The Existential Passage Hypothesis

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April 12, 2023

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Abstract

In this paper, I argue for what I call the *extended existential passage hypothesis*, which implies, for example, that under the assumption that naturalism is true, death is not the end of a person's stream of consciousness, that is, a person's stream of consciousness continues at the moment of death, without his or her memories and personality traits, as the stream of consciousness of another person (or another being) who is conceived and gains consciousness. I articulate two requirements of rational choice that follow from that hypothesis.

1. Introducing the Existential Passage Hypothesis

If naturalism is true, then, contrary to a widespread belief, death does *not* bring about eternal oblivion, a permanent cessation of the stream of consciousness at the moment of death. Several authors (Clark, 1994, n.d.; Darling, 1996; Sharlow, 2009; Spaulding, 1982) have independently argued that the stream of consciousness continues after death—devoid of the body's former memories and personality traits—and it does so as the stream of consciousness of new, freshly conscious bodies (other humans, animals, etc., that are conceived and develop consciousness). And so, any permanent cessation of the stream of consciousness at the moment of death is impossible as long as new, freshly conscious bodies come to exist. *Consciousness* is defined here as awareness, and is not limited to self-awareness (i.e., the recognition of one's awareness). This thesis has significant implications regarding the requirements of rational choice, as I will point out in Section 3 of this paper.

Clark's (1994) and Stewart's (1999) arguments for this thesis can be restated as follows: (1) Suppose that a person (Alice) lapses into unconsciousness and then regains consciousness without having suffered brain damage. Suppose further that Alice is the only conscious being in existence. We would say that Alice's stream of consciousness prior to lapsing into unconsciousness continues as Alice's stream of consciousness upon regaining consciousness. (2) Now suppose instead that Alice lapses into unconsciousness and then regains consciousness having suffered serious brain damage, to the point that she can then be considered a different person. She suffers amnesia (she has no memories from prior to lapsing into unconsciousness) and her personality has changed. Suppose further that Alice is the only conscious being in existence. We would still say that Alice's stream of consciousness prior to lapsing into unconsciousness continues as Alice's stream of consciousness upon regaining consciousness. (3) Now suppose that Alice lapses into unconsciousness and then dies as a result of serious brain damage. A different person (Fred) is conceived shortly thereafter and gains consciousness. Fred obviously does not have any memories at the moment of gaining consciousness and his personality is different from Alice's. The only difference between (2) and (3) is that in (2) a different person gains consciousness in the *same body* as Alice's, whereas in (3) a different person gains consciousness in a *different body* than Alice's (Fred's body). But this difference seems to be irrelevant to whether we should say that Alice's stream of consciousness prior to lapsing into unconsciousness continues as Fred's stream of consciousness upon gaining consciousness. Therefore, we should say that Alice's stream of consciousness prior to lapsing into unconsciousness continues—devoid of the Alice's former memories and personality traits—as Fred's stream of consciousness upon gaining consciousness.

Clark (1994, n.d.) refers to this thesis as the *generic subjective continuity* hypothesis and Stewart (1999) calls this thesis the *existential passage hypothesis*. The core intuition of Stewart's (1999) existential passage hypothesis is the intuition that the passage between *x*'s death and *y*'s birth is "understood as unfelt time-gap, with nothing superadded—rather, and critically, with individuation *subtracted*. All that has 'passed' is a shift of perceived existential 'moment'—a natural relocation of the

awareness of existence."[1] In arguing for this core intuition, Stewart (1999) refers to two plausible, central concepts: *time-gaps* and the *stream of thought*. (I refer to the latter concept as the *stream of consciousness*.) Both concepts are credited to William James (James, 1890).

Stewart (1999) expresses the existential passage hypothesis concept in several ways:

> Where nature assembles necessary and sufficient conditions for a phenomenon, we trust nature to deliver the phenomenon. That trust applies to essay conditions, as everywhere.[2] [pers. comm.] It applies for example to William James' unfelt time-gap; delivering the unfelt time-gap wherever nature assembles conditions for it, even if conditions are assembled across separate persons.[3]

The following is my own restatement of that hypothesis:

> For any conscious body, *x*, *x*'s stream of consciousness *continues*, following *x*'s permanent cessation of consciousness (or *death*), as the stream of consciousness of some other body (or *passage recipient*), *y*, namely the *first body* to have *gained* (or first experienced) consciousness following *x*'s death.[4]

Importantly, by "*x*'s stream of consciousness *continues*…," what I mean (from this point onward) is that *x*'s stream of consciousness continues *un*imbued with *x*'s former memories and personality traits.

Given my restatement of the existential passage hypothesis, the notion of *existential passage* (as used by Stewart (1999)) can be stated as follows:

> For any conscious body, *x*, the passage that occurs when *x*'s stream of consciousness *continues*, following *x*'s death, as the stream of consciousness of some other body (or *passage recipient*), *y*, namely the *first body* to have gained consciousness following *x*'s death.

Stewart (1999) argues that existential passage is unaffected by spatial distances and differences in central nervous systems (CNSs) and that this passage can thus theoretically occur between vastly distant worlds harboring living organisms with vastly different CNSs.[5]

He explains and illustrates how four *types of existential passage* logically follow from the existential passage hypothesis. These four types are restated as follows:[6]

- A *unitary passage*: For a given conscious body, x_1, x_1's stream of consciousness *continues*, following x_1's death, as the stream of consciousness of some other body, *y*, namely the first body to have gained consciousness following x_1's death; and neither a *merged* passage nor a *split* passage has occurred.
- A *merged passage*: For at least two conscious bodies, $<x_1 \dots x_n>$, $<x_1 \dots x_n>$'s streams of consciousness *continue*, following $<x_1 \dots x_n>$'s deaths, as the stream of consciousness of some other body, *y*, namely the first body to have gained consciousness following $<x_1 \dots x_n>$'s deaths.
- A *split passage*: For a given conscious body, x_1, x_1's stream of consciousness *continues*, following x_1's death, as the streams of consciousness of at least two other bodies, $<y_1 \dots y_n>$, namely the first bodies to have gained consciousness following x_1's death, where those bodies have gained consciousness at the exact same moment in time. Stewart (1999) believes that split

[1] http://mbdefault.org/9_passage/2.asp (Accessed March 31, 2023).
[2] http://mbdefault.org/9_passage/3.asp (Accessed March 31, 2023).
[3] Personal communication, July 15, 2018.
[4] http://mbdefault.org/9_passage/2.asp (Accessed March 31, 2023).
[5] http://mbdefault.org/20_proof/default.asp (Accessed March 31, 2023).
[6] http://mbdefault.org/11_types/default.asp; http://mbdefault.org/12_grammar/default.asp (Accessed March 31, 2023).

passages are probably unlikely since "developmental timings cannot approach the perfect synchronization posited in the split passage."[7]

- An *ex nihilo passage*: *y*'s stream of consciousness is not the continuation of any antecedent stream of consciousness. An *ex nihilo* passage occurs *if and only if y* achieves consciousness, but neither a unitary passage, nor a merged passage nor a split passage has occurred.[8]

Stewart (1999) also discusses alternatives to his existential passage hypothesis. He calls these alternatives the *permeable identity hypotheses.*[9] He argues that they are conceivable, though unlikely to be true. He identifies two: (I have restated these hypotheses and given them unique names.)

- The *strongly permeable identity hypothesis*: For any conscious body, *x*, *x*'s stream of consciousness *continues*, following *x*'s death, as the stream of consciousness of at least one other body, *y*, namely any body that is conscious following *x*'s death.
- The *weakly permeable identity hypothesis*: For any conscious body, *x*, *x*'s stream of consciousness *continues*, following *x*'s death, as the stream of consciousness of some other body, *y*, namely the first body to have gained or *re*gained consciousness following *x*'s death.

Importantly, by *regained consciousness*, what I mean (from this point onward) is that *y* (the *body*) was previously conscious, then *y* lost consciousness and, after an unspecified amount of time, *y* returned to consciousness. According to *MedlinePlus*,

> "Unconsciousness is when a person is unable to respond to people and activities. Doctors often call this a coma or being in a comatose state. […] Being asleep is not the same as being unconscious. A sleeping person will respond to loud noises or gentle shaking. An unconscious person will not." (*Unconsciousness—first aid*, n.d.)

2. Introducing the Extended Existential Passage Hypothesis

Stewart (1999) objects to both permeable identity hypotheses on the grounds that "the stream of thought persists unbroken throughout life" and that "we ourselves perceive subjective experience as a deeply unified whole".[10] But these arguments are undercut by Stewart's later acknowledgment that "the passage recipient would be ignorant of any such [passage] events, just as he or she would have been ignorant of the existential passage which transpired at conscious birth."[11]

Stewart (1999) also objects to both permeable identity hypotheses on the grounds that they are not supported by any strong arguments or intuitions, and because "subjectivity is conserved in the thalamocortical system, even during sleep," whereby that system sets a "baseline integrity of subjective experience." The latter objection is addressed below in my counterargument to objection "(2) Potentiality".

With regard to the former objection, let us assume for the sake of argument that Stewart is correct in claiming that no supporting arguments or intuitions are forthcoming. And let us define *permeable identities* as identities (or bodies) that are capable of *receiving* existential passages during the course of their lives, even after having initially achieved consciousness. Whether permeable identities *do* or *do not exist* we should *not* expect to have strong *supporting* arguments or intuitions about whether they exist, *either way*. Again, I need only point to Stewart's own acknowledgement that if permeable identities *did*

[7] http://mbdefault.org/11_types/default.asp (Accessed March 31, 2023).
[8] http://mbdefault.org/11_types/11_6.htm (Accessed March 31, 2023).
[9] http://mbdefault.org/11_types/default.asp#fn7 (Accessed July 6, 2018).
[10] http://mbdefault.org/11_types/default.asp#fn7 (Accessed March 31, 2023).
[11] http://mbdefault.org/11_types/default.asp#fn7 (Accessed March 31, 2023).

exist, then these identities would be completely oblivious to any passage events. Therefore, a lack of strong *supporting* arguments or intuitions about permeable identities cannot be counterevidence of permeable identities.

Actually, though, I believe that we *do* have strong supporting arguments and intuitions about permeable identities, more specifically, *weakly permeable identities*—i.e., permeable identities that are capable of *receiving* existential passages only when they gain or *re*gain consciousness. We can begin by noting that, all else being equal, hypotheses that posit weakly permeable identities are more parsimonious (i.e. using fewer of assumptions), and as such, more plausible than hypotheses that posit *strongly permeable identities*—i.e., permeable identities that are capable of *receiving* existential passages at *any and every* moment.

On this basis, strong arguments (or counterarguments) will be made (in what follows) in support of an *extended* hypothesis that posits *weakly permeable identities*. From now onward, I will refer to that hypothesis simply as the *extended existential passage hypothesis*. I define it as follows:

> For any conscious body, *x*, *x*'s stream of consciousness *continues*, *following any (permanent or temporary) loss of consciousness by x*, as the stream of consciousness of at least one body (or *passage recipient*), *y*, namely the first body to have gained or *re*gained consciousness following *x*'s *loss of consciousness*, where instances of *x* can be instances of *y* (i.e., the passage recipient can be *x* itself).

The notion of *extended existential passage* is defined as follows:

> For any conscious body, *x*, the passage that occurs when *x*'s stream of consciousness *continues*, *following any (permanent or temporary) loss of consciousness by x*, as the stream of consciousness of at least one body (or *passage recipient*), *y*, namely the first body to have gained or *re*gained consciousness following *x*'s *loss of consciousness*, where instances of *x* can be instances of *y* (i.e., the passage recipient can be *x* itself).[12]

Using Chapter 11's four passage types as a template, we can identify four *types of extended existential passage*:

- A *unitary passage*: For a given conscious body, x_1, x_1's stream of consciousness *continues*, following any loss of consciousness by x_1, as the stream of consciousness of some body, *y*, namely the first body to have gained or *re*gained consciousness following x_1's loss of consciousness (where x_1 can be *y*); and neither a *merged* passage nor a *split* passage has occurred.
- A *merged passage*: For at least two conscious bodies, $<x_1 \dots x_n>$, $<x_1 \dots x_n>$'s streams of consciousness *continue*, following any losses of consciousness by $<x_1 \dots x_n>$, as the stream of consciousness of some body, *y*, namely the first body to have gained or *re*gained consciousness following $<x_1 \dots x_n>$'s losses of consciousness (where $<x_1$ or $\dots x_n>$ can be *y*).
- A *split passage*: For a given conscious body, x_1, x_1's stream of consciousness *continues*, following any loss of consciousness by x_1, as the streams of consciousness of at least two bodies, $<y_1 \dots y_n>$, namely the first bodies to have gained or *re*gained consciousness following x_1's loss of consciousness, where those bodies have (respectively) gained and *re*gained consciousness at the exact same moment in time (where x_1 can be $<y_1$ or $\dots y_n>$).
- An *ex nihilo passage*: *y*'s stream of consciousness is not the continuation of any antecedent stream of consciousness. An *ex nihilo* passage occurs *if and only if y* gains or *re*gains

[12] Contrary to existential passage, *extended existential passage* can thus occur between living bodies.

consciousness, but neither a unitary passage, nor a merged passage nor a split passage has occurred.

Stewart (1999) does not *explicitly* acknowledge this *extended* existential passage hypothesis. Other than his arguments against strongly permeable identities and weakly permeable identities (which I have addressed above), Stewart's *implicit* rejection of this *extended* existential passage hypothesis in favor of his more *restricted* existential passage hypothesis appears to be based on Arguments (1) and (2) as they are restated below. Here is a telling passage:

> *Subjectively*, Nicos' unfelt time-gap *continues*, indefinitely. […]
>
> This particular time-gap is unusual in that it is open-ended. Nicos' inanimate body cannot restore subjectivity to Nicos in future; as a result, it cannot end the time-gap which Nicos' death has initiated.
>
> Hereafter I will refer to this special type of unfelt time-gap as a 'mortal amnesia': it is the forgetfulness of existence we can associate with failure of the criteria of personal identity. By prior reasoning this amnesia is irreversible. Having encountered mortal amnesia, Nicos afterwards lacks the means of perceiving any aspect of his condition, or of recovering in future any of the memories which death has destroyed.[13]

Arguments (1) and (2) and my counterarguments to each are as follows:

(1) *Backward causation*: The *future* restoration of *x*'s personal identity (or alternatively, the *future* restoration of key attributes guarantying the continuity of *x*'s personal identity), upon or after *x*'s return to consciousness, prevents *x*'s extended existential passage (to another passage recipient) from occurring in the present.

Note: Stewart (1999) argues at length that *x*'s personal identity is best understood as a combination of three key attributes: physical continuity, episodic memory and subjectivity.[14]

My reply to (1): Backward causation is only possible if we accept a *tenseless theory of time* (or *B-theory of time*)—where the past, present and future are equally real. But the notion of a *stream of consciousness* (as it is used in Chapters 9 and 11) seems to necessitate a *tensed theory of time* (or *A-theory of time*)—where the present is real, but *not* the future. This is because the tensed (or A-) theory of time is seemingly the only theory of time that allows for the *objective passage of time* (or objective becoming) that is needed to make sense of the notion of a *stream of consciousness*. Without objective temporal passage (or objective passage of time), conscious experience is nothing more than a set of counterfactually-related conscious experiences superimposed on a set of time coordinates. Consequently, without objective temporal passage, there can be no stream of consciousness and so, no generic subjective continuity—i.e., no existential passage and no *extended* existential passage. According to *The Stanford Encyclopedia of Philosophy*,

> A proper notion of backward causation requires a static account of time in the sense that there is no objective becoming, no coming into being such that future events exist on the par with present and past events. It means that the future is real, the future does not merely consist of unrealised possibilities or even nothing at all. […] If backward causation is to be conceptually possible it forces us to be realists with respect to the future. The future must contain facts, events with certain properties, and these facts can make sentences about the future true or false. Such a realist account is provided by

[13] http://mbdefault.org/9_passage/default.asp (Accessed March 31, 2023).
[14] http://mbdefault.org/8_identity/default.asp (Accessed March 31, 2023).

> static and tenseless theories of time. (Faye, 2018)

Some recent metaphysical work has however challenged the widely accepted view that, under a tenseless (or B-) theory of time, time does not objectively pass:

> Most B-theorists defend the reality of both time and change. Overwhelmingly, however, they deny that time genuinely passes, insisting that the passage of time is some kind of cognitive illusion. In this chapter it is argued that, while A-theoretic accounts of the passage of time are indeed mistaken, there is no reason for the B-theorist to resist the idea of mind-independent temporal passage. This mistake stems from two sources: first, the implicit acceptance of the A-theory's understanding of passage; secondly, from the unnecessary assumption that temporal passage is best understood as some kind of motion. A tenseless, relational account of passage that is based on tenseless, temporal relations is presented and defended. It is further argued that the B-theory is compatible with an objective direction of time. (Mozersky, 2015)

If this new perspective is correct, then the idea of a *stream of consciousness* appears to be fully consistent with a tenseless (or B-) theory of time. So, let us suppose for the sake of argument that the idea of a *stream of consciousness* is entirely consistent with a tenseless (or B-) theory of time. Is (1) then salvageable?

I do not believe so. The reason I say this is that Argument (1) presupposes Argument (2) (see below), and Argument (2) is unsustainable. Let me explain: (1) states that personal identity or key attributes thereof have the power to retro-cause *x*'s prior stream of consciousness to continue in *x*. But as I will explain in my reply to (2), we have no reason to think that personal identity or key attributes thereof have any such potentiality—i.e., whether we take the cause to precede its effect (forward causality) or the effect to precede its cause (backward causality).

(2) *Potentiality*: When *x* has all the markers of temporary unconsciousness, *x* has the potential to *receive x*'s continued stream of consciousness, and so, upon *x*'s return to consciousness, *x*'s prior stream of consciousness seamlessly continues as *x*'s renewed stream of consciousness.

My reply to (2): As long as *x*'s neural and cognitive machinery remains intact, *x* has the potential to experience a stream of consciousness imbued with *x*'s memories and personality traits. *That*, we can all agree on. However, we have no justifiable reason for claiming that upon *x*'s return to consciousness, *x*'s stream of consciousness must have *this or that* origination *on the basis of x*'s neural and cognitive machinery.

Since streams of consciousness *un*imbued with the bodies' memories and personality traits differ only in their originations and since *x*'s neural and cognitive machinery cannot discriminate among originations, unimbued streams of consciousness are indistinguishable to *x*'s neural and cognitive machinery. Therefore, as long as *x*'s neural and cognitive machinery remains intact, then upon *x*'s return to consciousness, *x* has the potential to *receive* any *unimbued* stream of consciousness—i.e., either *ex nihilo* or from any conscious body—*within* the passage rules entailed by generic subjective continuity.

It is also worth noting that personal identity abstracted from *x*'s neural and cognitive machinery has no potentiality as it is *abstracta*—abstract objects (e.g. numbers, sets, propositions, etc.) are considered causally inert (Rosen, 2017).

For all these reasons, I believe that (2) is unsustainable. And if we apply the same line of reasoning to *y*, then we also have strong reasons for positing a *weakly permeable identity*—i.e., where *y* is the first body to have gained *or regained* consciousness following *x*'s loss of consciousness.

To sum up, I have argued that as long as generic subjective continuity is *itself* plausible, then among the various *alternative hypotheses* that posit generic subjective continuity (e.g. the weakly permeable identity hypothesis, the strongly permeable identity hypothesis, the (restricted) existential passage

hypothesis, etc.), the *extended* existential passage hypothesis is the only one of those hypotheses that can be considered plausible. As such, if the generic subjective continuity hypothesis is true, and I believe that it is, then we have every reason to give credence *not* to the *restricted* existential passage hypothesis but rather to the *extended* existential passage hypothesis (as defined and explicated above).

3. The Extended Existential Passage Hypothesis and the Requirements of Rational Choice

Stewart (1999) explains in what ways his passage hypothesis could profitably inform decision theory and ethics. He points out that if we accept his passage hypothesis, then we are rationally required to do what we can for the welfare of *posterity*—i.e., future generations of conscious creatures—because we ourselves will join posterity via existential passage.[15]

However, given the non-negligeable risk of one's unimbued stream of consciousness passing—via extended existential passage—to a comparatively *worse* stream of consciousness,[16] every person should determine, in light of their individual circumstances and on the basis of ECU theory, whether it would be rational for them to endeavor to prolong their *conscious* life *indefinitely* in order to avoid risky extended existential passages.[17] For example, this could count as a prudential reason to support life-extension research.

Acknowledgements

Many thanks to Wayne Stewart for helpful comments on an earlier draft of this paper.

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[15] "For [Peter] Singer, the critical anatomic structure is just the central nervous system (CNS) itself. The CNS makes possible the sensation of pleasure and pain. Consequently the CNS makes a creature deserving of natural rights and ethical treatment. Singer's ethical conclusion dovetails with the metaphysical conclusion of Chapter 17. In that chapter we found that Metaphysics by Default would seem to apply not to *Homo sapiens* alone, but to CNS species generally. CNS species have been shown to meet the criteria of personal identity: it follows that creatures of all CNS species may be thought to participate in the web of existential passages described by Metaphysics by Default." (http://mbdefault.org/18_benefits/default.asp. Accessed March 31, 2023.)

[16] In some *multiverse theories* (i.e., physical theories positing multiple universes), such as the many-worlds interpretation of quantum mechanics, causal interactions between different universes are a theoretical possibility (Plaga, 1997). Such multiverse theories thus certainly do not rule out extended existential passage between different universes.

[17] For a discussion of the possibility of technological immortality, see Grant, 2012.

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