

# The Life Trajectory Theory of What Matters in Survival

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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

The following question defines the problem of personal identity: given the degree to which a person changes over their lifetime, what would make it true that they in fact endure or persist over time? The modern answer is that there must be certain relation(s) connecting the earlier ways a person once was to the ways they are now such that – despite these changes – the holding of these relation(s) entails that a person remains one and the same individual over time.<sup>1</sup>

From a contemporary scientific point of view, if persons are anything, they are psychological-physical objects. If so, being the same person over time can involve only relations between psycho-physical states. However, we tend to think of a person's psychology as distinct from a person's physical body. If this is correct, then whether relations between one or the other of these states might matter more in a person's persistence. The most widely accepted idea is that a person's identity over time depends on the holding of certain relations between that person's psychological states, rather than their bodily states. This is better known as psychological continuity theory.

Parfit (1971) offers a proof of psychological continuity theory in the form of a thought experiment in which a person would not mind or be particularly upset if their psychologies were moved to another body exactly like their current one in order to avoid the death of their

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<sup>1</sup> This assumes that the problem of identity over time has been settled in favor of a relational view.

bodies. This is supposed to show that personal identity does not depend upon bodily integrity.

On the psychological continuity theory, the types of connections that must hold between the psychological states a person once had, and the psychological states that person now must remain the same person over time is that their adjacent psychological states are similar or resemble one another, and that their current psychological states causally or counterfactually depend upon their earlier psychological states.<sup>2</sup>

I discuss several flaws with psychological continuity theory, some of which are well known. For instance, it is not clear whether the standard theory of psychological continuity even satisfies the criteria for being an equivalence relation at all. However, because the idea that retaining psychological integrity is so compelling when considering a person's survival over time, the debate about personal identity shifted to defining what is called "what matters in survival." However, not only does psychological continuity theory fail as an identity theory, I argue it also fails as a theory of what matters in survival. For this reason, I offer an alternative theory of what matters in survival that I call the "life trajectory" account.

In Section 2, I present the arguments that show that psychological continuity theory as an identity theory fails, and I offer a third argument. I then give a neutral definition of the concept of having what matters in survival. In Section 3, I discuss a particular thought experiment that shows that psychological continuity theory fails even as theory of having what matters in survival. The results of this thought experiment also hint at the correct theory. In Section 4, I develop an account of the type suggested in Section 3 – the life trajectory theory. Section 5 offers reasons for accepting this theory based on its advantages over the standard psychological continuity theory. Section 6 considers several objections.

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<sup>2</sup> For this succinct characterization, see Lewis (1983).

## **2. Identity Theories and Having What Matters in Survival**

That an identity theory of persons over time is a worthwhile pursuit is questionable. This comes from the consideration of several arguments against it.

### **2.1 Psychological Continuity Theory's Failure as an Identity Theory**

Despite its compelling nature, as standardly conceived, psychological continuity theory has problems. For example, as it turns out, it fails as an account of personal identity altogether based on two facts.

The first fact is that the standard account of psychological continuity allows for one-to-many relations between psychologically continuous beings. That is, more than one later person can count as having an earlier person's psychology. Consider, for example, what is called a "fission" scenario involving tele-transportation. Imagine that tele-transporting involves destroying a person's body in one place and recreating it in another, but that this process does not threaten that person's psychological continuity. Suppose that the Earth is uninhabitable, and Mars is the only planet that can support human life, but that the only means of transportation is tele-transportation. Most people would likely choose to tele-transport to Mars rather than die on Earth, even though 1% of the time the teletransportee "fissions" when using the tele-transporter. That is, upon arrival, 1% of the time, two exact duplicates of the original teletransportee step out of the tele-transporter, both psychologically continuous with the original transportee.<sup>3</sup> However, identity relations entail those two objects cannot be identical to one. A single object can only ever be identical to itself. This shows that psychological continuity does not necessarily involve maintaining identity over time.

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<sup>3</sup> Fission scenarios are also discussed by Parfit (1971:5) but were earlier considered by Williams (1976) and Wiggins (1967).

The second fact is that psychological continuity can come in degrees.<sup>4</sup> Imagine, for instance, a person who undergoes several radical sudden changes due to outside forces, and is therefore, to a certain degree, less psychologically continuous with the person they earlier were after these changes. Is this later person whose memories and several preferences suddenly changed now, to a certain degree, less identical to the earlier person they once were? Not plausibly, no. Identity, however, cannot be a matter of degree. An individual cannot be more or less identical to itself. Identity is all or nothing. This second fact about psychological continuity also illustrates that the relations that hold between psychological states on the standard theory are not identity relations.

The previous two facts show that psychological continuity theory fails as an identity theory. The natural thing to say is that the correct theory of personal identity is yet to be discovered. However, consider the following objection to any type of identity theory that from an observation of Butler's (1736) about Locke's memory theory of personal identity (1694).

## **2.2 A General Problem for any Identity Theory**

Locke held that a later subject is identical to an earlier subject just in case the later subject remembers being the earlier subject also known the memory theory of personal identity. Butler's (1736) concern was that the theory was uninformative, since a later subject can only remember being an earlier subject if it is already known that the later subject is identical to the earlier subject. Butler assumed that mental states count as memories only if they accurately portray a subject's past experiences. To say that a subject remembers an event, then, entails that that subject experienced that event. Butler concludes that Locke's memory theory is, therefore, question-begging given that presupposes the truth of that which is purporting to explain.

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<sup>4</sup> See Schetchman for more discussion on the degree criterion (2001).

In response to Butler's original objection to the memory criterion, some psychological continuity theorists – most notably Shoemaker (1970) – introduced a different notion of memory that does not require identity on which Parfit also draws. According to Shoemaker, even if Butler is correct, there are mental states that at least appear to be memories even if they would not count as genuine memories, at least not in Butler's sense. These mental states are described as "quasi-memories," or as "q-memories." To have a q-memory is to inherit a memory that is not one's own, but that cannot be distinguished as such. That is, there is no discernible qualitative difference between memories and q-memories. This makes room for the position that the only thing a person could rationally want is the persistence of quasi-psychological continuity – that they would have no grounds for complaint if this was all they ever had, since it makes no qualitative difference from a first-person perspective. If that is correct, then identity fails to matter not because psychological continuity theory allows for fission and degrees of psychological continuity, but rather because caring about the identity relation is not reasonable from a first-person perspective. This turns out to be a general objection to any identity theory.

In response, Parfit, paradoxically and startlingly concludes that identity, or being the same person over time, is not important for survival (1984: 261-265; 1995: 21-22).<sup>5</sup> Instead of offering theories that maintain a person's identity, Parfit claims that the focus should be on what he calls "what matters in survival."<sup>6</sup>

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<sup>5</sup> For theorists who resist the idea that fission threatens identity, see Carroll (2011); Demarest (2016); and Lewis (1983).

<sup>6</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) also offers an objection based on similar concerns. 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.

## 2.3 What Matters in Survival

Currently, many theorists have accepted Parfit's conclusion. Call these theorists "survivalists." Survivalists must now answer the following question: if identity is not what matters in survival, what else could possibly matter? I believe that what matters is that some relation holds between some person A and a later person B that is qualitatively distinguishable from the holding of an identity relation that allows for A and B to both identify B as A's successor. More formally, a relation matters in survival if it meets at least the following two general conditions:

- (1) If a person A at moment  $t$  identifies with another person B at later moment  $t_1$  in same way that they would if person A was identical to person B, then person B has what matters for A's survival.
- (2) If a person B at moment  $t_1$  identifies with a person A at an earlier moment  $t$  in same way that they would if person A was identical to person B, then person B has what matters for A's survival.

To better grasp these conditions, consider this example: assume a person A is not identical to a later person B. Now imagine that at moment  $t$ , A knows that they will soon die, and arranges to have their psychological states preserved by cryogenically freezing their brain upon their cessation and wills it to neuroscientists instructed to transplant it into a healthy subject that, unfortunately, experiences brain death. Subject A also wills their possessions to the body into which their brain is transplanted. At moment  $t$ , A identifies with the future of whomever receives their brain as if it is their own. Now suppose that upon A's cessation at moment  $t_1$  that another subject B experiences brain death and their body is therefore available for a brain transplant. Upon the immediate transplant of A's brain into B's body, B awakens recalling from a first-person perspective that A desired to renovate their home. Subject B proceeds to do so. In this case, both conditions (1) and (2) for having what matters in A's survival are satisfied: A believes that their desires will be present in person B in the same way they would have been had A been identical to B, and B has A's desires

and acts on them in the same way A would have had A persisted.<sup>7</sup>

Conditions (1) and (2) are plausible candidates for having what matters in survival, at least if all that matters is that a person sustains something qualitatively indistinguishable from sustaining their identity. If we suppose this is purely a matter of the internal relations between a person's psychological states over time, as several of Parfit's thought experiments appear to illustrate, then psychological continuity theory is a strong candidate for a theory of what matters for survival, despite that the fact that it fails as a theory of identity. However, not all thought experiments support psychological continuity theory as a theory of what matters in survival.

### **3. Why Psychological Continuity Theory Fails as a Theory of What Matters in Survival**

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**

At least one virtual immersion case involves what Nozick (1998) calls the "experience machine." It can provide a person with an endless supply of desirable, but illusory, life experiences. In this scenario, a subject's psychology remains fully intact. However, most people would likely react negatively to the idea of being in the experience machine. In fact, many of us, I believe, would recoil in horror at the prospect of entering it, viewing the subject

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<sup>7</sup> The reason for both forward and backward-looking requirements for having what matters in survival should now be clear for at least one reason: the transplant is successful only if there in fact exists a later being who retroactively "owns" their successor's past. For more arguments for both criteria, see Schetchman (2001).

who does so as mere simulacrum of what they once were.<sup>8</sup> We do not view this later being's existence as a continuation of our current future. We do not have what matters in survival in this scenario. But if the experience machine does not threaten a subject's psychological integrity, and the reaction to the idea is justified, then psychological continuity theory must fail to be all that matters in survival.

### **3.2 What is Missing in the Experience Machine**

Now why do we react this way to the experience machine? 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 explanation is that having not just passive illusory experiences, but to have certain experiences that depend upon an external world that is independent of a psychological subject require that subject to navigate in that context in a particular way – to form correct beliefs about it, to deliberate about how to achieve their desires, and to take the required actions that their deliberations indicate that they should. So, we value authenticity because it indicates the possibility of having a life of our own design independent external environment. This ability to take our lives in a particular direction, and shape and guide it in response to environmental factors, is something not all sentient beings can do.<sup>9</sup> I claim that this ability is unique to a specific kind of being – that of a person.<sup>10</sup> The systematic lack of the veridicality of a psychological subject's experience in the experience

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<sup>8</sup> The fact that the situation portrayed in "The Matrix" is at all disturbing is proof that many people have negative reactions to virtual immersion.

<sup>9</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).

<sup>10</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.



machine scenario threatens that subject's personhood. If what is missing in subject in the experience machine is that of being a person, then this must be important for having what matters in survival.

### **3.2 Why Being a Person Matters in Survival**

Why accept the claim that being a person matters in survival? Well, one reason is simply conceptual – that in giving a theory of what matters in survival of persons, our object of study is...well...persons. 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.

A second reason is found when considering certain other thought experiments. Recall that in the single-case transplant most agree that their mind matters more for what matters in survival than their bodies making psychological continuity theory the most competitive as an account of what matters in survival. Supposing this is a good argument strategy, I will now appeal to the very same method, except that in this thought experiment, the choice is between remaining a person without full psychological continuity over time, or relinquishing personhood but retaining full psychological continuity.

Suppose, for instance, 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 approximately 2.5 petabytes, or

2500 terabytes transferred to a digital storage device.

You are warned, however, that scientists cannot covert 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 is 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 are 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 the finer details of your psychological states. For example, you may lose some of your memories or current desires, but none that shaped your current character. This process would, therefore, allow you to keep the defining properties of your psychology in a way like the way in which a JPEG file of a tiger, which was originally a RAW file, still looks like a tiger, even though it fails to contain every tiger-y pixel it had originally.

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. You would lose properties that I claim constitute being a person. In the second scenario, your autonomy and control, among other properties that make up being a person are fully preserved. That is, after the compression transfer process, you could 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 as far as they allow us to continue to be the self-

determining beings we had always been. I conclude then that being a person does matter in survival.

#### **4. The Life Trajectory Theory of What Matters in Survival**

What are the basic components of having a life of our own design? First, there is the property of having a life in general. I will think of a person's life as the path of a psychological subject through an external environment individuated by that psychological subject's external relations to that environment. A psychological subject's path through an external environment, I will call their "life trajectory." A life trajectory of one's own design begins with an action that counts as self-determining and is shaped by those types of acts afterwards. As the experience machine illustrated, being self-determining requires being related to an external environment in particular ways. In turn, being related to an environment in particular ways confer certain extrinsic properties upon a psychological subject. I deduce therefore that the continued having of certain extrinsic properties must play a role in an account of what matters in survival.<sup>11</sup>

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

Because extrinsic properties play a key role in having a self-determined life trajectory – what matters in survival – I will now explore their nature. Consider, for example, the following extrinsic properties of my own. 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 longer-lived properties of being the custodian of one Catahoula rescue 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 sole author of

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<sup>11</sup> 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." Her view, however, counts as a narrative social constitution view, my own is very different from that kind of view.

this work, of being my father's second born child, as well as being the agent of whatever intentional action or decision from which my self-determined life trajectory originated.

All the mentioned properties individuate my specific life trajectory, at least, currently. Only certain extrinsic properties, however, can do so over time – those I will have, come what may, for the duration of my lifespan. I call such properties “permanent” extrinsic properties. These properties differ from the more temporary extrinsic properties. For example, having the extrinsic property of living in a particular location depends upon occurrent relations to that location. In contrast, being an author of some work does not depend upon occurrent relations to that work. That work could be destroyed completely and yet the author would still have the property of being the author of that work. That is, having a permanent extrinsic property does not require the present holding of certain external relations between a person and their environment. They depend only on those relations having held at some point in time. Because of this, permanent extrinsic properties are what delineate a single continuous life trajectory over time. Therefore, it is these properties that matter in survival. Furthermore, these properties matter intuitively. They are part of what gives a person a sense of continuity over time – of what grounds their current identification of having been a particular earlier subject, and the continued having of such properties are part of what grounds a person's identification as being a particular later subject.<sup>12</sup>

#### **4.2 Continuity and Permanent Extrinsic Properties**

The continued holding of permanent extrinsic properties is required to have what matters in

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<sup>12</sup> 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.

survival. Now, one obvious way to ensure their continuity is simply for that very subject to remain the bearer of them. However, this rules out any non-identity theory of what matters in survival since it requires that for any later subject to be the author of that work, they must be identical to any earlier subject that was the author of that work. If this was the only way to ensure continuity in a person's permanent extrinsic properties, then the life trajectory could not accept the Parfitian idea that identity is not what matters. But this is not the only way to understand the continuity of a person's extrinsic properties over time. The idea of what matters in survival, as opposed to what is required for strict identity, can also be invoked in this case as well.

In general terms, the two conditions on having what matters in survival can be applied to a person's extrinsic properties in the following way:

- (3) If a person A at moment  $t$  identifies with a person B at later moment  $t_1$  as having the same permanent extrinsic properties in the way they did, then person B has what matters for A's survival.
- (4) If a person B at moment  $t_1$  identifies with a person A at an earlier moment  $t$  as having the same permanent extrinsic properties in the same way they do, then person B has what matters for A's survival.

So, like Shoemaker and Parfit, I too can rely on the idea of something's making a qualitative difference to a psychological subject concerning their survival, except that it applies not only to internal psychological or mental states, but also a subject's extrinsic properties. If conditions (3) and (4) hold of a later person B, then that person has what I will call the "quasi-counterparts" of an earlier person A's permanent extrinsic properties, and this is part of what is required for an earlier person A's life trajectory to continue. For a person B to satisfying conditions (3) and (4) concerning person A, B must relate to their current external environment in a way indistinguishable from the way in which A would have had they strictly persisted over time.

For a later person B to be qualitatively indistinguishable from an earlier person A

concerning their extrinsic properties, they must both maintain the qualitative character of those properties, but also the temporal status of those properties.

To clarify, consider this example. Suppose that a subject A ceases to exist at moment  $t$ , and that another psychologically continuous subject B comes into existence at moment  $t_1$ . Now imagine that at moment  $t$ , A had the permanent extrinsic property of being the author of a certain work. For A, this property had certain qualities: (a) believing that they authored the work; (b) remembering having authored it; (c) feeling dissatisfied with it; (d) being credited as the author of the work; (e) accepting that credit; and (f) being the only person who authored the work. To satisfy conditions (3) and (4), A would have to believe of B that they will have this property in the same way they did, and B would have to believe that A was correct.

Concerning qualities (a)-(c), the fact that B will be psychologically continuous with A might be sufficient for A to identify with B as having their property in the same way as they had it. Having the qualities of (d)-(f), however, requires something slightly different. For A to believe that B will have quality (d), B would have to be able to be credited as the author of that work in the very same way as A would have. For A to believe that B To have quality (e), B would have to be disposed to take that credit in the same way A did. To have quality (f), B would have to be the only person identifiable as the current author of that work. Having features (d)-(f) requires cooperation from the external environment. To satisfy condition (3), then, A must believe that B will occupy the same environmental niche as A did concerning having authored a certain work.

Condition (4), because it is concerned with A's future after moment  $t$ , and this did not happen, but could have, satisfying it is somewhat less difficult. The reason is that if A had existed after moment  $t$ , they could have changed in many ways with respect to having authored a certain work. They might have decided to disown it, or just completely forget

about 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 new permanent extrinsic properties, such as having children or inventing the world's best can opener. Given these facts, what must be true of a later person B to count as being A's successor?

Remaining neutral on the question of determinism entails that either there is no way to know what A's later extrinsic properties could have been, or there is no way to even determine these facts at all. To satisfy condition (4), the only reasonable requirement is that person B must simply continue to have the quasi-counterparts of A's extrinsic properties, since A would have had these no matter what they did after moment t. That is, B is A's successor just in case B identifies as having the quasi-counterparts of the permanent extrinsic properties A would have had if A had persisted, not those that A could have had.<sup>13</sup> And, person B must be received as currently having those properties. That is, B cannot lack or lose the permanent extrinsic properties A would have had after moment t.

But how do conditions (3) and (4) 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 significant discernible difference, for instance.

## **5. 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 accommodates this. The fact that the theory is identity-neutral is appealing because there are those who reject that identity is

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<sup>13</sup> Given the controversy about whether the future is open or determined, I believe condition (4) is reasonable.

required for survival, but who do not endorse psychological continuity theory. Furthermore, identity theorists could also adopt it, properly modified.

The theory is attractive for more reasons than this, however. First, it rules out fission cases as those in which a person has what matters in survival. This is essential for its appeal to identity theorists, but also for non-identity theorists who wish to reject the fission consequence of psychological continuity theory. Second, the life trajectory theory can account for different intuitions about virtual immersion scenarios better than psychological continuity theory can.

### **5.1 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. In fact, there are several non-identity theorists who have expressed doubts about fission as a way of having what matters.<sup>14</sup> And this is 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. That is, being unified over time is not the same as being identical over time.<sup>15</sup>

To be unified over time is to remain an organized or structured complex or systematic whole. This does not require being an object that retains its identity.<sup>16</sup> For example, consider a sports team I will call “The Changelings.” Suppose that The

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<sup>14</sup> 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.

<sup>15</sup> See Belzer (2005) who introduces the difference between what he calls the “identity” reaction and the “unity” reaction.

<sup>16</sup> See also Perry (1972) for discussion of this distinction.



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.

The life trajectory theory is fully consistent with Parfitian unitarianism.<sup>17</sup> This is because it does not allow fission as an instance of having what matters in survival since fission threatens the quasi-continuity of a subject's permanent extrinsic properties. That is, fission products cannot meet the requirements for continuity in A's extrinsic properties. This is true either because the permanent extrinsic property in question happens to be one that by its nature can be logically held only by one subject at a time, or because it is an originating property of a subject's life trajectory.<sup>18</sup>

To illustrate, reconsider psychological subject A, and their property of having authored a certain work. Now imagine that A at moment t does not cease, but instead undergoes a procedure that results in the fissioning of A into two subjects B<sub>1</sub> and B<sub>2</sub>, both psychologically continuous with, and yet distinct from A. Now, can B<sub>1</sub> and B<sub>2</sub> continue A's

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<sup>17</sup> 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 be an externalist account of that concept. Although I do not provide such details here, I do believe that such an interpretation is possible.

<sup>18</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.

extrinsic properties? Let us consider whether they can with respect to A's property of having authored a certain work.

First, consider how A had the property of being the author of a certain work – in the form of having been the sole author of that work that had certain qualities. Recall features (a)-(f) that having this property entailed. Both  $B_1$  and  $B_2$  will have the psychological features of (a)-(c), but they cannot have the features (d)-(f). For  $B_1$  and  $B_2$  to have features (d)-(f), 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 work is not a property that two beings can have at once, simply as a conceptual matter. Furthermore, two individuals cannot legitimately both take full credit for having authored a particular work, nor they cannot they be recognized as such.

Of course, it could be argued that even if  $B_1$  and  $B_2$  cannot have the quasi-counterpart of having been a sole author, they can have something similar – that of having co-authored the work in question. But having the property of being a co-author has a distinct 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 their nature, not merely practical matters. So even if we granted the property of co-authorship to  $B_1$  and  $B_2$ , they still could not be A's successor. Of course, both  $B_1$  and  $B_2$  can claim to be psychologically continuous with something that once had that property of A's, and this is not something that just anyone can claim, nevertheless, having once had A's extrinsic property of being a sole author no more counts as having that property's q-counterpart than would merely having once had A's memories. Neither fission product, then, can maintain what is required for what matters in survival on the life trajectory theory.<sup>19</sup> Parfitian unitarianism, therefore, itself attractive, can be adopted by the life

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<sup>19</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,

trajectory theorist.

## 5.2 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 decorrelated 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, 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, a respectable number of us would look at a scenario as a way of achieving immortality.<sup>20</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>20</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. So, neither is to be preferred over the other, at least on these grounds.

However, the life trajectory theory is more versatile than it might at first seem. It turns out that it can in fact predict the correct reaction to the second virtual immersion case. To see this, requires re-conceptualizing what it means to exist in an external context, however. 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 that incorporate all the ways we can do so in the spatial temporal realm. In this case, a purely virtual environment could count as mind-independent – as external – assuming shared experiences of that virtual environment and that it is itself governed by predictable, systematic laws. If a virtual environment can be so construed, then persons could still have extrinsic properties that could persist over time or cease to do so. The life trajectory theorist could then say that what matters in survival can be maintained in such contexts.

## **6. Objections**

I now address three objections to the life trajectory theory. Two of them question the underpinnings of the theory, and the third questions the value of the theory.

### **6.1 The Metaphysics of What Matters in Survival**

Once the idea that offering a theory of the identity of persons over time is misguided and that the proper focus is on understanding what it is to have what matters in survival, the question of how to determine the appropriate constraints on this concept naturally arises. For example, an identity theorist might argue that any property that could matter in survival is only one that matters to a life of value. There is no difference between a life worth living and having what matters in survival. What counts as a life worth living can be an

idiosyncratic highly individualized matter, not a topic befitting generalization, unlike what is required for having what matters in survival. For example, if a life worth living cannot be distinguished from what matters in survival, then it is possible for the very same thing to be at stake for 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. If there is no difference between a life worth living and what matters in survival, then theories of what matter in survival could no longer be concerned with metaphysics, but instead with practical issues and issues of value. Appealing to this distinction, however, threatens to undermine the entire project of offering any theory of persons whatsoever – at least one with any grounding in metaphysical concerns.<sup>21</sup> A particular constraint that rules out this consequence, then, is needed. The constraint I rely on is that of being a member of the kind person – at least in part a metaphysical kind. Losing a big toe cannot plausibly be argued to be part of being a person, but self-sufficiency, in contrast, could be.

In fact, even Parfit, in considering what constitutes personal identity over time, begins with a metaphysical stance on the nature of a person as a kind – as a psychophysical entity. And appealing to this claim is required 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.

## **6.2 Personhood, What Matters in Survival, and Psychological Continuity Theory**

Having argued that personhood is needed to survive, there are two ways the psychological continuity theorist might try to defend their theory as one of survival. One way is to argue

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<sup>21</sup> This is where Schetchman (2014) would have strong disagreements. Whereas she argues that practical concerns are metaphysical concerns. I am committed to the idea that at least being a member of a metaphysical kind is still importantly different from being a member of let us say, a purely normative kind, or socially constructed kind.

that the subject in the experience machine retains a self-determined life and is therefore still a person. Because that subject chose 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 simply making one self-determining choice enough to have a self-determined life, and therefore be a person? I argue that the answer is “no.”.<sup>22</sup>

Part of having a self-determined life is to play an active role in shaping one’s life, and prior decisions. Even if a person’s dreams come to fruition, this does not entail that that person has a self-determined life. Consider, for instance, a parent who wishes their children to be well off, and they plan things so that this is true after their death. Now of course simply because the parent’s choice is realized, this is not part of that parent’s self-determined life since their life has ended. Or consider someone who decides to drink too much alcohol and kills a child in a car accident. Society holds this person responsible for the after-effects of their decision to drink, and they are given a life sentence for that decision due to its results. This person is then imprisoned and their free will severely constrained. Their ability to be self-determining is almost non-existent. Examples like these illustrate that the mere realization of a person’s initial self-determining actions does not entail having a self-determined life. This line of argument from the psychological continuity theorist, then, also does not appear promising.

Of course, there are other ideas about what it is to be a person, some of which may or may not require being self-determining. While I cannot offer a conclusive argument that the capacity for self-determination is required for being a person, I can offer objections to the alternatives. Furthermore, if we assume that reactions to the experience machine track what matters in the survival of persons, and the diagnosis of what is missing in the

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<sup>22</sup> See Wilson (2005) for arguments that agency should not be included in an account of personhood.

experience machine is cogent, then the capacity for self-determination is necessary for being a person.

A different idea is that persons have the property of being self-aware – a kind of higher-order conscious state.<sup>23</sup> As Baker (2013) would put it, they must have a “first-person perspective.” However, it is not clear whether this property distinguishes persons from other types of psychological beings that are not persons. 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’s perspective. Each knows that it is their own nails that are to be clipped and that this is unpleasant, which they illustrate by running away as soon as they see the clippers coming out of the drawer.<sup>24</sup> 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 this is still an instance of self-awareness or having a self-oriented perspective. But my dogs, as much as I might wish it so are not people. Self-awareness and a first-experiencer’s perspective, then, are not sufficient for personhood.

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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. 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 certain types of cognitive beings as failing to be persons, such as dogs, for instance.

Nevertheless, the previous idea is still too broad. Consider the Borg from Star Trek. These creatures, we see as beings controlled by a central intelligence that itself may have

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<sup>23</sup> In fact, it is not clear that conscious states do not presuppose self-awareness.

<sup>24</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.

higher order thoughts, and yet there is no single entity with the property of being a person. The collective consciousness is too fragmented, while the singular consciousness of any given Borg likely has the same level of self-awareness of a dog, and quite possibly lacks even a first-experiencer's point of view. The presence of an organism with higher-order consciousness, then, may again be a necessary condition on being a person, but it does not suffice for it.<sup>25</sup>

## **6.2 Other Fission Scenarios**

There are other ways fission might be realized that could be argued are consistent with the life trajectory theory, which would rule out its adoption by the Parfitian unitarian, something 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 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>26</sup> It

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<sup>25</sup> Carruthers's dispositionalist account (1996) improves upon these ideas since the states must be about oneself, but in terms of being used to address a theory of what matters, it would either beg the question, or count The Borg as a single person.

<sup>26</sup> Suppose that we have an entire world that fissions. Would each fission product then count as



is not clear, for instance, whether this case is not better described as a case of sophisticated body cloning that includes a 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>27</sup>

## 7. 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>28</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>29</sup>

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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>27</sup> See Martin (1995) for reasons for thinking it truly is a case of fission.

<sup>28</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>29</sup> Thanks to John G. Bennett, Peter Carruthers, Ted Everett, Dan Giberman, John Harty, Peter Ludlow, Duncan MacIntosh, Raymond Martin, Eric Olson, Derek Parfit, 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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