Embodied Mind Account proffers a false relation between the part (the mind or person) and the whole (the organism), as well as implicitly prescribes narrative discontinuity, based on the final criterion, the end result is that the Embodied Mind Account does not satisfy the criterion of narrative integrity. Its parts do not align with the whole.

V. Closing, Paradox, and Hensel Twins Revisited

I hope I have shown that with a basic introduction to the inclusion of the three new criteria for settling disputes in personal identity, we may get some traction on some intractable issues. Informed by holism and narrative identity, (1) *material holism*, (2) *narrative unity*, and (3) *narrative integrity* as criteria can be helpful additions to help determine whether or not a theory of personal identity should be adopted. These criteria serve as standards aimed to ensure holistic alignment and narrative continuity, cohesion, unity, and integrity of the theories of personal identity in question. As we have shown beginning with the inverse *challenge of craniopagus*, the Embodied Mind Account theorist does not escape their own kind of challenge that they issued to animalists. In the adjusted Hogan-like craniopagus twins case, the Embodied Mind Account indeed suffers from a Problem of Too Many Thinkers. Moreover, in order to settle on its claim that persons are distinct entities from their organism, the Embodied Mind Account

must countenance a mereology that is independent from its whole, which is inherently a false relation. Brain-sized persons cannot arise on their own without the organism. Furthermore, an independent mereology that rejects the human animal as necessary to the existence of the person, leads to the consequent of an implicitly prescribed narrative discontinuity. That we are not essentially embodied minds gives us reason to consider other alternative personal identity theories that can better explain the beginning, middle, and end of a human life without positing late and fuzzy existences, as well as premature deaths. By virtue of not satisfying the first two criteria, it follows that the Embodied Mind Theorist also does not satisfy the criterion of narrative integrity. As such, the Embodied Mind Account ultimately recommends a fragmented and incomplete picture of human existence and it lacks plausibility as it relates to its account of personal identity. The Embodied Mind Account of Identity and its prescription for early abortion that it grounds must therefore be rejected or ameliorated. If an argument for early abortion is to be made, it must be made another way outside of the Embodied Mind Account's criterion for personal identity. It is interesting to note that personal identity theories such as animalism, the hylomorphic soul theory, and the Person-Life View (Schechtman 2014, 110–138) would likely fare better at satisfying the new criteria than the Embodied Mind Account and any other psychological identity account. Another paper putting rival personal identity theories to the test would potentially prove to be a fruitful endeavor.

To return to the paradox of the Hensel twins, how should we move forward? Recall that narrative identity possesses the mechanism capable of rendering paradox intelligible in a continuous, cohesive, and unified narrative. In a narrative, the discordant contradictions that riddle a life can be brought into concordance by a unified whole. Taking a second look at the Hensel twins then, we could describe the dicephalic twins as two partially overlapping organisms that possess some of their own organs and partially share some organs that are united. In this way, we retain narrative integrity by describing what reality *actually* is like and we are able to then conclude that we need not make the logical conclusion that persons are existentially distinct from their human organism, for the Hensel twins are not an actual clear cut case of two heads sprouting out of a single organism with only one set of shared organs. Moreover, narrative preserves the identity individuation of each Hensel twin, while also promoting a comprehensive, holistic, and unified view of what and who we are. Holism and narrative as tools enable us to articulate a richer and fuller account of human life and thereby grant us additional pathways for getting clear on what it fundamentally or essentially means to be human.

References

- Campbell, Tim, and Jeff McMahan. 2010. "Animalism and the Varieties of Conjoined Twinning." *Theoretical Medicine and Bioethics* 31 (4): 285–301.
- Condic, Maureen L. 2013. "When Does Human Life Begin? The Scientific Evidence and Terminology Revisited." *University of St. Thomas Journal of Law & Public Policy* 8 (1): 44–81.
- Hershenov, David B. 2013. "Who Doesn't Have a Problem of Too Many Thinkers?" *American Philosophical Quarterly* 50 (2): 203–208.
- Liao, S. Matthew. 2006. "The Organism View Defended." *The Monist* 89 (3): 334–350.
- MacIntyre, Alasdair C. 2007. *After Virtue: A Study in Moral Theory*. Third edition. Notre Dame, Ind: University of Notre Dame Press.
- McMahan, Jeff. 2002. *The Ethics of Killing: Killing at the Margins of Life*. New York: Oxford University Press.
- Ricoeur, Paul. 1992. *Oneself As Another*. Chicago: University of Chicago Press.
- Schechtman, Marya. 2014. *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. First edition. Oxford: Oxford University Press.
- Schechtman, Marya. 1996. *The Constitution of Selves*. Ithaca, NY: Cornell University Press.