

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

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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) that hold between the earlier ways a person once was to the ways they are now such that – despite these changes – their presence entails that a person remains the same individual over time.¹

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 these types of states. However, a person's psychology is typically considered distinct from their body. If this is correct, we can ask whether the integrity of one of these matters more than the other in the persistence of a person. Most place more importance on psychological integrity rather than bodily integrity. This is known as the psychological continuity theory of personal identity.

Parfit (1971) offers a proof of the correctness of psychological continuity theory in the form of a thought experiment in which a person would not mind if their psychologies were moved to another body exactly like their own in order to save themselves from bodily death. This is supposed to show that personal identity does not depend upon bodily integrity, but rather on psychological integrity.

On the psychological continuity theory, the types of relations that must hold between

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

the psychological states a person once had, and the psychological states that person now has is the following: first, their adjacent psychological states must be similar or resemble one another; and second, their current psychological states must causally or counterfactually depend upon their earlier psychological states.²

I discuss several flaws with psychological continuity theory, some of which are well known, such as the failure of psychological continuity to maintain identity altogether. However, because retaining psychological integrity is so compelling as what is important for survival, the debate about personal identity shifted from defining identity to that of defining what is called “what matters in survival.” But, as I argue, not only does psychological continuity theory fail as an identity theory, but it also fails as a theory of what matters in survival. For this reason, I offer an alternative theory of what matters in survival called the “life trajectory” theory.

In Section 2, I present the standard arguments that show that psychological continuity theory as an identity theory fails, and I offer an additional 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, and I diagnose the reasons. These reasons hint at the correct theory. In Section 4, I develop a theory hinted at 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, and section 6 considers some objections to it.

2. Identity Theories and Having What Matters in Survival

It is well-known that the most compelling relation for having what is important in survival –

² For this succinct characterization, see Lewis (1983).

psychological continuity – fails to be an equivalence relation. Second, it is not clear that the notion of personal identity is clearly substantive.

2.1 Psychological Continuity Theory's Failure as an Identity Theory

The first fact that illustrates that psychological continuity cannot be an identity relation is it 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. For example, imagine a tele-transportation scenario gone wrong in which the original transportee arrives at their destination in duplicate.³ But if psychological continuity was an identity relation, then only one of the two duplicates could possibly be identical to the original transportee, since two objects cannot be identical to one. But in this scenario, both duplicates are psychologically continuous with the original. Psychological continuity over time, then, does not entail identity over time.

The second fact that illustrates that psychological continuity cannot be an identity relation is that it come in degree.⁴ But identity relations do not come in degree. An object cannot be more or less identical to itself. Identity is all or nothing. Again, psychological continuity theory cannot be a theory of personal identity over time.

2.2 Does Identity Matter?

At any rate, it may not matter whether psychological continuity can maintain personal identity over time, since it is not clear that the identity relation itself is what is of central concern to persons in their concern for survival anyhow. We can see this when we consider an observation of Butler's (1736) concerning Locke's memory theory of personal identity (1694).

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

⁴ See Schetchman for more discussion on the degree criterion (2001).

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. That is, to say that a subject remembers an event entails that that subject having that memory is the very subject who experienced that event. Butler concludes that Locke's memory theory is, therefore, uninformative given that it presupposes the truth of that which is purporting to explain.

In response to Butler's objection to the memory criterion, some psychological continuity theorists – most notably Shoemaker (1970), but also Parfit – rely on a different notion of memory that does not require sustaining identity.

According to Shoemaker, even if Butler is correct about genuine memories, it is possible to have mental states that at least appear to be genuine memories to the person who experiences them, but who nevertheless fails to be identical to the subject who experienced the events that the memories are about. These mental states are described as "quasi-memories," or as "q-memories." For the person experiencing these memories having them is indistinguishable from having genuine memories. That is, there is no discernible qualitative difference between q-memories and genuine memories.

This casts doubt on the importance of a theory of the identity of a person over time, since it allows for the possibility 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, even if there was a relation that maintained a person's identity, its true relevance to what is important in a person's survival becomes

questionable. On this line of reasoning, 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 practically rational from a first-person perspective.

2.3 Replacing the Concept of Personal Identity with What Matters in Survival

Parfit, paradoxically and startlingly, concludes that since psychological continuity theory must be what matters, identity or being the same person over time does not (1984: 261-265; 1995: 21-22).⁵ For this reason, Parfit claims that the focus should be on what he calls “what matters in survival.”⁶ And for Parfit, this means having psychological continuity – in the sense that it matters to us prudentially in our self-concern for what matters in our survival, as opposed to a life worth living.⁷

Currently, many theorists have accepted Parfit’s conclusion that identity does not matter in survival. Call these theorists “survivalists.” Because I reject psychological continuity as what matters, but accept that something must matter, and in the sense of prudential survival not in the sense of a life worth living. To define what matters in survival in this sense, I rely on Parfit and Shoemaker’s idea that what matters is a relation(s) that holds between some person A and a later person B that is qualitatively distinguishable from the

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

⁶For 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 of strict survival, not a life of value.

⁷ This distinction is explored by Garrett (1998), Perry (1976), and Unger (1990).

holding of an identity relation.⁸ The holding of such a relation would allow for A and B to both identify B as A's successor in terms of their prudential self-concern without necessarily adopting psychological continuity as having what matters. This definition of what matters in survival is not intended to deny Parfit's understanding of what matters in survival, but rather to offer a more general characterization of that notion, not a distinct one. 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 cannot distinguish the difference between themselves and a later person B at moment t_1 , in the same way if A were identical to B, then person B has what matters in A's survival.
- (2) If a person B at moment t_1 cannot distinguish the difference between themselves and an earlier person A at moment t , in the same way if B were identical to A, then person B has what matters in A's survival.

Consider this example as a case of the satisfaction of conditions (1) and (2). 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. They will their brain to neuroscientists with the instructions 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 another subject B experiences brain death and their body is therefore available for a brain transplant. Upon the transplant of A's brain into B's body, B awakens recalling from a first-person perspective that A wanted 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

⁸ 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.

their desires, hopes, wishes, and so on, will be present in person B in the same way they would have been had A been identical to B, and B has these states and acts on them in the same way A would have had A persisted.⁹

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 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

Now consider what I call "virtual immersion scenarios." These involve isolating a psychological subject from their external environment in certain ways with their psychology 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 Scenario

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, and therefore should not threaten what matters in a person's survival. However, most people would likely react negatively to the idea of being in the experience machine. In fact, many of us, I

⁹ 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).

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.¹⁰ That is, this scenario might threaten what matters in survival. If correct, this later being's existence would not count as being the future continuant of the previous being. That is, this is not a scenario in which a person has what matters in survival. But if the experience machine does not threaten a subject's psychological integrity, and the negative reaction to the scenario is justified, then psychological continuity theory fails even as a theory of what matters in survival.

3.2 What is Missing in The Experience Machine Scenario

Now why is there a negative reaction 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. It does, however, seem to be a necessary condition on being autonomous. And autonomy is a key feature of being a person. In fact, I claim that having autonomy is reasonably part of what it is to be a person. Autonomy is not something all sentient beings have.¹¹ I claim that this ability is in fact unique to a specific kind of being – that of a person.¹² As I will argue, personhood is a requirement for having what matters in survival.

The experience machine threatens a psychological subject's autonomy and therefore their personhood because, to have autonomy, first, a psychological subject must be able to form correct beliefs about their external environment. Second, to have any interactions that

¹⁰ The fact that the situation portrayed in "The Matrix" is at all disturbing is proof that many people have negative reactions to virtual immersion.

¹¹ 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).

¹² 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.

shape their interactions with that environment – to be autonomous – a psychological subject must be means-ends rational. That is, they must be able to deliberate about how to achieve their desires concerning these interactions and must understand how to take the required actions that would allow them to achieve their desires to have certain interactions with their external environment. Autonomy then is understood in terms of having the capacity to have a self-determined life or self-directed life trajectory. Neither of the requirements for having one of these is satisfied by psychological subjects in the experience machine. Yet, they do satisfy the requirements for being psychologically continuous over time, so, there is at least something required in what matters in survival that goes beyond what is required by psychological continuity theory.

3.3 Personhood as Mattering in Survival

Why accept the claim that being a person matters in survival? I will illustrate this in three ways: by appealing to a conceptual truth, by showing how meeting conditions (1) and (2) require it, and by considering a thought experiment.

On the matter of personhood mattering simply on conceptual grounds, consider the fact that in giving a theory of what matters in the survival of persons, our object of study is...well...persons. Simply by definition, then, being a person must matter in survival.

Now consider whether being a person is required for meeting conditions (1) and (2) for having what matters in survival. I claim that it is. Imagine, for instance, a person 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. So, condition (2) is not satisfied in this case. And neither is condition (1): the person who now exists now will not anticipate that the bunny's inheriting of

the money will constitute the satisfaction of their current desires.

A third reason to believe that remaining a person is important in having what matters in survival can be found by considering a certain thought experiment. 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 theory 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 autonomous without full psychological continuity over time, or relinquishing it, 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. To preserve your entire psychology, then, it 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 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 similar way to 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, although your psychology continues in its entirety, you lose a significant degree of autonomy and control over your life. Your autonomy would be compromised severely, and therefore compromise 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 – something that matters in survival +126. I conclude then that being a person matters in survival.

4. The Life Trajectory Theory of What Matters in Survival

What are the basic components of being autonomous or of having a life of our own design – a self-directed life trajectory? 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 as their life trajectory. A self-directed life trajectory begins with an action that counts as self-determining or autonomous and is shaped by those types of acts afterwards. Of course, a person's life trajectory is not entirely self-directed. As the experience machine illustrated, being autonomous requires being related to an external environment in particular ways. And, in turn, being related to an environment confers 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.¹³ XXXX

4.1 Extrinsic Properties and What Matters in Survival

Because extrinsic properties play a key role in having a self-directed life trajectory – what I claim 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 coffee and of 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. These properties are ephemeral. Even further, however, there are other properties I have that I will always have, such as being the sole author of 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-directed life trajectory originated. These properties are hold of me permanently throughout my lifetime.

All the mentioned properties above individuate my specific life trajectory, at least, currently. Only the permanent extrinsic properties, however, can do so over time – those I will have, come what may, for the duration of my lifespan.

The reason is that these properties differ from the more temporary extrinsic properties in that their holding does not depend on my occurrent relations to my environment. For example, having the extrinsic properties of drinking a cup of coffee or of living in a particular location depends upon being currently related to a cup of coffee and a particular location. In contrast, being the author of this work does not depend upon

¹³ 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.

occurrent relations to this work. It could be destroyed completely and yet I would still have the property of being the author of that work. Similarly, having the property of being my father's second born child is true of me even though my father has passed away and I am no longer currently related to him. 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 can delineate a single continuous life trajectory over time, although the more ephemeral properties can delineate one at a time. Therefore, it can only be the permanent extrinsic properties that matter in survival over time.

Furthermore, these properties matter intuitively. They are a 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.¹⁴

4.1 Continuity and Permanent Extrinsic Properties

If the continued holding of permanent extrinsic properties is necessary to have what matters in survival, then understanding how to ensure their continuity is required. Now, one obvious way to ensure their continuity is simply for that very subject upon which they were bestowed continues over time as their bearer. However, this rules out any non-identity or survivalist theory of what matters in survival, since continuing to have permanent extrinsic properties

¹⁴ 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.

would require that any later subject must be identical to any earlier subject to be their successor. However, this is not the only way to understand the continuity of a person's extrinsic properties over time. The idea of something being qualitatively identical to strict survival can also be invoked for the continuity of permanent extrinsic properties.

In general terms, the two conditions on having what matters in survival concerning permanent extrinsic properties are as follows:

- (3) If a person A at moment t cannot distinguish between themselves and a later person B at moment t_1 concerning the permanent extrinsic properties B has and A would have had as if A was identical to B, then person B has what matters for A's survival.
- (4) If a person B at moment t_1 cannot distinguish between themselves and an earlier person A at moment t concerning the permanent extrinsic properties B has and A would have had as if A was identical to B, 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 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 later person B to be qualitatively indistinguishable from an earlier person A concerning their extrinsic properties, they must maintain the character of those properties. That is, person B must be able to occupy A's previous environmental niche. But how could anyone but A accomplish this? It is simply a fact that A could have changed in many ways with respect to their permanent extrinsic properties. 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. A's future could have included gaining various new permanent extrinsic properties, such as having children or inventing the world's best can opener. How then can anyone but A count as having A's

future permanent extrinsic properties?

This might appear to be an impossible question to answer. However, because conditions (3) and (4) require only that B has the properties A would have had after they ceased to exist, and the permanent extrinsic properties that A had at time t are the only properties that they are guaranteed to have, then so long as B has those properties in the manner specified by conditions (3) and (4), then B has what matters in A's survival. 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.¹⁵

4.2 What it is to Have the Quasi-counterparts of Permanent Extrinsic Properties

Now what is it to have the quasi-counterpart of another person's permanent extrinsic properties? There are two characteristics of permanent extrinsic properties that I must address: their eternally present status, and their qualities. 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 features: (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; (f) being the only person who authored the work, and (g) once having become the author always remaining the author. 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 features (a)-(c), the fact that B will be psychologically continuous with A would be sufficient for A to identify with B as having their property in the same way as they had it, and likewise for B to identify with A at moment t_1 . Having features (d)-(g), however,

¹⁵ Given the controversy about whether the future is open or determined, I believe this is reasonable.

requires something slightly different. For A to believe that B will have feature (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 feature (e), B would have to be disposed to take that credit in the same way A did. To have feature (f), B would have to be the only person identifiable as the current author of that work. To have feature (g) B would have to always remain the present author of that work. Unlike features (a)-(c), having features (d)-(g) requires cooperation from the external environment. For instance, B would have to exist in an environment in which they were the sole author of the work, and they remained the sole author of the work. A consequence of this is that neither A nor B could have what matters in A's survival if they ever fissioned. This consequence is discussed in more detail in Section 5.

A second issue concerning the continuity of extrinsic properties is 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 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.¹⁶ 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.¹⁷

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.¹⁸ For example, consider a sports team I will call “The Changelings.” Suppose that The Changelings win the championship every year, but that its individual members are different each time the team wins. Fans of The Changelings attend every game the team plays and

¹⁶ 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.

¹⁷ See Belzer (2005) who introduces the difference between what he calls the “identity” reaction and the “unity” reaction.

¹⁸ See also Perry (1972) for discussion of this distinction.

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.¹⁹ 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 permanent extrinsic properties can be held only by one successor at a time.²⁰

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 B₁ and B₂, both psychologically continuous with, and yet distinct from A. Now, can B₁ and B₂ continue A's extrinsic properties? Let us consider whether they can with respect to A's property of having authored a certain work.

¹⁹ 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.

²⁰ 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.

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)-(g) 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)-(g). For B_1 and B_2 to have features (d)-(g), 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.²¹ Parfitian unitarianism, therefore, itself attractive, can be adopted by the life

²¹ Even if condition (1) is relaxed in certain ways so that a successor of A need not be completely indistinguishable with respect to certain permanent extrinsic properties of A's, nevertheless, because they are extrinsic properties, certain environmental conditions would still be required to hold that would rule out the possibility of two beings having the q-counterpart of a property like being a sole author. And, even supposing the global condition of satisfying condition (1) is relaxed, it is relatively unlikely that all of the permanent extrinsic

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.²²

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

properties a psychological subject has that entail unity over time could be ruled out, at least not without begging the question.

²² 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.

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 interact 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 eternally. 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. That is, there is no difference between a life worth living and having what matters in survival. So 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 threatens to undermine the entire project of offering any theory of persons whatsoever – at least one with any grounding in metaphysical concerns.²³ 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.

The topic of what matters in the survival of persons must remain metaphysical to some extent. In fact, the entire debate about what matters in survival, even for Parfit, begins with a metaphysical about the nature of a person as a kind – as a psychological-physical entity. And appealing to this 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

²³ 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.”.²⁴

Part of having a self-determined life is to play an active role in shaping one's life, including later 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, 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.

A different idea is that persons have the property of being self-aware – a kind of

²⁴ See Wilson (2005) for arguments that agency should not be included in an account of personhood.

higher-order conscious state.²⁵ 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.²⁶ 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.

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 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

²⁵ In fact, it is not clear that conscious states do not presuppose self-awareness.

²⁶ 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.

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.²⁷

6.3 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 with continuously updated psychological states that match the conscious one. Once the conscious fission product ceases, the unconscious one is awakened and picks up where the conscious one 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.²⁸ It is not clear, for instance, whether this case is not better described as a case of

²⁷ 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.

²⁸ 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.

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.²⁹

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 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.³⁰ 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.³¹

References

Aristotle. *Nicomachean Ethics*. Christopher Rowe (trans.), Oxford: Oxford University Press.

Belzer, Marvin. (2005). "Self-conception and Personal Identity: Revisiting Parfit and Lewis with an Eye on the Grip of the Unity Reaction." in *Personal Identity*. Eds. Ellen Frankel Paul, Fred D Miller Jr, and Jeffrey Paul.

Burge, Tyler. (1979). "Individualism and the Mental." *Midwest Studies in Philosophy*.

²⁹ See Martin (1995) for reasons for thinking it truly is a case of fission.

³⁰ 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.

³¹ Thanks to my husband Shaun Brock, 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.

Butler, Joseph. (1736). "Of Personal Identity," in *The Analogy of Religion*, reprinted in Perry 1975, pp. 99–105.

Carroll, John. (2011). "Self-visitation, Traveler Time, and Compatible Properties." *Canadian Journal of Philosophy*. 41: 359-370.

Chalmers, David. (2010). "The Singularity: A Philosophical Analysis." *Journal of Consciousness Studies*. 17:7-65.

Christman, John. (2004). "Narrative Unity as a Condition of Personhood." *Metaphilosophy*. 35/5: 695-713.

Demarest, Heather. (2016). "Fission May Kill You (But Not for the Reasons You Thought)." *Philosophy and Phenomenological Research*. 92/3: 565-582.

Ehring, Douglas. (1995). "Personal identity and the R-relation: Reconciliation through cohabitation?" *Australasian Journal of Philosophy*. 73/3: 337-346.

Gallagher, Shawn. (2007). "Moral Agency, Self-consciousness, and Practical Wisdom." *Journal of Consciousness Studies* 14/5-6: 199-223.

Garrett, Brian. (1998). *Personal Identity and Self-Consciousness*. London: Routledge.

Giberman, Daniel (2014). "Person and Place." unpublished manuscript.

Hudson, Hud. (2001). *A Materialist Metaphysics of the Human Person*. Cornell University Press.

Hume, David. (1738). *A Treatise on Human Nature*. Eds. David Fate Norton and Mary J. Norton, Oxford/New York: Oxford University Press. 2000.

Johansson, Jens. (2010). Parfit on Fission. *Philosophical Studies*. 150: 21-35.

Johnston, Mark. (1997) "Human Concerns without Superlative Selves." In *Reading Parfit*. Ed. _____

Jonathan Dancy. Oxford Blackwell.

----- (1987). "Human Beings." *Journal of Philosophy* 84: 59–83.

Kant, Immanuel (1771/1778). *Critique of Pure Reason* (The Cambridge Edition of the Works of Immanuel Kant). Translated and edited by [Paul Guyer](#) and [Allen W. Wood](#). Cambridge University Press. 1999.

Korsgaard, Christine M. (1989). "Personal Identity and the Unity of Agency: A Kantian Response to Parfit." *Philosophy and Public Affairs* 18.2: 109-23.

- Lewis, David. (1983). "Survival and Identity." *Philosophical Works*, Vol. 1. Oxford: Oxford University Press. 55-78.
- (1973). *Counterfactuals*. Oxford: Blackwell Publishers and Cambridge, MA: Harvard University Press.
- Lindemann, Hilde. (2014) *Holding and Letting Go*. Oxford: Oxford University Press.
- Locke, John. (1975). *An Work Concerning Human Understanding*, 2nd Edition. Ed. Peter Nidditch. Oxford: Oxford University Press. Originally published in 1694.
- Lycan, William. (2001). "A simple argument for a higher-order representation theory of consciousness." *Analysis*, 61: 3–4.
- MacIntosh, Duncan. (1993). "Persons and the Satisfaction of Preferences: Problems in the Rational Kinematics of Value." *The Journal of Philosophy*, Vol.XC, No.4. 163-80.
- Martin, Raymond. (1998). *Self Concern*, Cambridge: Cambridge University Press.
- (1995). *Fission Rejuvenation*. *Philosophical Studies* 80.1: 17-40.
- McDowell, John. (1997). "Reductionism and the First-Person." *Reading Parfit*. Ed. Jonathan Dancy. Oxford: Blackwell Publishers. 230-250.
- Mead, George, Herbert. (1913). "The Social Self." *Journal of Philosophy, Psychology and Scientific Methods*. 10: 374-80.
- Moyer, Mark. (2008). "A Survival Guide to Fission." *Philosophical Studies*. 141/3: 299-322.
- Nagel, T. (1986). *The View from Nowhere*. Oxford University Press.
- Noonan, Harold W. (2003). *Personal Identity*, Second Edition. London: Routledge.
- Nozick, Robert. (1998). "The experience machine." *Ethical Theory: Classical and Contemporary Readings*. Ed. Louis Pojman. Wadsworth Publishing Co. 152-53. ---
- (1981). *Philosophical Explanations*. Harvard University Press.
- Olson, Eric. T. (2010). "Personal Identity." *The Stanford Encyclopedia of Philosophy*. Ed. ----
- (2003). "An Argument for Animalism." *Personal Identity*. Eds. Raymond Martin and John Barresi. Blackwell Publishing.
- (1997). *The Human Animal: Personal Identity without Psychology*. New York: Oxford University Press.
- Edward N. Zalta. <http://plato.stanford.edu/archives/win2010/entries/identity-personal>.
- Frankfurt, Harry. 1971. "Freedom of the Will and the Concept of a Person." *The Journal of Philosophy*. 68.1: 5-20.

- Parfit, Derek. (2012). "We Are Not Human Beings." *Philosophy*. 87/1: 5-28.
- . (1999) "Experiences, Subjects, and Conceptual Schemes." *Philosophical Topics*, 26 (1/2):217-70.
- . (1995). "The Unimportance of Identity." *Identity*. Ed. Henry Harris. Oxford: Oxford University Press. 13-45.
- . (1984). *Reasons and Persons*. Oxford: Clarendon Press.
- . (1971). "Personal Identity." *The Philosophical Review* 80: 3-27.
- Peacocke, Christopher. (1999). *Being Known*. Oxford University Press.
- Perry, John. (1976). "The Importance of Being Identical." Amelie Oksenberg Rorty (ed.), *The Identities of Persons*. University of California Press.
- . (1972). "Can the Self Divide?" *Journal of Philosophy* 69: 463–488.
- Rosenthal, D. (1986). "Two concepts of consciousness." *Philosophical Studies*, 49: 329–359.
- Rovane, Carol. (1998). *The Bounds of Agency: An Work in Revisionary Metaphysics*. Princeton, NJ: Princeton University Press.
- Rudder Baker, Lynn. (2013). *Naturalism and the First-person Perspective*. Oxford University Press.
- . (1999). "What Am I?" *Philosophical and Phenomenological Research*. 59/1: 151-159.
- Sauchelli, Andrea. (2017). "Life-extending enhancements and the narrative approach to personal identity." *Journal of Medical Ethics*. doi: 10.1136/medethics-2016-103923
- Schechtman, M. (2014). *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford: Oxford University Press.
- . (2005). "Experience, Agency, and Personal Identity." *Social Philosophy and Policy*. 22/2:124.
- . (2001a). *Philosophical Explorations*. Van Gorcum Publishers.
- . (2001b). "Empathic Access: The Missing Ingredient Personal Identity." *Philosophical Explorations*. 4/2: 95-111.
- . (1996). *The Constitution of Selves*, Ithaca: Cornell University Press.
- Shoemaker, Sydney. (1984). "Personal Identity: A Materialist's Account." *Personal Identity*. Eds.
- Sydney Shoemaker and Richard Swinburne. Oxford: Basil Blackwell Limited. 67-132.
- . (1970). "Persons and their Pasts." *American Philosophical Quarterly* 7. 269-285. ---
- . (1963). *Self-knowledge and Self-identity*
- Sidelle, Alan. (2011). Parfit on 'The Normal/A Reliable/Any Cause' of Relation R. *Mind*. 120/479: 735-760.
- Strawson, Galen. (1997). "The Self." *Journal of Consciousness Studies*. 4/5-6: 405-28.

- Unger, Peter. (1990). *Identity, Consciousness, and Value*. Oxford University Press.
- Wilson, Robert A. (2005). "Persons, Agency, and Constitution." *Social Philosophy and Policy*. 22/2:49-69.
- Whiting, Jennifer. (2002). "Personal Identity: The Non-branching for of "What Matters."" In *The Blackwell Guide to Metaphysics*. Ed. Richard M. Gale. Blackwell Publishers. Oxford. 190-218.
- Wiggins, David. (1980). *Sameness and Substance*. Oxford: Blackwell. ----
 ----. (1967). *Identity and Spatio-temporal Continuity*. Oxford.
- Williams, Bernard. (1976). *Problems of the Self*. Cambridge: Cambridge University Press. --
 ----. (1970). "The Self and The Future." *Philosophical Review* 79, no. 2 (1970): 161-180.
- Whitney, David. (2009). "Toward Unbinding the Binding Problem." *Current Biology*. 19/6: 251253.
- Wolf, Susan. (1990). *Freedom within Reason*. Oxford University Press.