

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

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**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. Introduction<sup>1</sup>

Most of us have the intuition that persons endure or persist over time despite changes in their bodies or their personalities. But given how much a person can change over their lives, what makes this true? The modern answer is that there must be some relation(s) that connects the earlier ways a person was to the later ways they become that makes it true that they are one and the same person – that makes them a single continuous being over time.<sup>2</sup>

From a scientific point of view, it is reasonable to believe that, if persons are anything, they are psychological-physical objects. If so, then being the same person over time consists in being the same psychological-physical object over time, and this requires that certain relations hold between that person's earlier and later psychological-physical states. However, on the face of it, there is a difference between a person's psychology and a person's physical body. A question then arises: does being the same person over time require having both the same psychology and physical body over time, or is only one of these required? The most widely accepted answer is that only one of them is necessary – having the same psychology.

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

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

<sup>2</sup> 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.

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 being, and therefore survives changes over the passage of time. The standard theory of the nature of psychological continuity is that a person has it just in case their adjacent psychological states are similar, and their current psychological states causally or counterfactually depend upon their earlier psychological states.<sup>3</sup>

While I accept that psychological continuity is fundamental for having what is important for survival, I reject the idea that remaining intact over time can be exhausted by the holding of only certain internal relations between a person's earlier and later psychological states.<sup>4</sup> I argue that this is because remaining intact as a person is also important for survival, and that this requires satisfying certain externalist constraints, which the standard theory of psychological continuity fails to address.<sup>5</sup> For this reason, I offer an alternative theory, called the "life trajectory" theory, which incorporates the idea that remaining a person over time is important for survival. I describe the theory's externalist constraints, offer some intuitive reasons for accepting them, what they entail for the continuity of a person over time, and defend this alternative theory as superior to the standard theory, as well as offer responses to objections.

To begin, in the next section, I will describe certain well-known facts concerning the standard psychological continuity theory and note one point of agreement. In Section 3, I

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<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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.

consider a famous thought experiment in which only a person's psychology remains intact, thereby isolating what the standard theorist claims is important in survival. The intuitively negative reaction to these scenarios shows that something more than having an intact psychology is important to us. I argue that what the psychological subject lacks, in this scenario, is the property personhood, and I offer a plausible picture of what criteria an individual must meet to have this property. Section 4 contains two arguments for the claim that lacking the property of personhood threatens our ability to be continuous over time. That is, lacking this property is more than a matter of lacking something that is only of practical value. If this is right, then the thought experiment I describe would constitute a counterexample to standard psychological continuity theory. I consider an alternative picture of persons on behalf of that theory in Section 5, but I ultimately argue that they are not feasible. In section 6, I develop and explain in detail the idea of having an extrinsic property, and in section 7, I develop the life trajectory theory. Section 8 points out the positive consequences of the theory, section 9 considers 2 objections, and finally in section 10 I make some concluding remarks.

## **2. Psychological Continuity Theory and Non-identity Theories**

Despite its compelling nature, psychological continuity theory, as standardly conceived, has several problems. One of these is especially troubling – that the satisfaction of its requirements for psychological continuity over time does not entail the identity, or strict survival, of a person over time. Two well-known observations illustrate this fact, as well an argument concerning what it is rational expect to suffice for psychological continuity.

The first of the two observations is that standard psychological continuity theory does not rule out the possibility for more than one later person to be psychologically continuous with a single earlier person. The second observation is that the relations required for psychological continuity, as standardly understood, can hold between later and earlier

persons to varying degrees.<sup>6</sup> Each observation independently shows that psychological continuity over time does not entail identity over time.

The first observation 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.<sup>7</sup> 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. 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 cannot be sufficient 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

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<sup>6</sup> See Schetchman (2001) for more detailed discussion.

<sup>7</sup> 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.

illustrates.<sup>8</sup> However, it cannot serve as a theory of the nature of personal identity.

Parfit – a psychological continuity theorist – considers several responses. One is to reject psychological continuity theory, but the strength of our intuition about Shoemaker's case rules this out. Another response would be to pick one of two later people as identical to the previous one. However, this would be arbitrary and stipulative, and therefore would not make it true that the chosen person is literally identical to you. It also seems wrong to say they are both the original person – that they compose a single entity that is identical to the original – since the two fission products are clearly separate persons.

Because of the fission case, and because psychological, not physical continuity seems undoubtedly to be what is 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. Those who disagree, Parfit challenges to explain how identity could be important for survival consistent with accepting that psychological continuity is what is important for survival. Parfit sees no way to do this.

The second observation — that psychological connections are a matter of degree — also shows that psychological continuity cannot be an equivalence relation, unless by stipulation -- by introducing an arbitrary cut off for the degree of psychological connectedness required for continuity over time. But objects are not identical by stipulation; they are identical as a matter of metaphysical fact. Therefore, if psychological continuity is what is important for survival, once again, identity must not be important (1995:21-22).<sup>9</sup>

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<sup>8</sup> For theorists who resist the idea that fission threatens identity, see Carroll (2011); Demarest (2016); and Lewis (1983).

<sup>9</sup> 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.

A third reason is inspired by a particular worry of Butler's (1736) concerning Locke's (1694) early psychological continuity theory of personal identity – the idea that a later subject is identical to an earlier subject just in case the later subject remembers having had the earlier subject's experiences. Butler claimed that we could know if a later subject remembered being an earlier subject only if we already know that the later subject is identical to the earlier subject. This is due to the nature of having a memory. A subject's mental state counts as a memory only if it accurately portrays that very subject's past experiences. For instance, suppose some subject thinks that, at some point, they went to Niagara Falls. If this state is an actual memory, then it must in fact be true that that subject really went to Niagara Falls, which entails that the subject who remembers having been at Niagara Falls must be identical to the subject who did. Butler concludes that Locke's memory theory is, therefore, uninformative.

In response to Butler's original objection to the memory criterion, several writers – most notably Shoemaker (1970) – introduced a different notion of memory, which does not define it as needing to be accurate in order to be a memory. On Shoemaker's account, which Parfit draws on, these types of memories are described as "quasi-memories," or as "q-memories." A q-memory is one the having of which is qualitatively indistinguishable from the having genuine memories. Suppose that it is required of a later subject to be continuous with an earlier one only if they have that earlier subject's q-memories.<sup>10</sup> This theory would not subject to Butler's worry. Having the q-memories of an earlier subject does not require that the subject having those memories must be identical to that earlier subject.

For any theorist that wishes to insist that a later subject must have genuine memories

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<sup>10</sup> Note that the quasi-memories of a subject B, as described here, must come from a previous subject A for B to count as psychologically continuous with A. Sidelle (2011) argues that the causal requirement for psychological continuity entails this.

as defined by Butler, we can ask what rational difference it makes whether a person has genuine memories or simply q-memories? That is, why should this matter? The only answer seems to be because it would a person to retain their identity over time. But this answer is simply question-begging considering Parfit's arguments.

I, in fact, accept a non-identity theory, but on the grounds of the second observation and the response to Butler. The fission result I find troubling, since even if I am not committed to an identity theory, I can remain committed to some kind of unity requirement.<sup>11</sup>

But what is it to be a non-identity theorist of personal identity? Non-identity theorists instead of offering theories of strict survival, 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 that must hold, to have what is important for survival, must be equivalence relations. This naturally raises the question: what could it be for something to be important in a person's survival if not identity aka strict survival? 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 this, it is possible to offer some coherent minimal conditions for having it.<sup>12</sup>

#### 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

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<sup>11</sup> As a non-identity theorist who endorses psychological continuity, but rejects fission, to properly respond to Parfit, I would have to offer an externalist theory of psychological continuity that ruled such cases out. I do not provide details about how the life trajectory theory can be interpreted in that way here, though I do claim that such an interpretation is possible.

<sup>12</sup> 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.

identical to A.<sup>13</sup>

To offer an example, assume that an earlier subject A is not identical to a later subject B. Now imagine that A is exposed to a radioactive substance, and before A is going to die, they have their brain removed, and cryogenically preserved, and that this supports their current psychological states. They are told that their brain will be used in a brain transplant experiment being conducted on a subject B who suffered brain death from a car accident.

To illustrate how satisfying conditions (1) and (2) results in a person having what matters in survival, imagine that one of A's current desires is to own and renovate an old house, and they now believe that B will carry this out. B's does so, B sees this as satisfying A's past desire. B therefore meets condition (1). Consider now A, prior to their brain being cryogenically frozen, who has the previous desire, and anticipates that B will carry that desire out. A considers B's future completion of the renovation as satisfying their current desire. B therefore meets condition (2).<sup>14</sup>

That we can have what matters in survival without identity is based on the idea that even if there is no general account of any equivalence relation that could hold between two psychological subjects over time that would entail their identity, there are still relations that can hold that are just as good as if some equivalence relation had held. If this seems odd, well, it is, since naturally what we expect would matter in survival is, well, actual survival. Now, how does the standard account of psychological continuity fare as a theory of the even looser concept of what matters in survival?

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<sup>13</sup> 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.

<sup>14</sup> 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).



### **3. Testing the Psychological Continuity Theory**

To see if anything is wrong with standard psychological continuity theory — whether it is missing anything — I consider an example of what I will be calling a “virtual immersion” scenario that involves isolating a psychological subject from their spatial-temporal context so that only their psychology remains intact. For reason, virtual immersion scenarios can be used to test psychological continuity theory for its plausibility as a theory of what matters in survival since, by definition, these scenarios sustain psychological continuity – at least the standard theory's internalist variety. If psychological continuity theory is correct, then no virtual immersion scenario should threaten having what matters in survival. I claim, however, that there are such cases. For example, the scenario described by Nozick (1998) involving what he calls the “experience machine.” I argue that even though this scenario is one in which a subject has psychological continuity over time, it is also one that most would not want to find themselves in. I argue that this is because being in this scenario threatens having what matters in survival, and therefore it shows that psychological continuity theory, as it stands, is not a complete theory of what matters.

#### **3.1 The Experience Machine: What Is Missing?**

Nozick (1998) describes the experience machine as a machine that a person can choose to enter that provides them with an endless supply of desirable, but illusory, life experiences. He claims that we would not choose to enter the machine. I agree. Many of us, I believe, would recoil in horror at the prospect of entering it, viewing the subject who does so as mere simulacrum of what they once were.<sup>15</sup> According to Nozick, this reaction is explained by the fact that we value more than merely experiencing ourselves as having done certain things.

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<sup>15</sup> The fact that “The Matrix” is at all compelling to watch is proof that many people do find these kinds of scenarios disturbing.

We also want those experiences to be veridical or authentic – to be accurate representations of our interactions with our surrounding environment.

But why does veridicality or authenticity matter? One explanation is that having authentic experiences contribute to having a life of self-determination that 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 both 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.<sup>16</sup> The authenticity or veridicality of a psychological subject's experience is important, then, since its systematic lack would compromise their ability to act in ways that would result in their failure to get they want in life – to act to exercise their free will.<sup>17</sup> .

The experience machine keeps subjects from living self-determined lives, because it makes them mere passive experiencers. Any sense that the subject in the experience machine might have of actively forming certain beliefs based on the weighing of evidence, or of making decisions and acting on the basis of these beliefs, and therefore of having exercised their free will, is illusory – determined by the machine, not the subject.

### **3.2 Self-determined Lives and Persons**

Now, what kinds of entities have self-determined lives? A natural and not unprecedented suggestion are members of the kind person. Frankfurt (1971), for instance, proposes the idea

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<sup>16</sup> 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.

<sup>17</sup> 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).

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. A being in the machine, then, lacks the property of personhood, and this is the reason for our reaction of horror at the prospect of entering the experience machine.

#### **4. Being a Person Matters in Survival**

If lacking personhood explains our negative reaction to experience machine, this implies either the standard theory simply fails as an account of what matters in survival, or it simply fails to incorporate a feature that makes a life worth living. If the latter is true, the psychological continuity theorist can claim that while subject’s life in the experience machine loses value, it does not cease to have what matters in survival, and it is the latter with which they are concerned not the former.

I argue, however, that being a person matters in survival based on methodological and conceptual considerations. In addition, I describe a thought experiment that intuitively shows that being a person matters in survival, the very same kind of appeal Parfit makes for the claim that what matters is psychological continuity.<sup>18</sup>

##### **4.1 Methodological and Conceptual Considerations**

Clearly, there is a distinction between what matters in survival and a life worth living. Any non-identity theorist must draw this distinction carefully in a way that does not make metaphysics completely irrelevant for their project. That is, we can imagine the identity theorist asking: if you are not offering an identity theory of what matters in survival, what role do metaphysical relations play in your theory? This is an especially difficult take for the psychological continuity

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<sup>18</sup> 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).

theorist, since their answer cannot be that persons are fundamentally beings whose psychological states are internally related over time, since this would make theories of what matters in survival makes personhood fundamental in a theory of what matters in survival, something they earlier attempted to avoid.

An alternative answer available to the psychological continuity theorist is that theories about what matters in survival are not, in fact, concerned with metaphysical issues at all, but rather, with practical and normative issues. This response, however, threatens to make their theory an entirely person-dependent value-laden issue. Surely a person who believes that they have ceased to have what matters in survival upon the removal of their lucky big toe is wrong, no matter how much that lucky big toe meant to them. This way of drawing the distinction, then, seems to lead to absurd consequences.

The difference, then, between what matters in survival and what matters in a life worth living cannot be invoked by the psychological continuity theorist to explain the negative reaction to the experience machine case, since they cannot appeal to the metaphysical property of personhood for drawing the distinction. However, I do not see another way to ensure that a theory of what matters in survival does have anything to do with metaphysics. For instance, even Parfit, in considering the question of personal identity over time, began with a metaphysical stance on the nature of a person as a kind – as psychological-physical individual. In fact, this idea is needed for the single-transplant argument for psychological continuity to be what matters to even be valid. The very structure of the argument depends upon having a choice between only physical or psychological continuity as what matters.

In short, the idea of making the metaphysical concept of being a person central in a theory of what matters in survival seems required for the theory to be a metaphysically based theory at all. Endorsing this idea, makes it possible to argue that for a property or relation to matter in survival, it must be one that is constitutive of the nature of a certain metaphysical

kind, specifically, persons. Consider the alternative. Imagine, for instance, that a person who will inherit millions of dollars, but who also knows that they are going to soon become a bunny. The subject who later inherits the money – a bunny – will not identify getting the inheritance, even supposing its cognizant of the fact, as the satisfaction of the earlier subject's desire to inherit the money. Neither will that person, knowing they are to become a bunny, anticipate that that bunny's inheritance counts as an instance of their desires being satisfied in the same way as they would if the bunny were identical to that person as a person. The idea that being a person matters in survival seems to be required for a theory of what matters in survival as having anything to with metaphysics at all – to maintain the distinction between what matters in survival and in a life worth living at all.

#### **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 it 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 50 enter it. And A believed that B's later experiences would so count. 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 being a person and having a self-determined life is to play an active role in

directing one's life throughout its duration. Simply because a subject has a certain desire and makes a choice to follow a certain course of action in satisfying that desire does not entail that that subject is living a self-determined 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. Persons as Essentially Psychological Beings**

A psychological continuity theorist can also argue, however, that the subject in the experience machine is, in fact, still a person because persons need not have self-determined lives. This is a debate that has generated several positions, and 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 must be at least have free will.<sup>19</sup>

A psychological theorist might add that not only must a be conscious, they must also have self-awareness – a kind of higher-order conscious state -- which of course, the being in

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<sup>19</sup> See Wilson (2005) for arguments that agency should not be included in an account of personhood.

the experience machine would have.<sup>20</sup> As Baker might (2013) would put it, they must have a “first-person perspective.” However, 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. But they can predict that certain experiences are going to happen to them. Self-awareness or having a self-oriented perspective, then, does not appear to be enough for personhood, since even dogs appear to have it, unless we offer some long-abandoned give a Skinnerian analysis of this behavior. I claim that creatures that behave like they can experience pain, and act as if they are aware of it, likely are, which would explain why we mercifully euthanize our suffering pets.<sup>21</sup>

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. Or, they can be aware that they have uncontrollable urges to smoke cigarettes, wish they could choose instead to eat gum, but frustratingly find themselves unable to do so. It does not seem as though dogs can have such thoughts. Dogs, in fact, will continue to eat dog food until they must regurgitate it, and they do not later regret it, and wish they could control their urges to eat too much. Having states

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<sup>20</sup> In fact, it is not clear that conscious states do not presuppose self-awareness.

<sup>21</sup> 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.

of higher-order consciousness like these then do, at least, separate certain types of cognitive beings. And this idea is strikingly like Frankfurt's distinction between a wanton and a free agent. However, for Frankfurt, the smoker who experiences frustration at a lack of control over their habit, is what explains why free will is valuable. Its value lies in a cognitive being's ability to reduce internal conflict. However, simply knowing what one wants and having the power to achieve it are two quite different things. And those who cannot implement such higher-order states in way any are, to a certain extent, compromised persons at those times.

Besides, having states of higher-order consciousness does not rule out certain kinds of cognitive beings as counting as persons that should not so count. For a different case, consider the Borg from Star Trek. In this case, it would appear we have plenty of states of higher-order consciousness, but no entity with the property of being a person. Furthermore, 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.<sup>22</sup>

I offered my own picture of the nature of persons earlier, as agents, 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 based on this fundamental idea.

## **6. The Nature of Life Trajectories and Extrinsic Properties**

As I have argued, being a person requires having a life trajectory, but what it is to have a life trajectory?

A person – in the sense in which I understand this notion – that continues over time,

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<sup>22</sup> 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.



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 relations to their environment.<sup>23</sup>

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 some 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 Extrinsic Properties**

Let us consider some examples of certain extrinsic properties that I have. Currently, I have the extrinsic properties of being a coffee drinker and of being a cigarette smoker. Over the last several years, I have had the property of being the custodian of two Catahoula and one McNab Shepherd rescue and I also live at a certain address. I also have properties that I will have until my death, such as being the single author of this paper, as well as having the property of being my father’s second born child. All these properties individuate my specific life trajectory, at least, currently. Not all of them will do so over time, however, since they have different durations. So, how then are these properties implicated in what matters in survival?

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<sup>23</sup> This idea is put forward in McDowell (1997) although for several reasons, as well as 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.

## 6.2 Survival-mattering Extrinsic Properties

Many of the extrinsic properties of the subject of a life trajectory come and go, such as, for instance, my being the drinker of a cup of coffee. Others are more durable, such as being the custodian of three dogs, but even these sadly will still come and go during my normal lifespan. In fact, not only do extrinsic properties come and go, some may not even overlap. None of these previous properties, then, ephemeral properties, can be used to determine the continuity of a person's specific life trajectory, even if collectively they might individuate person's life trajectory, this would be true only at a given point in time, not over time.<sup>24</sup> There are, however, extrinsic properties that can be used to do so – those properties of the subject of a life trajectory that they cease to have only upon their death – permanent extrinsic properties, and those they gain, in virtue of which, they begin to have self-determining lives. The presence of these types of extrinsic properties, do not depend on the continued holding of any relations between a subject and its environment. For example, that of my being single author of this paper, or my first self-determined, and person-forming act --- that of getting first place in a public speech competition I gave about Elvis Presley.

In addition to individuating a continuing trajectory over time, intuitively, many of these properties will also intuitively matter in survival. 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.<sup>25</sup>

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<sup>24</sup> Perry (1976) also raises the issue of whether having certain properties – for him, those that relate a subject to their past – are special in an account of personal identity, since only the subject could have them. However, Perry thinks that this is a consideration in favor of an identity theory of persons, unlike the current hypothesis under consideration – not an identity theory – which will become clear in the next section.

<sup>25</sup> Psychological continuity and life trajectory continuity then are symbiotic.

## 7. The Life Trajectory Theory of Having What Matters in Survival

I now turn to the third question: how these permanent extrinsic properties must be continued in order for them to sufficiently continue persons over time. One obvious answer is to have them.

This however re-raises Butler's worry about Locke's theory. Using an earlier example, consider being the author of a certain paper subject A. 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? It seems that B could not have done so, and that therefore the life trajectory theory like Locke's theory is circular.

As Shoemaker and Parfit do, I will also invoke the concept of qualitative indistinguishability, but this time, the idea will apply to permanent extrinsic properties rather than mental states. Given this refinement, the life trajectory theory now 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 earlier subject. What it means to possess the quasi-properties of an earlier subject is encoded in the following:

### 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 qualitatively 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 qualitatively indistinguishable from the way in which A would have had A persisted after moment t.

To clarify the conditions for having permanent extrinsic q-properties, I will first address how each condition 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 subject B, psychologically continuous with A, comes into existence at  $t$ . 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. For B 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.<sup>26</sup> To put it casually, for B to have the q-extrinsic property of having written A's paper after moment  $t$ , B must occupy A's previous environmental niche concerning that property.

In contrast, condition (2) is weaker than condition (1), to satisfy it, 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. Condition (2) requires only that B never lose the q-extrinsic property of being the author of A's paper. This differs significantly from satisfying condition (1). Condition (1) is concerned with B resembling A with respect to A's past. Condition (2), in contrast, concerns B resembling A with respect to A's possible future. This makes satisfying these two conditions quite different. Before moment  $t$ , for instance, there were definite ways in which A had the property of having written a certain paper. For this reason, any continuer of A must also seem as though they had that property in the past in the very same way as A had it. However, A failed to persist after moment  $t$ , so their future after that moment is something that never happened. It is possible that if A had

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<sup>26</sup> 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.

existed after moment *t*, they could have changed in various ways with respect to having authored a certain work. For instance, their attitude towards it may have changed to one of repudiation or they could have lost all memories of having written it, and so on. There is not any way to know, however, or to perhaps to even determine the various ways *A* could have changed with respect to having authored a certain work, had they persisted after moment *t*. What is known is that *A* would have been the author of that paper no matter what *A* did after moment *t*. A second way in which satisfying condition (2) differs from condition (1) is that if *A* had persisted after moment *t*, it is possible that *A* could have gained other extrinsic properties. This is the reason for requiring that subject *B* have only the quasi counterparts of the permanent extrinsic properties *A* would have had, not could have had – those *A* has in any world similar to our own.<sup>27</sup>

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 qualitative indistinguishability with the notion of significant discernible difference, or by having enough of them, or by giving certain types of properties certain weights perhaps.

## **8. The Appeal of the Life Trajectory Theory**

I have argued that being a person is required for having what matters in survival, and that part of this involves having a life trajectory, which is tied up with the continuation of a subject's extrinsic properties. I then offered an identity neutral account of how this might work. Several

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<sup>27</sup> 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'.

advantages of accepting the life trajectory theory are, therefore, already clear. For instance, because it requires that a psychological subject does in fact live a life, it makes many of the features that matter for personhood matter in survival, which recommends it over the standard psychological continuity theory. While I prefer an identity neutral version of the theory, It could be interpreted as an identity theory.<sup>28</sup>

What I will now do is point out two further consequences of the view that the standard theory lacks. The first concerns a consequence of the theory for the fission scenario. The second concerns a consequence for different cases of virtual immersion.

### **8.1 Fission and the Unity Reaction**

Regarding fission, the life trajectory theory, even in an identity neutral form, rules it out as a form of survival. This is appealing, since accepting fission as a case in which we had what mattered was always an unexpected consequence of standard psychological continuity theory.<sup>29</sup> It was never a naturally intuitive idea, and even non-identity theorists have expressed doubts about fission as a way of surviving.<sup>30</sup> Call those who believe identity does not matter, but that remaining a unified whole over time does -- “Parfitian unitarians” – those shocked by the consequences of psychological continuity, but who also find the idea that identity matters elusive. I endorse this idea myself, but so too do others.

Whiting (2002), for instance, rejects identity as what matters, but also rejects that fission cases maintain what matters in survival. For Whiting, having what matters in survival requires that we consider ourselves as a single continuous being over time, stemming from

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<sup>28</sup> See Lewis’s account (1983).

<sup>29</sup> 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).

<sup>30</sup> See Korsgaard, 2003; Schetchman, 1996; Sosa, 1990; Rovane, 1998; Unger, 1997; Whiting, 2002; Wolf, 1986; among others.

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)

Belzer (2005), in fact, explicitly distinguished between the identity reaction and unity reaction. For Belzer these are separate, and therefore we might reject identity as what matters, and therefore also reject fission cases as instance of having what matters. Of course, the "identity" reaction requires that what matters in the survival of a person must appeal to relations that are reflexive, symmetric, and transitive, something psychological continuity theory failed to provide, since it accepts fission as an instance of having what matters. The second reaction Belzer terms the "unity" reaction – that what matters in survival is the continuation of an organization – something that is structured so that it forms a complex or systematic whole over time.<sup>31</sup> And, in fact, Belzer points out that both reactions are fission objectionable.

While not obvious, perhaps, being a unity over time is not the same as being a persistent object over time. Imagine that every year, a team changes its membership entirely. In this case, there is a unity that wins the championship every year for which we can cheer, but there is not some persistent object that does the winning each year. There is no group of winners, for instance, that we can congratulate on their long-lived success. Because the concept of being a unity over time and having identity over time can come apart, it is possible to believe that one is necessary for having what matters in survival without believing that the other is.

The life trajectory theory supports Parfitian unitarianism, because conditions (1) and (2) entail that life trajectories are unities, and therefore can be continued only by one psychological subject at a time, which rule out fission as cases in which we have what matters

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<sup>31</sup> See also Perry (1972) for discussion of this distinction.

in survival. The reason for this is that many of the extrinsic properties a psychological subject has are those that can be had by only one subject at a time, and this is true even for having the q-counterparts of such properties.<sup>32</sup>

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 Parfitian 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.<sup>33</sup> Do they? I argue that the answer is "no."

Regarding 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

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<sup>32</sup> 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.

<sup>33</sup> Parfit argued that non-branching psychological continuity cannot be what matters in survival because what matters must concern the intrinsic relations between earlier and later subjects, and in fission scenarios, each fission product is intrinsically psychologically related to their predecessor. Whether there are two or not is an irrelevant extrinsic factor. It is standard, when focused on the identity of an individual over time, to hold that only internal relations between those properties essential for being that thing continue to persist over time, but the requirement that we focus only on internal relations applies when determining the identity of something over time, not necessarily in determining what matters in the survival of something over time.

Does this very same reasoning apply to the life trajectory theory? The answer is no, since the relata are not mere psychological subjects, but life trajectories, and life trajectories are in part individuated by extrinsic factors.



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 and is therefore a different property from being a sole author. Being the sole author of a certain paper has a quite different character from being the co-author of a paper. And these facts – about the different characters of the relevant properties – are metaphysical facts about their nature, not merely practical matters. Fission products, therefore, cannot satisfy condition (1) for being A's successor.

Turning now to condition (2), it demands that both B1 and B2 cannot lack or lose those 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 definition. 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.<sup>34</sup>

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<sup>34</sup> 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,

## 8.2 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.<sup>35</sup>

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

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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.

<sup>35</sup> 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.

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.

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.

## **9. Objections**

While there are several objections to the life trajectory theory, I can now consider only one. The first concerns different ways fission might be realized raising the possibility that it does preserve what matters in survival. The second concerns whether permanent extrinsic properties have enough intuitive importance that a subject losing them really loses what matter in survival.

### **9.1 Fission Scenario Variants**

Thus far, fission has been rejected as a way of surviving on metaphysical grounds. But there might be other ways of fissioning that maintain everything that the life trajectory theory

requires. If so, only one way of fissioning, rather than fissioning altogether, would be ruled out.

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.<sup>36</sup> 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.<sup>37</sup>

## **9.2 Extrinsic Properties and What Matters in Survival**

Although I did earlier offer a brief reason for thinking that such properties do intuitively matter, I do not offer much in the way of a defense of this claim. But this is not significant. The claim that what matters in survival is the continuation of some extrinsic q-properties is not supported

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<sup>36</sup> 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.

<sup>37</sup> See Martin (1995) for reasons for thinking it truly is a case of fission.

on the grounds of our direct intuitions. It is a consequence that follows from other intuitions we do have, like the intuition that we do not have what matters in the experience machine case, since our connection to an external context is lost, and this constitutes the loss of our personhood, something I argued does matter in survival. 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, an idea that was analyzed in terms of the continuity of certain extrinsic properties over time. The requirement that we care about such properties, then, is an implication of caring about being connected to the external environment and of remaining a person; it is not the life trajectory theory's starting point.

## **10. 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.<sup>38</sup> 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.<sup>39</sup>

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<sup>38</sup> 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.

<sup>39</sup> Thanks to John G. Bennett, Peter Carruthers, Ted Everett, Dan Giberman, John Harty, 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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