

What Matters in Survival: Self-determination and The Continuity of Life Trajectories

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7-21-20

Abstract: In this paper, I argue that standard psychological continuity theory does not account for an important feature of what is important in survival – having the property of personhood. I offer a theory that can account for this, and I explain how it avoids two other implausible consequences of standard psychological continuity theory, as well as having certain other advantages over that theory.

1. Introduction¹

The problem of personal identity can be succinctly defined with the following question: given how much persons change over their lifetimes, what would make it true that they in fact endure or persist over time? The modern answer is that there must be some relation(s) connecting the earlier ways a person once was to the ways they are now that, despite any changes, the holding of these connections entails that a person retains their identity.²

From a contemporary scientific point of view, if persons are anything, they are psychological-physical objects. If so, being the same person over time consists in being the same psychological-physical object over time. But we tend to think of a person's psychology as distinct from a person's physical body. If so, the issue of whether both, one or the other matter most in survival. And, in fact, most agree that only one of these is required - the having the same psychology over time.

The standard account of what is required to have the same psychology over time, also called "psychological continuity" theory is that if there are the right kinds, and enough of the right kinds of connections between the psychological states a person once had and the psychological states that person now has, then that person is a psychologically continuous

¹ For the sake of neutrality, the singular pronoun 'they' and its variants will be used throughout.

² This assumes that the puzzle about whether change over time is possible has been resolved and resolved in favor of a relational theory of identity preservation over time.

being, and therefore survives changes over the passage of time – retains their identity. The standard theory of the nature of psychological continuity is that a person has it just in case their adjacent psychological states are connected via relations of similarity, and their current psychological states causally or counterfactually depend upon their earlier psychological states.³

While I accept that psychological continuity is fundamental for having what is important for survival, I reject the idea that retaining personal identity over time can be exhausted by the holding only of internal relations between a person's psychological states.⁴ And, the reason is that such accounts allow for the loss of the property being a person, which I argue is important for survival. To remedy this, I offer a theory I call the "life trajectory" theory that includes satisfying certain externalist constraints, and an address this issue, which most theories of psychological continuity fail to do.⁵

In the next section, I will describe certain well-known facts about standard psychological continuity theory, which have some unexpected consequences. In Section 3, I describe a famous thought experiment in which only a person's psychology remains intact and to which most react negatively. I explain this negative reaction as due the fact that, in this scenario the person in it, loses the property of being a person, and I explain why this is the case. Section 4 contains two arguments for the claim that lacking the property of personhood threatens what is important in survival. I consider an alternative picture of persons on behalf

³ See Lewis (1983) for this characterization. See Shoemaker (1970) for problems with the causal-connectedness requirement, and MacIntosh (1993) for problems with the similarity requirement.

⁴ That this remnant of Cartesianism was unrecognized for quite some time is somewhat surprising given the vehement rejection of Cartesianism by the initiators of contemporary psychological continuity theory.

⁵ See Parfit (2012) who accepts that survival fundamentally involves being a person. His account, however, does not address the issues I raise in what follows.

of that theory in Section 5, which I reject. In section 6, I develop the life trajectory theory, and in Section 7 I point out some positive consequences of the theory. Section 8 considers an objection to the theory.

2. Psychological Continuity Theory and Personal Identity

Despite its compelling nature, as standardly conceived, psychological continuity theory has problems. Particularly worrying is its standards for continuity do not entail the identity, or strict survival, of a person over time. Two well-known observations illustrate this fact.

2.1 The First Observation

The first observation is that standard psychological continuity theory does not rule out the possibility that more than one later person might be psychologically continuous with a single earlier person. It is based on considering “fission” scenarios, discussed by Parfit (1971:5), but earlier considered by Williams (1976) and Wiggins (1967). These are scenarios in which a single person undergoes some process that results in the creation of at least two distinct persons, each of them related to the original person in the ways required by the standard theory for psychological continuity.

Wiggins (1967: 50), for instance, describes a variant on a scenario originally proposed by Shoemaker (1963: 22). In Shoemaker’s scenario, he asks us to consider whether a person would survive if they retained the same psychology, but their brain is transplanted into a brainless body that is not their previous body but is exactly like their previous body, which most agree a person would survive.⁶ Wiggins asks us to imagine that a person is to undergo the very same transplant procedure with this exception: this time, their brain is split in two and transplanted into two separate bodies, qualitatively indistinguishable from the original.

⁶ This is in fact one of the thought experiments Parfit heavily relies on to show that psychological, rather than physical continuity is what is important for survival.

Assume that each half of this person's brain can fully support their earlier psychological states. After a successful performance of this surgical procedure, then, there will be two people who both satisfy the conditions for being psychologically continuous with the original person.

The previous result is puzzling, however. Since two people cannot be identical to one, the presence of the relations standardly required for psychological continuity are not sufficient for a person to retain their identity. Nevertheless, the intuition that psychological continuity is what is important for survival is highly compelling, as Shoemaker's example illustrates.⁷

Because of the fission case, and because psychological, not physical continuity seems undoubtedly to be what important for survival. Parfit (1984: 261-265) paradoxically, and rather startlingly concludes that identity, or being the same person over time, is not important for survival. While startling, Parfit's challenge is to explain how accepting that psychological continuity is what is important for survival could be consistent with identity mattering.

2.2 The Second Observation

The second observation is that at least one of the stated relations required for a later person to be psychologically continuous with an earlier person – psychological similarity – comes in degrees.⁸ But, being identical over time does not. An object cannot kind of or almost be identical to itself. So, unless there is a non-arbitrary exact amount of similarity required for psychological continuity, being similar is not the same as being identical over time. And, since it hard to see any cut off or threshold as anything other than stipulative. But identity is a matter of physical fact, not stipulation. This second observation, like the first, also shows that if

⁷ For theorists who resist the idea that fission threatens identity, see Carroll (2011); Demarest (2016); and Lewis (1983).

⁸ See Schetchman (2001) for more detailed discussion.

psychological continuity is what is important for survival, then identity is not (1995:21-22).⁹

2.3 Why It Really Does Not Matter That Identity Does Not Matter

After noting the first two observations, many theorists accept Parfit's arguments. Those who do are known as non-identity theorists about what is important for survival. For these theorists, instead of offering criteria for strict survival, they offer theories of something looser called "what matters in survival. A theory of what matters in survival is "looser" than a theory of personal identity in that it relinquishes the idea that the relations required to have what is important for survival will define an equivalence relation. In fact, I too, accept a non-identity theory, but not on the grounds of the first observation, but instead on the grounds of observation two, as well as an observation relying on non-identity responses to Butler's (1736) objects to Locke's (1694) memory theory of identity.

Butler's (1736) worry concerning Locke's (1694) early psychological continuity theory of personal identity – that a later subject is identical to an earlier subject just in case the later subject remembers being the earlier subject – was that the theory was uninformative. According to Butler, it is only known that a later subject remembers being an earlier subject if it is already known that the later subject is identical to the earlier subject. Mental states are memories only if they accurately portray a subject's past experiences. To say then, that a subject remembers an event, entails that that subject experienced that event. Butler concludes that Locke's memory theory is, therefore, question-begging.

In response to Butler's original objection to the memory criterion, several writers – most notably Shoemaker (1970) – introduced a different notion of memory that does not

⁹ For more discussion of the details of Parfit's arguments, along with issues about interpretation, see Johansson (2010), and Schetchman (1996) who develops the objection that this cannot be a criterion on having what matters since it does not allow us to distinguish self-interested from other-interested concern. Williams (1973) too offers an objection based on similar concerns.

require identity. On Shoemaker's account, which Parfit also draws on, these mental states are described as "quasi-memories," or as "q-memories." These are mental states that a subject who inherits them from an earlier one cannot distinguish as not being their own.

Once the concept of q-memories is introduced, any theorist insisting that a later subject must have genuine memories as defined by Butler, raises question of what difference it makes? That is, why should this matter, given that to the person who inherits these mental states, it makes no difference to their own qualitative experiences of being the same person psychologically? The answer seems to be because it would not entail that a person to retains their identity over time. But now this answer is simply question-begging considering Parfit's arguments.

2.4 What Matters in Survival: Replacing Identity Theories

But what is it to be a non-identity theorist of personal identity? That is, how can something be important in a person's survival that does not entail that person's actual survival? Though it is difficult to conceptualize, it is possible to offer some coherent minimal conditions on having it.¹⁰

Having What Matters in Survival

(1) A later person B has what matters in the future survival of an earlier person A only if the relations that hold between B and A allow B to identify with A's past in the same way as if B were identical to A.

(2) A later person B has what matters in the past survival of a later person A only if the relations that hold between A and B allow A to identify with B in the future as if B were identical to A.¹¹

To illustrate, first assume that an earlier subject A is not identical to a later subject B. Now

¹⁰ It should be noted that Parfit is not consistent in his use of the term 'survival'. 'Survival' sometimes stands for persistence (1984), while at other times, he drives a wedge between the two concepts (1971). I will follow the more natural (1984) use.

¹¹ I give only minimal conditions here, since I do not wish to rule out a priori different theories of what matters in survival. The term 'identify' is used for the same reasons. For other definitions of what matters, see Martin (1995), Perry (1976), and Unger (2003), among others.

imagine that A is told that they will soon die, so they have their brain cryogenically preserved to maintain its integrity. A is told that their brain will later be transplanted to another subject B who suffered brain death from a car accident.

Imagine that one of A's current desires is to own and renovate an old house. Suppose that B's does so later and sees this as satisfying A's past desire. B therefore meets condition (1) for having what matters in A's survival. And now consider A who currently has the mentioned desire. Insofar as A believes that B will complete the renovation of an old house, they anticipate this as the satisfaction of their current desire. B therefore meets condition (2).¹² A subject B can have what matters in the survival of a subject A despite the fact that no equivalence relations hold between the two, so long as there are relations that that are just as good as if some equivalence relation had held.

The issue I now wish to examine is whether the standard account of psychological continuity can even serve as a good theory of what matters in survival?

3. Virtual Immersion Scenarios as Tests on Psychological Continuity Theory

Consider now what I call "virtual immersion scenarios." These involve isolating a psychological subject from their external environment in certain ways their psychology remains intact. It follows that if psychological continuity theory is correct, then no virtual immersion scenario should threaten having what matters in survival, but there are such cases.

3.1 The Experience Machine: What Is Missing?

At least one virtual immersion case involves what Nozick (1998) calls the "experience machine," which can provide a person with an endless supply of desirable, but illusory, life experiences. In this scenario, a subject's psychology remains fully intact, but most react

¹² The reason for both forward and backward-looking requirements for having what matters in survival should now be clear, since the transplant's success is not guaranteed. For more arguments for both criteria see Schetchman (2001).

negatively to the idea of being in the experience machine. In fact, many of us, I believe, would in fact recoil in horror at the prospect of entering it, viewing the subject who does so as mere simulacrum of what they once were.¹³ Nozick's explanation of this reaction is that we value more than merely experiencing ourselves as having done certain things, we also want those experiences to be veridical or authentic – to be accurate representations of our interactions with our surrounding environment. But why should veridicality or authenticity matter? It does not seem to be of intrinsic value.

One possible explanation is that having authentic experiences contributes to having a life of self-determination, which a psychological subject effectively directs or governs – at least one way of conceiving of the concept of having free will. To effectively direct or govern a life, a psychological subject must, at least, take an active stance towards that life and to non-accidentally or reliably shape its direction. This at least requires a director that is epistemically and practically rational – whose beliefs are based largely on perceiving the world as it is, and who bases their actions on what would satisfy their desires based on those beliefs.¹⁴ The authenticity or veridicality of a psychological subject's experience is important, then, since its systematic lack would threaten a subject's ability to live the life they choose – to exercise their free will.¹⁵ The experience machine makes subjects mere passive experiencers. Any sense that the subject in the experience machine has of having exercised their free will, is illusory – determined by the machine, not the subject.

I will now turn to exploring what kind of being has these properties. I will argue that it

¹³ The fact that the situation portrayed in "The Matrix" is at all disturbing is proof that many people have negative reactions to virtual immersion.

¹⁴ That believing based on evidence enhances autonomy was emphasized by Kant (1785), and which is also part of the reason for why he believed lying to be wrong.

¹⁵ For arguments that having plans and projects are important for having what matters in survival, see Perry (1976). See Wolf for arguments that knowledge is required for the exercise of free will (1986).

is persons that have them, and therefore, personhood that is threatened by Nozick's experience machine.

3.2 Self-determined Lives and Persons

A natural and not unprecedented idea is that the kinds of beings that have free will or self-determined lives are members of the kind person. Frankfurt (1971), for instance, proposes the idea that having free will is what distinguishes persons from what he calls "wantons." And Aristotle's notion of persons (or "humans" in his terms) in his *Nichomachean Ethics* (trans. Rowe 2002) involves having rational capacities and effectively exercising those capacities, among many others in history – too many to mention. By these standards, a being in Nozick's experience machine, would not be persons, and as I will argue next, being a person matters in survival.¹⁶

4. Personhood and What Matters in Survival

If lacking personhood explains our negative reaction to experience machine, the psychological continuity theorist could respond that personhood is not a property that matters in survival, but only in a life of value. I will rebut this argument, as well offer two additional arguments for my claim – one concerning methodological and conceptual issues, and the other is based on a thought experiment.

4.1 Methodological and Conceptual Considerations

Clearly, there is a distinction between what matters in survival and a life worth living. However, any non-identity theorist must draw this distinction carefully, if they want metaphysical matters to remain relevant in their theories of what matters in survival, since the identity theorist can always ask the non-identity theorist: if you are not offering an identity theory of what matters

¹⁶ Olson (2010) would disagree. For Olson, what matters in survival is not a sortal. For considerations against this claim, see Rudder Baker (1999), and Parfit (2012).

in survival, why should metaphysics enter the picture at all?

Now, the psychological continuity theory has already rejected one possible answer – that metaphysics matter in theories of what matters in survival because even non-identity theorists are concerned with what matters in the survival of a certain kind of metaphysical entity – persons. However, this answer is not available to the psychological continuity theorist who claims that the loss of personhood in the experience machine does not threaten what matters in survival, only a life of value.

A different response to the identity theorist's question is to simply admit that theories of what matters in survival are not concerned with metaphysics, but instead with practical issues and issues of value. This response however threatens to make what matters in survival entirely perspectival or person relative. That is, the very same thing would be at stake in the case of a person who so highly values their lucky left big toe that they believe losing it would kill them, and a person who requires that medical professionals refrain from resuscitating them if they can no longer be self-sufficient – what matters in their survival. This seems wrong. Clearly, some constraint that rules out this consequence is needed. What it could be if an appeal to the metaphysical kind person is not available, however, is not clear.

Even Parfit, for instance, in considering what constitutes personal identity over time, begins with a metaphysical stance on the nature of a person as a kind – as a psychological-physical entity. In fact, appealing to this claim is needed to make the single-transplant argument for psychological continuity valid altogether, given that its structure depends upon the choice between physical or psychological continuity as an exhaustive dichotomy.

In fact, given the minimal conditions on having what matters in survival, the property of personhood must matter in survival in order for a theory to count as being about what matters in survival at all, simply as a conceptual matter. Consider the alternative. Imagine, for instance, a person now knows they will soon inherit millions of dollars, but they also know

that before this happens, they will be turned into a bunny. The subject who later inherits the money – the bunny – is not going to experience that event as if it constitutes the satisfaction of the previous subject's desire, assuming bunnies are even sufficiently advanced enough to be cognizant of having inherited anything at all. Neither will the person who now exists anticipate that the bunny's inheriting of the money will constitute the satisfaction of their current desires. Simply by definition, then, being a person must matter in survival.

4.2 Choosing How to Continue: A Thought Experiment

Recall that in the single-case transplant most agree that their mind matters more for what matters in survival than their bodies. This then serves as evidence for Parfit's claim that what matters in survival is psychological continuity. Supposing this is a good argument strategy, I will now appeal to the very same method, except the choice is not between body and mind, but is instead between being a subject with full psychological continuity but lacking personhood, or accepting only partial psychological continuity but whose personhood remains intact. I claim that the latter is intuitively preferable to the former. If correct, then personhood must matter in survival.

Imagine that you are ill with a fatal degenerative brain disease, but that neuropsychologists and computer scientists know how to convert sets of psychological states into a digital format. Your doctor offers you the option of having your entire psychology, which has the digital informational value of roughly 2.5 perabytes or 2500 terabytes transferred to a digital storage device.

You are warned, however, that scientists cannot convert psychological states back into any format readable by an organic brain, and that it is possible to store 2500 terabytes of data on a portable digital storage unit only if it kept at a ridiculously low temperature. Otherwise, your psychology must be stored on a device that is not feasibly portable. If you choose to have your entire psychology converted, then, there will be no way for you to live as the

embodied person you once were. You will, however, still be able to communicate with the outside world via projecting your thoughts onto a digital screen.

You also told, however, that there is another option. Your psychology can be compressed and stored on a digital storage unit that will fit within a body cloned from yours, but that this compression will inevitably result in the loss of some of the finer details of your psychological states. This process would, however, allow you to keep the defining properties of your particular psychology in a way similar to the way in which a JPEG file of a tiger that was originally a RAW file still looks like a tiger even though it fails to contain every tiger-y pixel it had originally. So you may lose some memories, for example, but none that shaped your current character. Even some of your current desires might be forgotten, but none that would cause anyone to exclaim that you had become a different person.

In the first scenario, though your psychology continues in its entirety, you lose a significant degree of autonomy and control over your life. You could no longer have the life you had once wanted. As I claim, this means that you lose some of the core properties of being a person. In the second scenario, your autonomy and control is fully preserved. After the transfer process, you can still do everything you had planned to do prior to the onset of the disease, at least those that you deemed important.

Now which choice is preferable? I suspect the second option is the most attractive – that our psychologies matter, but only insofar as they allow us to continue to be the self-determining beings we had always been. Notice that Parfit's uses this very style of argument to show that what matters is psychological continuity.

5. Persons, Self-determination, and Psychological Beings

The failure of the previous response still leaves two other options for the psychological continuity theorist: (a) the beings in the machine are self-determining, or (b) persons are not the kind of beings I claim they are.

5.1 The Experience Machine and Self-determination

One way to argue that the subject in the experience machine retains a self-determined life is to claim that the subject chooses to enter the machine, and every experience they have afterwards, is the result of their original choice. They are in fact living the lives they want to live. But is this enough to have a self-determined life, and therefore be a person? I argue that the answer surely must be “no.”

Part of having a self-determined life is to play an active role in shaping one's life. Consider, for instance, the fact that a parent wishes their children to be well off upon their death, and they plan things so that this is true after their death. Now of course simply because the parent's choice is realized, clearly this is not part of their self-determined life since their life has presumably ended. Or consider someone who decides to drink too much alcohol, blacks out, and gets into a street fight. Now, though it is still unclear the exact reason for this, we hold this person responsible for the aftereffects of their decision to drink. But during a blackout, a person is certainly not exercising their free will – shaping their life direction, even if during the blackout they threw a punch.

It seems clear, then, that the simple realization of one's decisions is not sufficient for a psychological subject to have a self-determined life. This line of argument, then, does not appear very promising for the psychological continuity theorist.

5.2 Persons as Essentially Psychological Entities

The question of what constitutes the nature of personhood has generated several positions. Unfortunately, I cannot discuss all of them here.

The two most relevant positions are that persons are fundamentally composed of internally related psychological states of some kind, or the position I endorse, that persons

are beings that have free will or can determine their life direction.¹⁷

For any psychological theorist, a subject will at least be conscious, but they must also have other cognitive capacities. One is that of being self-awareness – a kind of higher-order conscious state.¹⁸ As Baker might (2013) would put it, they must have a “first-person perspective.” Whether these distinguish persons from other types of psychological beings depends on how we define the concepts.

For instance, it surely seems that when it is time to clip the nails of my dogs, they show self-awareness, and a first-experiencer perspective. They know it is their nails that are to be clipped and that they find it unpleasant, which they illustrate by running away as soon as they see the clippers coming out of the drawer. Now of course they do not think to themselves that I, one of the dogs that lives here, is going to have my nails clipped. Self-awareness or having a self-oriented perspective, then, does not appear to be enough for personhood.

Some might claim that these creatures only seem like they can experience pain, and act as if they are aware of it happening to themselves. I claim that if this is true, it is most likely true, which would explain why we mercifully euthanize our suffering pets.¹⁹

Another idea is that persons, unlike dogs, have more complex states of higher-order consciousness than simple self-awareness. That is, they have conscious states about their conscious states. So, for instance, a person can have anxiety about having anxiety about getting to sleep, which prevents them from sleeping, and dogs do not seem to have this problem. Having states of higher-order consciousness like these then do, at least, separate

¹⁷ See Wilson (2005) for arguments that agency should not be included in an account of personhood.

¹⁸ In fact, it is not clear that conscious states do not presuppose self-awareness.

¹⁹ According to Lycan (2001), this would entail that dogs have higher-order states of consciousness, but I am not sure this would be a happy result for what are known as “HOT” theorists, if offering an “HOT” theory as a way of distinguishing persons from other types of cognitive beings. Rosenthal’s (1986) theory has much the same problem.

certain types of cognitive beings as failing to be persons, such as dogs, for instance. But many humans will count as persons, as well as possibly extra-terrestrials or the artificially intelligent.

However, even though the second idea is more restrictive, it might still count certain kinds of cognitive beings as counting as persons that should not so count. Consider the Borg from Star Trek. These creatures we see as beings controlled by a center of thought that seems to have higher order thoughts. Yet, in this case, there is no entity with the property of being a person. In fact, the Borg does not even satisfy the minimum criteria for having what matters in survival over time. There is no later subject B that believes its experiences are those that satisfy the desires of previous subject A's desires. Having states of higher-order consciousness, then, may again be a necessary condition on being a person, but it does not suffice for it.²⁰

I offered my own brief picture of the nature of persons earlier, as beings with self-determined lives, and therefore as being required to be able to interact with and effect their own environments. I will now spend the rest of the discussion developing a theory of survival based on this fundamental idea.

6. The Life Trajectory Theory of What Matters in Survival

A person – in the sense in which I understand this notion – that continues over time, whether this sustains equivalence relations or not, creates what I will call a “life trajectory.” This is the path of a free rational psychological subject through an external environment individuated by that psychological subject's extrinsic relations to their environment.²¹ It is trajectory that

²⁰ Carruthers's dispositionalist account (1996) improves upon these ideas since the states must be about oneself, but in terms of being used a way to address a theory of what matters, it would either beg the question, or count The Borg as a single person.

²¹ This idea is put forward in McDowell (1997) although for several reasons, as well as

begins with an action that counts as one that is self-determining. Other beings such as frogs, cats, and quails – other types of psychological beings – also have trajectories, but they do not have life trajectories, since they do not have self-determined lives. We might instead call these trajectories “phenomenal” or “qualia-tative” trajectories. Even non-psychological subjects such as rocks, baseballs, and atoms – those things understood as objects as opposed to simply stuff – also have trajectories, again produced by interactions with the environment, which I call “objectual” trajectories. In all these cases, being related to an external environment results in conferring certain extrinsic properties upon the subject of those relations.

6.1 The Extrinsic Properties of a Life Trajectory and What Matters in Survival

Let us consider some examples of certain extrinsic properties that I have. Currently, I have the short-lived extrinsic properties of drinking a kickstart and smoking a cigarette, as well as typing on my keyboard. In contrast, I also have the more longer-lived properties being the custodian of two Catahoula rescues and one McNab Shepherd rescue, and of living at a certain address. Even further, there are other properties I have that I will always have, such as being the single author of this paper, as well as being the agent of whatever intentional action created my life trajectory. All these properties individuate my specific life trajectory, at least, currently. Only some of them, however, can do so over time – those I have for the duration of my lifespan, since they do not depend on the continued holding of any relations between myself and my environment.

It is the holding of these latter properties that make for a single continuous trajectory

supporting an anti-reductionist hypothesis. Marya Schetchman has recently developed a similar idea (2014) emphasizing the importance of unity with respect to practical concerns, which she terms having a “person life.” While similar sounding to my own idea, my concern is with the metaphysical continuity of certain properties over time, not only practical issues.

over time, and therefore, it is these latter properties that matter in survival. And intuitively, they do matter. What I will call “permanent” extrinsic properties are part of what gives a person a sense of continuity over time – of what grounds their current identification with a past subject, and part of what sustains identification with a future subject as anticipated as having those properties.²²

6.2 The Continuity of Life Trajectories

I now turn to what constitutes the continuity of a person’s extrinsic properties. One obvious answer is to simply be the bearer of them, but if I wish to remain a non-identity theorist then I cannot offer this as an answer, and this requires that I revisit Butler’s worry about Locke’s theory. To return to an earlier example, consider A’s having written a certain paper. According to the life trajectory theory, a later subject B can have what matters in A’s survival only if B has the property of having written A’s paper. But how could B have written a paper of A’s without being identical to A? This would seem to be impossible, and if so, then the life trajectory would be circular just like Locke’s theory.

However, like Shoemaker and Parfit, I too will invoke the concept of something making no qualitative differences to a subject’s experience, except that I will be applying this notion to extrinsic properties rather than mental states. That is, the life trajectory theory takes this form: if a later subject continues an earlier subject’s life trajectory, then that later subject must possess the quasi-properties corresponding to the permanent extrinsic properties of that

²² Psychological continuity and life trajectory continuity then are symbiotic. But even if this is not sufficiently convincing, the claim that what matters in survival is the continuation of some extrinsic q-properties is not supported on the grounds of our direct intuitions anyway. It is a consequence that follows from other intuitions we do have, like the intuition that being a person matters in survival, which I claim requires a certain kind of connection to an external context. To account for this intuition, it was then conjectured, not deduced, that part of what matters in our survival is the continuation of our life trajectory, which is analyzed in terms of the continuity of certain extrinsic properties over time.

earlier subject.

What it means to possess the quasi-properties of an earlier subject is expressed in the following two conditions:

Having Permanent Extrinsic Q-Properties

(1) A later subject B has the q-property corresponding to an earlier subject A's permanent extrinsic property just in case B is able to relate to their current external context in a way indistinguishable from the way in which A did at the time of their cessation.

(2) A later subject B has the q-property corresponding to an earlier subject A's permanent extrinsic property just in case B relates to their external context in a way indistinguishable from the way in which A would have had A persisted after moment t.

To clarify these conditions, I will address how each applies in the case of a particular property, and then turn to discussing their global application.

Suppose that a subject A ceases to exist at moment t, and that another psychologically continuous subject B comes into existence. Imagine that, just before moment t, A had the permanent extrinsic property of being the author of a certain paper. A believed and remembered authoring the paper, felt dissatisfied with it, took credit for having written it, was given such credit, gave presentations on it, and so on. To satisfy condition (1), then, B would have to (a) quasi-believe they were the author of that paper; (b) quasi-remember having authored it to the extent that A did; (c) have the same quasi-attitudes towards the paper that A had; (d) be received in the external world in the same way as A was with respect to that paper, and so on.²³ To put it casually, B must occupy the same environmental niche that A did in virtue of having written a certain paper.

Before moment t, there were definite ways in which A had the property of having written a certain paper. Condition (1), then, is concerned with B resembling A with respect to

²³ One might think that B would satisfy (a)-(c) simply in virtue of being A's psychological successor, but that's not essential for B to count as A's psychological successor, unless the conditions for counting as psychologically continuous are very stringent.

A's past. Condition (2), however, cannot require similarity, since it is concerned with A's future after moment t, which is something that never happened but could have. It is possible, for instance, that if A had existed after moment t, they could have changed in various ways with respect to having authored a certain work. They might have decided to disown it, or perhaps just completely forgotten it. The same is true for any of the permanent extrinsic properties A had at moment t. Furthermore, A's future might have included gaining various permanent extrinsic properties, such as having children or inventing the world's best can opener. Now what must be true of a later person B to count as being A's successor given these facts?

If we wish to remain neutral on the question of determinism, then either there is no way to know or there is no way to even determine the facts concerning A's possible future. What is known, however, is that A would have been the author of a certain paper no matter what they did after moment t. To satisfy condition (2), then, B must simply continue to have the q-extrinsic property of having written A's paper, since if A had continued after moment t, they would have continued to have had that property. That is, condition (2) requires only that B never lose the q-extrinsic property of being the author of A's paper. That is, to satisfy condition (2), subject B must have only the quasi counterparts of the permanent extrinsic properties A would have had, not could have had – those A has in any world like our own.²⁴

Now the question is: how do conditions (1) and (2) apply globally? For instance, must B satisfy these conditions for all, or only most, of A's past extrinsic properties. For simplicity and accessibility, I will simply stipulate that B is, in fact, required to meet both conditions for all of A's permanent extrinsic properties. However, the theory need not be this strong. The same points could be made by replacing the notion of indistinguishability with the notion of

²⁴ Might this merely be ad hoc? Possibly, but given the controversy about whether the future is open or determined, I believe it would simply be an unreasonable demand to require the condition to have the word 'could' instead of 'would'.

significant discernible difference, for instance.

7. The Appeal of the Life Trajectory Theory

I argued that being a person is required for having what matters in survival. I then offered an identity neutral account – the life trajectory theory – that respects this idea. So, one advantage of the theory is, therefore, already clear. Furthermore, a second advantage is also clear, it is an account that a non-identity theorist can accept, but it could also be interpreted as an identity theory.²⁵ There are two further advantages as well that I will now discuss. The first concerns a consequence of the theory for fission cases. The second concerns a consequence for different cases of virtual immersion.

7.1 Fission and the Unity Reaction

While it might appear as though a non-identity theorist should have no qualms about fission as a case in which we have what matters in survival, this is not required.²⁶ In fact, there are several non-identity theorists who have expressed doubts about fission as a way of having what matters.²⁷ And this seems reasonable. After all, it was not an intuitive position initially, not even for Parfit. Call those who believe identity does not matter, but who reject fission as a way of having what matters “Parfitian unitarians.” For these theorists, having what matters requires unity, but not necessarily identity over time – being unified over time is not the same

²⁵ See Lewis’s account (1983).

²⁶ Some psychological continuity theorists have embraced this consequence. Lewis (1983), for instance, agrees that we have what matters in fission cases, as do some others (Moyer, 2008; Ehring, 1995).

²⁷ See Korsgaard, 2003; Schetchman, 1996; Sosa, 1990; Rovane, 1998; Unger, 1997; Whiting, 2002; Wolf, 1986; among others. For Whiting (2002), for instance, having what matters in survival requires that we consider ourselves as a single continuous being over time, stemming from Locke’s observation that personal identity consists in the fact that a thinking being “can consider itself as itself, the same thinking thing in different times and places....” (L-N 2.27.9). Her theory requires accepting only unity not identity, which in fact, she rejects.

as being identical over time.²⁸

To be unified over time is to remain an organized or structured complex or systematic whole over time. This does not require being an object that retains its identity over time.²⁹ For example, consider a sports teams I will call “The Changelings.” Suppose that The Changelings win the championship every year, but that its individual members are different each time the team wins. Fans of The Changelings attend every game the team plays and celebrate its victory every year. However, even though The Changelings win the championship every year, there is no object The Changelings that does this winning. There is no group of winners, for instance, that we can congratulate on their long-lived success. Nevertheless, The Changelings remains a unified team for which we can cheer at every year’s final championship game. Being unified over time then is not the same as being identical over time.

A Parfitian unitarian theory would have to be one that rules out fission as a way of having what matters in survival. As it turns out, the life trajectory theory, in fact, does rule this out. It is therefore a welcome addition for the Parfitian unitarian.³⁰ The reason it does so is that the requirements for the continuity of a subject’s permanent extrinsic properties, as stated in conditions (1) and (2), entail that life trajectories must be unities. This is true either because the permanent extrinsic property in question happens to be one that its nature is such that it can logically be held by only one subject at a time, or because it is the originating property of

²⁸ See Belzer (2005) who introduces the difference between what he calls the “identity” reaction and the “unity” reaction.

²⁹ See also Perry (1972) for discussion of this distinction.

³⁰ In order for a non-identity theorist like myself to fully endorse psychological continuity as what matters, an intuitive position even if its current formulation is flawed, I would also need to interpret the life trajectory theory as a theory of theory of psychological continuity, which would presumably be an externalist account of that concept. Although I do not provide such details here, I do believe that such an interpretation is possible.

a subject's life trajectory. This is true even for having the q-counterparts of such properties.³¹

To illustrate, reconsider psychological subject A, and their property of having authored a certain paper. Now consider A just before moment t again, except in this case, instead of ceasing at moment t, A undergoes a fission procedure that ends with the creation of two subjects B1 and B2, both psychologically continuous with, and yet distinct from A. Now, does the life trajectory theory allow for both B1 and B2 to have what matters in A's survival? Well, it does only if B1 and B2 can satisfy conditions (1) and (2) with respect to A's property of having authored a certain paper. Do they? I argue that the answer is "no."

Concerning condition (1), consider how A had the property of being the author of a certain paper – in the form of having been the sole author of that paper, and A related to the world in the way that being the sole author of a paper dictates. While B1 and B2 could both potentially have the same q-psychological states with respect to being the sole author of A's paper, they could not both act that way, or be recieved that way in A's previous environmental context simply due to the nature of the property of being a sole author. B1 and B2, then, could not occupy A's previous environmental niche of having been a sole author.

It might be argued that even if B1 and B2 cannot have the q-counterpart of having been a sole author, they can have something similar – that of having co-authored the paper in question. But having the property of being a co-author has a rather different character from being a sole author. It is therefore a different property than being a sole author. And these facts about the different characters of the relevant properties are metaphysical facts about

³¹ One potential objection to this criterion is that it begs the question. The issue can be understood in the following way: in assuming that there are permanent extrinsic properties that only one being can have at a time, haven't I guaranteed that fission cannot preserve what matters in survival? Well, yes, but the argument I have offered for the life trajectory theory did not begin with the premise that properties that only one being at time can have matter in survival. This followed from other assumptions for which there is independent motivation.

their nature, not merely practical matters. Fission products, therefore, cannot satisfy condition (1) for being A's successor.

Condition (2) would require that both B1 and B2 cannot lack or lose those permanent extrinsic properties that A would have had after moment t. As just illustrated, however, one of the properties that A would have had after moment t is being the sole author of a certain paper. Now for B1 and B2 to have this property, they must both be able to be said to currently have the q-counterpart of that property, but being the sole author of a certain paper is not a property that two beings can have at once, simply as a matter of its nature. While both B1 and B2 can claim to be psychologically continuous with something that once was the sole author of a certain paper and this is not something that just anyone can claim. Still, having once been the author of a certain paper no more counts as having that property's q-counterpart than would merely having once had A's memories would count as having A's q-memories. Neither fission product, then, can maintain what is required for what matters in survival.³²

Fission as a way of having what matters is therefore ruled out on the life trajectory theory due what is required for the continuity of a subject's permanent extrinsic properties. Parfitian unitarianism, itself attractive, can therefore be adopted by the life trajectory theorist, a third reason to find the theory appealing.

³² Even if condition (1) is relaxed in certain ways so that a successor of A need not be completely indistinguishable with respect to certain permanent extrinsic properties of A's, nevertheless, because they are extrinsic properties, certain environmental conditions would still be required to hold that would rule out the possibility of two beings having the q-counterpart of a property like being a sole author. And, even supposing the global condition of satisfying condition (1) is relaxed, it is relatively unlikely that all of the permanent extrinsic properties a psychological subject has that entail unity over time could be ruled out, at least not without begging the question.

7.2 Virtual Immersion Scenarios

The second positive consequence of the life trajectory theory is that it can explain and predict a range of intuitions about virtual immersion cases. To illustrate, I reconsider the experience machine and a variant of that case.

In the experience machine case, I claimed that most would react with horror and anxiety to the possibility of being immersed in a world in which their experiences were entirely de-correlated with facts about their external context. The explanation for this horror was that, in such a scenario, we lose what matters for our survival due to the loss of our personhood.

Now consider a different scenario. Imagine the anticipation we might feel if all psychological subjects could rid themselves together, en masse, of the shackles of their decaying bodies by immersing their psychologies within a shared, interactive virtual world, maintained independently of their bodies. Suppose that, somehow, our aging, dying biological bodies become obsolete. Surely, many of us might look at a scenario like this as a way of achieving immortality.³³

As I argued earlier, standard psychological continuity theory predicts that we do have what matters in cases of virtual immersion, and therefore it can predict our reaction of anticipation to the second case. However, it cannot predict our reaction of horror to the experience machine case. In contrast, it appears that the life trajectory theory can predict our reaction of horror, but it cannot predict our reaction of anticipation. Therefore, standard psychological continuity theory gets it wrong for the first virtual immersion case, but right for the second one. And the life trajectory theorist gets it right for the first case, but wrong for the second one.

³³ For details about ways these possibilities might be realized and their potential implications, see Chalmers (2010). Sauchelli (2017) addresses how such “life extending” techniques may or may not fit with certain narrative conceptions of what matters over time.

However, things are not quite this simple. As it turns out, the life trajectory theorist can predict the correct reaction to the second virtual immersion case. To see this, however, requires re-conceptualizing what it means to exist in an external context. Our natural assumption is that these kinds of contexts must be identified with spatial temporal contexts. But this assumption might be rejected if technology advances to the point of allowing for purely virtual interactions. In this case, the notion of a mind-independent external world need not involve connections to an ordinary physical environment. We could instead think of a purely virtual environment as mind-independent – as external – supposing we have shared experiences of that virtual environment together with the ability to affect that shared environment in certain predictable, systematic law-like ways. If this is how we understand immersion within a virtual environment, then we might still reasonably ascribe extrinsic properties to subjects in contexts like these. The life trajectory theorist could then say that the second case of virtual immersion preserves what matters in survival after all.

8. Ways of Fissioning: An Objection

While there are many potential objections to the life trajectory theory, I can now consider only one. It concerns different ways fission might be realized that are could be consistent with the life trajectory theory, which would rule out its adoption by the Parfitian unitarian, which I claimed as an advantage of the theory. I consider one such way and suggest that it is not clearly a case of fission, and therefore it does not threaten my claim that the life trajectory theory rules out fission as a way of having what matters.

One non-standard fission scenario is explored by Martin (1995), which he calls “fission rejuvenation.” In this scenario, we suppose that when we are, say, 30 years old, a scientist offers us the opportunity to undergo fission, except that one fission product is kept unconscious, and we then continue our life as before. The unconscious fission product remains physically preserved until our death, at which point that being, whose psychological

states have been continuously updated so as to track the now deceased fission product's psychological states, is awakened and picks up where we left off. We can imagine this continuing indefinitely. Martin claims that this is a case of fission, and if that is correct, it appears to be one that meets the requirements of the life trajectory theory for having what matters in survival. However, the claim that this is a true case of fission is questionable.³⁴ It is not clear, for instance, whether this case is not better described as a case of sophisticated body cloning that includes a kind of mental state transfer process. The claim that fission rejuvenation counts as a true case of fission, then, needs more careful consideration before we could draw any strong conclusions about the life trajectory theory.³⁵

9. Concluding Remarks

I offered a theory, in lieu of standard psychological theory since I believe it captures more of what counts as a person than that theory does. I also argued that the theory fares better with respect to our intuitions about certain cases, such as fission and different kinds of virtual immersion scenarios.³⁶ Since standard psychological continuity theory cannot accommodate as many of our intuitions as the life trajectory theory can, we ought to reject the standard theory in favor of the life trajectory theory.³⁷

³⁴ Suppose that we have an entire world that fissions. Would each fission product then count as having what matters? The answer I think would depend upon whether the q-counterparts of extrinsic properties are themselves individuated internally or externally mirroring the debate about whether water or even mental states must be so individuated. Thanks to Eric Schwitzgebel for bringing this possibility to my attention.

³⁵ See Martin (1995) for reasons for thinking it truly is a case of fission.

³⁶ The position explored shares similarities with other view but is still distinct. In particular, the externalist aspect of the life trajectory hypothesis is not new, and neither is the Parfitian view of identity. However, the emphasis on the importance of personhood for having what matters, and their specific way in which externalism and Parfitian views about identity are combined is novel. For comparison, Whiting's (2002) work supports Parfitian singularism, but is driven by internalist considerations. In contrast, Lindemann's (2014) work on personal identity is externalist, but hers is one focused on social relations, rather than all external relations.

³⁷ Thanks to John G. Bennett, Peter Carruthers, Ted Everett, Dan Giberman, John Harty,

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Peter Ludlow, Duncan MacIntosh, Raymond Martin, Eric Olson, John Perry, Paul Pietroski, Georges Rey, and Allen Stairs for comments on drafts in progress. Thanks also to Derek Parfit for sharing his work in progress on the topic. More thanks are due also to various anonymous reviewers, audiences at the 2010 "Personal Identity, their Embodiments and Environments" Workshop, the 2004 Canadian Philosophical Association meeting, the Dalhousie Philosophy Colloquium Series, and the UC Riverside Workshop Series.

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