Brutal Personal Identity

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Biography

Peihong (Karl) Xie is presently a PhD student in the Department of Philosophy, SUNY at Buffalo. His current interest is in metaphysics (especially of time and personal identity), metaphilosophy, applied ontology, and philosophy of science. He will recently publish Chinese translations of two philosophy books, which are *Metaphysics: An Introduction* by Alyssa Ney (Routledge, 2014), and *Essays and Reviews: 1959-2002* by Bernard Williams (Princeton University Press, 2014, with other two translators).

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Abstract

This paper presents a new anti-criterialist view, Brutal Personal Identity (BPI). According to BPI, personal identity is a quasi-fundamental fact, which is metaphysically grounded in brute facts about absolutely fundamental personhood. By reversing the order of metaphysical explanation, BPI is not a form of identity mysticism as Dean Zimmerman asserts. Instead, BPI has even the potential to lay a solid foundation for developing an appropriate account of mentality and first-person perspectives. Furthermore, a comparison between BPI and soul theory is provided to show why BPI is better than its main anti-criterialist rival. This provides us a compelling reason for considering BPI in the debate over personal identity.

Keywords

Anti-criterialism, Brutal Personal Identity, Natural Kind, Ontic Naturalism, Mysterious Identity, Soul Theory, Fission

Is there a non-trivial criterion for personal persistence, or personal identity over time? Criterialists' answer is simply "Yes": There is a non-trivial criterion for personal identity. By contrast, anti-criterialists usually answer, "No." Generally speaking, anti-criterialism is the thesis that there is no non-trivial criterion for personal identity.

While most anti-criterialists in the literature are **soul theorists**, this paper aims to defend a new anti-criterialist view, **Brutal Personal Identity** (BPI). It argues that there is no necessarily true and non-trivial criterion for personal identity *just because* of brutal personhood. Such an account of personal identity has significant theoretical virtues, including ontological parsimony, alignment with ontic naturalism, and respect for important modal considerations. As a result, we should seriously consider its theoretical potential.

Accordingly, this paper is divided into six sections. Section 1 and 2 briefly look through two core questions and the debate between criterialism and anti-criterialism in the philosophical context of personal identity. Then, Section 3 gives a precise formulation of BPI, and clarifies its modal significance. To motivate BPI, Section 4 assesses and rejects

a challenge from mysterious identity. Then, Section 5 provides a comparative justification for BPI by showing its superiority over typical versions of soul theory. Finally, Section 6 concludes this paper.

1 Two Core Questions of Personal Identity

As Peter van Inwagen's (1990) makes a famous distinction between the *General Composition Question* and the *Special Composition Question* in the metaphysical context of mereology, we can make a similar distinction between two core questions in the philosophical context of personal identity. The first core question is a conceptual question, which can be called "the General Persistence Question" (GPQ):

What is the correct analysis (or engineering) of the concept of personal identity over time?

A supposed solution to GPQ provides either an analytical definition of the concept of personal identity, or a proposal about how we *should* use that concept for theoretical or practical purposes. In contrast, a more substantive question, which can be called *"the Special Persistence Question"* (SPQ), is more directly concerned with the reality of personal identity, so to speak. It is:

If a person x exists at t and some entity y exists at t', under what circumstances is it the case that x is identical with y?

A supposed solution to SPQ has the following standard form:

(F) Necessarily, for any person x existing at t and any entity y existing at t', x is identical with y iff x satisfies a certain criterion ϕ with y.

(F) is symbolized as:

(F') $\Box \forall x \forall y \ (Person \ (x) \rightarrow ((x=y) \leftrightarrow \phi xy)).^1$

It is not difficult to see that the condition ϕ is a (metaphysically) necessary and sufficient condition for personal identity.

I omit the formalization of temporal parameters in (F) for the purpose of simplicity. A more precise formalization is something like: □∀x∀y∀t∀t'(Person (x, t)∧ExistsAt(x, t)∧ExistsAt(y,t)→(x=y↔φxy)). However, this does not make a significant difference on our following discussion. So for a similar consideration, I will also omit the formalization of temporal parameters when I formalize a sufficient or necessary condition for personal identity over time (as (B1) and (B2), see Section 5.3).

It should be noted that SPQ does not ask what it takes for a person to persist *as a person*. Rather, it asks what it takes for a person like you or me to persist *in any way at all*. This formulation is thereby able to cover the theoretic possibility of *animalism*—the view that a human person is identified with a human animal—and other views that we are merely contingently persons. In this paper, I will focus more on SPQ than on GPQ.

2 Criterialism versus Anti-criterialism

Given SPQ and the form of a supposed criterion for personal identity, we come to the debate between *criterialism* and *anti-criterialism*. According to a standard formulation, anti-criterialism is the denial of criterialism, which is the view that there is a criterion for personal identity that is *true*, *non-trivial*, and *finite*.

Here are some necessary elucidations of criterialism. First, the supposed criterion for personal identity is *non-trivial* in the sense that it does not presuppose notions of person or personal identity in a *question-begging* way. Second, a statement of the supposed criterion is *finitely long*, so an enumeration of infinitely many individual cases of personal identity would be an inappropriate solution to SPQ in the view of criterialists.

In the current literature, most (but not all) forms of the *complex view*—the view that personal identity consists in some sort of qualitative continuity—are classified within criterialism. For example, most believers of the physical/psychological continuity view are criterialists. Of course, animalists are also criterialists, given my formulation of SPQ.

On the other hand, nearly all forms of the *simple view*—the view that personal identity is a further fact beyond any qualitative continuity—are classified within anticriterialism. This includes soul theory, my BPI account (see below), and Bernard Williams' (1973) view that personal identity is a further fact but bodily continuity is necessary for it.

Here a tricky case is how to classify Derek Parfit's (1984) complex view. In his view, personal identity consists in psychological continuity, but it is not what matters at least in some cases (Parfit 1984, 217).

His famous claim that personal identity sometimes does not matter has two senses. In the ethical sense, personal identity does not always matter because it is not always what grounds one's rational egoistic concern about one's future. Put another way, personal identity is not – to use Jeff McMahan's locution – a *"prudential unity relation"* (McMahan 2002, 42). However, the ethical sense of Parfit's claim is based on its metaphysical sense. In the metaphysical sense, personal identity does not always

matter because SPQ is sometimes an *empty question* in cases like fission. In those cases, different solutions to SPQ are nothing but different descriptions of the same set of facts there, so they have no factual difference. This is why Parfit says, "we should not try to decide between the different criteria of personal identity" (Parfit 1984, 241).

In my view, Parfit's complex view is also a special form of anti-criterialism. Some might disagree with my classification because what really makes SPQ empty in Parfit's sense is *semantic indecision*. That is, it is semantically indeterminate which sort of entities in our ontology is the official referent of the word "person", but this does not preclude those candidate sorts of entities from each having a non-trivial criterion for its diachronic identity.²

Suppose for the sake of argument that my opponents are right about the semantic indecision. Then, what kind of solution to SPQ can Parfit give? Given the semantic indecision, a possible solution is supposed to be *disjunctive* at best: "The correct criterion of personal identity over time is (C_1 or C_2 or C_3 or...)", where C_n stands for the persistence criterion of some sort of entities, which is as a candidate referent of the word "person". However, such a disjunctive solution is very probably infinitely long, thus violating criterialists' requirement of *finiteness*. In light of this, it is safe to classify Parfit's (1984) view as a form of anti-criterialism. This implies that the distinction between the complex view and the simple view.

3 Brutal Personal Identity

3.1 Fundamental Personhood

Now it is time to visit my BPI account. BPI is made up of four distinct theses: Person Fundamentality, No Further Explanation of Personal Identity, Necessary-Condition Contingency, and Sufficient-Condition Contingency.

The first thesis of BPI is as follows:

Person Fundamentality: The kind *Person* is an absolutely fundamental natural kind, and its kind membership is primitive. So whether an entity existing at *t* is a person, a member of the kind *Person*, is a brute fact.

^{2.} I'm thankful to David Hershenov for bringing up this point in personal correspondence.

Here are some necessary elucidations. Generally speaking, natural kinds are kinds that carves the nature at its joints, constituting an objective and theory-independent partition of reality. However, a natural kind can be either absolutely fundamental or not. A natural kind is absolutely fundamental if the fact that an entity is a member of it is not metaphysically grounded in any other fact. Otherwise, it is a non-fundamental natural kind. Only absolutely fundamental natural kinds are indispensable to a complete description of the whole reality. So the thesis of Person Fundamentality implies that the kind *Person* is indispensable to a complete description of reality.

Although the kind *Person* is absolutely fundamental in the above sense, this does not mean that an individual person is an absolutely fundamental entity that is similar to an individual top quark (if the standard model of physics is correct). Rather, an individual person can be something like you or me, instantiating lots of physical and/ or mental properties. But neither the physical nor the mental metaphysically grounds its personhood. Whether an individual entity instantiates *personhood*, or the kind property of being a person, is a further fact that is as fundamental as, or even more fundamental than, physical or mental facts. Put another way, fixing its instantiation of all qualitative properties except personhood, an individual entity may be a person, or may not be a person.

Since it is brute (given Personal Fundamentality) whether an entity existing at *t* is a person, and facts about personal identity over time have to involve the instantiation of brutal personhood, it is natural (though not logically deductive) to assert the second thesis of BPI:

No Further Explanation of Personal Identity: For any entity x existing at t and any entity y existing at t', if x is the same person as y, then there is no further non-trivial explanation of the fact that x is the same person as y except brutal personhood.

3.2 Two Contingency Theses

The third and fourth theses of BPI are two contingency theses as follows:

Necessary-Condition Contingency: A non-logically true *necessary* condition for personal identity, if any, only contingently holds. In formalism, for any non-logically true condition ϕ , $\Box \forall x \forall y (Person (x) \land (x=y) \rightarrow \phi xy) \rightarrow \sim \Box \Box \forall x \forall y (Person (x) \land (x=y) \rightarrow \phi xy).$

Sufficient-condition Contingency: A sufficient condition for personal identity, if any, only contingently holds. In formalism, for any condition ϕ , $\Box \forall x \forall y$ (*Person* (x) $\land \phi xy \rightarrow (x=y)$) $\rightarrow \ \sim \Box \Box \forall x \forall y$ (*Person* (x) $\land \phi xy \rightarrow (x=y)$).

To make sense of these two contingency theses, we have to revisit the debate between criterialism and anti-criterialism. As stated in Section 2, it is a debate about whether there is a true, non-trivial, and finite criterion for personal identity. However, it is not enough for criterialists to merely assert the existence of such a criterion. Instead, they are supposed to assert that it *necessarily* holds by adding a second necessity operator to the front of its symbolization. That is, the following thesis is true for criterialism:

Criterion Necessity: There is a criterion for personal identity that necessarily holds. In formalism, for some condition ϕ , $\Box\Box\forall x\forall y$ (*Person* (x) \rightarrow ((x=y) $\leftrightarrow \phi xy$)).

Since anti-criterialism is the denial of criterialism, one can have two ways to be an anti-criterialist now. Either one can deny the existence of any true, non-trivial, and finite criterion for personal identity, as traditional anti-criterialists did. Or one can even accept such a criterion, but argues that it is merely contingently true. It is not difficult to see that BPIers go the second way when they are committed to Necessary-Condition Contingency and Sufficient-Condition Contingency.

However, some may argue against the two contingency theses because the modal axiom $4 (\Box \phi \rightarrow \Box \Box \phi)$ falsifies them by guaranteeing that a necessary/sufficient condition necessarily holds. But it is worth noting that BPI requires a weaker modal logic than *S4* and thus denies the modal axiom *4*. Considering that our concern is *metaphysical necessity* here, it is not an inappropriate move for BPIers to deny the modal axiom *4*. As David Braun (2022) points out, we have reason to believe that the correct logic for metaphysical necessity is a system weaker than *S4*, otherwise our logical treatment of problem cases like the *Ship of Theseus* (another puzzle of persistence!) would lead to counterintuitive results (Braun 2022, 192-193).

4 A Challenge from Mysterious Identity

To motivate BPI, now let us evaluate a challenge from mysterious identity, which is much inspired by Dean Zimmerman (1998). That is, since BPI denies any qualitative continuity as the necessarily true and non-trivial criterion for personal identity, it allows for a possibility in which the person x is not *numerically identical* with y even if x is

continuous with, or even *qualitatively identical* with, *y* in all qualitative aspects. Then, doesn't personal identity look too mysterious according to BPI?

Indeed, BPI admits of the extreme possibility of all-encompassing qualitative continuity without personal identity. However, I will argue that this is a feature, but not a drawback, of BPI. In this section, I will divide the challenge from mysterious identity into two aspects, one metaphysical and one epistemological, and then reject them.

4.1 No Metaphysical Mystery

To say that X is metaphysically mysterious in a theory is to say that X requires, but lacks, a metaphysical explanation (or a metaphysical ground) in that theory. Here we have two cases, depending on whether X is absolutely fundamental or not:

- If X is absolutely fundamental, then it cannot be metaphysically mysterious because it does not require any further metaphysical explanation.
- (2) If X is non-fundamental, it does require a metaphysical explanation. But it would not be metaphysically mysterious if it is metaphysically explained by, or metaphysically grounded in, something absolutely fundamental.

In the view of BPIers, personhood is *absolutely fundamental*, so it is not metaphysically mysterious. Furthermore, facts about personal identity are not metaphysically mysterious, either. It is because, although those facts are not absolutely fundamental, they are *quasi-fundamental* in the sense that they are directly metaphysically explained by facts about the instantiation of brutal personhood.

Given brutal personhood, a better explanation of mentality is even available to BPIers. Recall Parfit's (1984) distinction between *genuine memory* and *quasi-memory*. A core feature of our genuine memory is that "we can remember only *our own* experiences." (Parfit 1984, 202). It is clear that such a notion of memory presupposes the notion of personal identity, so an account of personal identity in terms of genuine memory is circular or question-begging. To fix the issue of circularity or triviality, Parfit (1984) invents a technical notion of quasi-memory when one seems to remember having an experience that might be someone else's (Parfit 1984, 219-223). Similar distinctions also apply to other kinds of mental states.

However, the technical notion of quasi-memory or, more generally, quasi-mentality, seems too *ad hoc*. Luckily, BPIers can reverse the order of metaphysical explanation and thus avoid those *ad hoc* notions. That is, BPI does not require memory or other mental states to metaphysically explain personhood and thus personal identity. Rather, it is brutal personhood that (at least partially) metaphysically explains personal identity and then genuine mentality! This is why the Parfitian inventions about quasi-mentality are not necessary for BPIers.

Furthermore, it is worth noting that BPI is still neutral on how mentality works, given the above reversal of explanation order. So BPI may be compatible with any plausible philosophical account of mental mechanisms. Therefore, given BPI's rich explanatory power and its theoretic neutrality, it is less metaphysically mysterious than my opponents suppose it is.

4.2 No Epistemic Mystery?

Still, someone may charge that BPI is epistemically mysterious. She may say, if BPI is true, there is a possible case that Sam fails to be the same person as Sam^{*} even if "all of the non-branching psychological, phenomenal, physical, biological, etc., connections obtain between them" (Duncan 2020, 174). This possibility undermines our everyday knowledge about our persistence. BPI is false because "we do know that we persist!" (Duncan 2020, 177)

In fact, Matt Duncan (2020) intends to use this epistemic objection to reject all forms of anti-criterialism. Since BPI is a sort of anti-criterialism, can its proponents make any progress in resolving the above epistemological challenge?

I think BPIers can. To see how to do it, it is worth noting that Duncan's epistemic objection could be reformulated in terms of the *relevant alternatives theory* (Rysiew 2006), the view that an epistemic agent *E* knows that *P* only if *E*'s total evidence is sufficient to preclude all relevant alternatives to the state of affairs which *P* is true of.

Here are two further points about the notion of relevant alternative. First, a state of affairs Q is an *alternative* to another state of affairs K if Q is incompatible with K. Second, although controversial, the alternative Q is *relevant* in the general sense that Q shares similar basic features with K in an epistemic evaluation. For example, Q is very similar to K in respect of their external environment, underlying metaphysical setting, E's cognitive abilities, and so on.

Now Duncan's objection can be formulated as a skeptical argument:

- (i) BPI is true. (a presumption *for reductio*)
- (ii) If BPI is true, then it is possible that we fail to persist despite having all qualitative features that a normal persisting person has. (a corollary of premise (i))
- So, it is possible that we fail to persist despite having all qualitative features of a normal persisting person. (by (i) and (ii) and modus ponens)
- (iv) We know that we persist only if our total evidence is sufficient to preclude all relevant alternatives to our persistence. (the relative alternatives theory)
- (v) The possibility of our failing to persist despite having all qualitative features is a relevant alternative to our persisting.
 (Duncan's claim)
- (vi) But our total evidence is insufficient to preclude the above possibility. (Duncan's claim)
- (vii) So, we do not know that we persist. (by (iii)-(vi) and *modus tollens*)
- (viii) But we do know that we persist. (common sense)

Therefore,

(ix) BPI is false. (by (vii) and (viii) and *reductio ad absurdum*)

For BPIers, a promising approach to addressing the above argument is to deny its premise (v).

The basic idea is that the possibility of our failing to persist despite having all kinds of qualitative continuities, even if it is a genuine possibility, is still an *irrelevant* alternative to our persistence. Here BPIers can follow Trenton Merricks (1998, 107-109) to distinguish *criterion* from *evidence*. BPIers deny any biological, physical or psychological continuity as the necessarily true criterion for personal identity, but allow them as good though fallible evidence for personal identity. And the scope of evidence can even include the sameness

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of fingerprints or clothing! So at the level of evidence, any qualitative continuity is not much deeper than the sameness of fingerprints or clothing.

In light of this, we have rich evidence for our everyday belief in our persistence. If our belief happens to be true due to worldly arrangements, then it is not unreasonable to claim that we possess everyday knowledge of our persistence in that case. The extreme possibility referred to by the premise (v) does not undermine our knowledge about our persistence in most ordinary cases just because it is a matter of extremely bad *epistemic luck*. Any reasonable account of knowledge is supposed to make room for such luck. Otherwise, we would have to return to the very implausible requirement of *infallible knowledge* as proposed by Descartes.

Nonetheless, opponents of BPI may still feel dissatisfied with the above reply because it violates the well-known *KK principle* that for any proposition *p*, if one knows that *p*, then one knows that one knows it (Hemp 2023). They may argue that given the BPI-based reply, even if we know that we persist, we do not know that we know that we persist. It may be because our knowledge about our persistence depends on whether it is true that we persist, and the latter is largely dependent on worldly arrangements, which are beyond our internal grasp.

In response to this, I will point out that the same charge is also against *externalists of knowledge*, who claim that an epistemic agent's lack of internal access to the basis for her knowledge does not necessarily undermine her knowledge. For example, a *reliabilist* may argue that knowledge is true belief generated by a reliable process of some sort, but she does not require any internal access to any reliable belief-generating process to ensure knowledge. So reliabilism, as a form of externalism, also violates the KK principle. Here BPIers can take sides with externalists. Some plausible externalist conception of knowledge may be essential to BPI.

5 A Comparative Justification for BPI

In this section, I will present a comparative justification for BPI by demonstrating its superiority over its main anti-criterialist rival, *soul theory*. For those who are inclined towards anti-criterialism, this comparative justification would offer them a compelling reason to seriously consider BPI. Let us start with a brief elucidation of soul theory.

5.1 What is Soul Theory?

Soul theorists are usually anti-criterialists. According to soul theory, a person has essentially a soul. She may be either a composite of a body and a soul, or just a soul. Either way, however, diachronic soul identity is indispensable to personal identity. There is no non-trivial criterion for personal identity *simply because* there is no non-trivial criterion for soul identity.

Regarding the origin of soul, soul theorists can have two competing conceptions. On the one hand, **soul naturalists** take a soul as a natural but immaterial simple: Either it *emerges* from an alive brain of considerable complexity (Hasker 2001; Zimmerman 2010), or it has an intrinsic *disposition* of pairing with a certain brain to support consciousness (Unger 2006). On the other hand, traditional **soul theists** argue that a soul is "an individual substance of a rational nature", which is created and implanted into a body by God (Shoemaker 2005, 56).

Many soul theorists believe that the mental nature of a soul implies that some sort of psychological continuity or (at least) psychological capacity is necessary for personal identity. Such a necessary condition for personal identity is thereby grounded in the essence of soulhood or personhood, making the following thesis true for soul theorists:

Necessary-condition Necessity: There is a non-logically true necessary condition for personal identity that necessarily holds. In formalism, for some non-logically true condition ϕ , $\Box\Box\forall x\forall y$ (*Person* (x) \land (x=y) $\rightarrow \phi$ xy).

Next, I will present how soul theorists holding Necessary-condition Necessity are confronted with four problem cases: *qualitative continuum*, *modal coincidence*, *graduality*, and *fission*. Then, I will outline how BPIers can effectively address those challenges.

5.2 Qualitative Continuum

Matt Duncan (2020) argues that all anti-criterialists should accept the presence of some non-trivial necessary conditions for personal identity. For example, I cannot persist until tomorrow if the universe will be destroyed before then. So it is a necessary condition for my persistence until tomorrow that the universe will not be destroyed before then (Duncan 2020, 6).

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Some ambitious soul theorists are not content with accepting such necessary conditions. Rather, they believe there is at least some necessary condition for personal identity that is essence-grounded and thus necessarily true. In particular, many (but not all) of them think that Necessary-condition Necessity is at least true of some sort of psychological continuity. An objection from *psychological continuum*, however, would show why it is not the case.

A psychological continuum is a range of possible cases covering all possible degrees of some sort of psychological continuity, which could be an overlapping chain of a certain amount of memories, desires, or other psychological states. Now at the near end of the psychological continuum in question, there is a person called Sam. Step by step, Sam's psychological continuity will reduced to a lesser and lesser degree, so that in the farend case, there would be another entity Sam* that is not psychologically continuous with Sam at all, though continuous with Sam in all other qualitative aspects. Such diachronic changes concerning Sam's psychological continuity are presented in a series of intermediary cases connecting the near-end case and the far-end case. The entities in any two adjacent cases are duplicates of each other except there is an extremely slight difference between their psychologies. So it seems natural to say that if the entity in one case is Sam, then the extremely slightly different entity in another adjacent case would also be Sam.

But if so, a simple proof by mathematical induction will show that Sam* is Sam:

- (1) Inductive base: The person in the near-end case is Sam.
- (2) Inductive step: If the entity in one case is Sam, then the entity in another adjacent case is also Sam.

Therefore, by mathematical induction,

(3) The entity Sam^{*} in the far-end case is Sam.

However, Sam^{*} is not psychologically continuous with Sam at all. Therefore, the above proof implies that *given the possibility* of the psychological continuum, the psychological continuity in question is not necessary for personal identity. So it is not *necessarily* the case that the psychological continuity in question is necessary for personal identity, showing that Necessary-condition Necessity is false of the psychological continuity in question. Similar reasonings can be easily extended to any other sort of qualitative continuity.

Of course, the above reasoning can be rejected by denying the inductive step (2). That is, it is possible that there is an *"abrupt change"* happening in some two adjacent cases so that the entity is Sam but the entity in another adjacent case is not. But it is difficult to see how the "abrupt change" is a necessity. So if it is possible that the "abrupt change" does not happen within a psychological continuum, the above reasoning against Necessary-condition Necessity remains valid, posing a challenge for soul theorists.

Nevertheless, BPI is immune from the objection from qualitative continuum because it is merely committed to Necessary-Condition Contingency. For BPIers, any sort of qualitative continuity, even if necessary for personal identity, is only *contingently* necessary for it. For example, the sort of psychological continuity required by a soul theorist may be necessary for personal identity in some cases, but not in other cases like the psychological continuum in question. So BPIers do give a solution to the problem of qualitative continuum, which is much more elegant than other solutions available to soul theorists holding Necessary-condition Necessity.

5.3 Modal Coincidence

Duncan (2020) claims that there are three key motivations against criterialism: Merricks' (1998) argument from *modal coincidence*, the argument from *graduality*, and the argument from *fission*. He also points out, however, that any anti-criterialist would be subject to the same charges if she accepts the existence of a non-trivial *sufficient* condition for personal identity. Therefore, he concludes that all anti-criterialists should deny any non-trivial sufficient condition.

Take Merricks' argument from modal coincidence first. As Section 1 shows, a standard solution to SPQ is supposed to have the following form:

(F') \Box ∀x∀y (Person (x)→(x=y↔ φxy)).

However, Merricks (1998) argues that a standard solution of this form in fact requires criterialists to establish a *necessary* connection between two *contingent* states of affairs: one state of affairs is the person x at t's being identical with the entity y at t', and another is x's satisfying the supposed criterion ϕ with y. However, such a necessary connection between two contingent states of affairs does not look very intuitive. Why should we believe in the first place that there is any necessary connection between two contingent relationship (Merricks 1998, 116-118)?

Following Merricks, Duncan argues that the same argument, if appropriate, could also be used against anti-criterialists who adhere to the existence of some non-trivial sufficient condition for personal identity. For if ϕ is a sufficient condition satisfied by x and y, then the following symbolization holds true:

(B1) $\Box \forall x \forall y$ (Person (x) $\land \phi xy \rightarrow (x=y)$).

This seems to be another case of a necessary connection between two contingent states of affairs. So Duncan concludes that anti-criterialists should not accept any sufficient condition for personal identity (Duncan 2020, 8).

Indeed, hardly any anti-criterialist actually acknowledges a sufficient condition for personal identity. Nevertheless, Duncan's reasoning is *flawed* because he does not find that his criticism of sufficient condition also applies to any necessary condition for personal identity. For if there is a certain necessary condition ϕ for personal identity, the following necessary connection holds between two relevant contingent states of affairs:

(B2) $\Box \forall x \forall y$ (Person (x) \land (x=y) $\rightarrow \phi xy$).

So if Duncan's conception of modal coincidence is correct, then anti-criterialists including soul theorists have to deny any necessary condition for personal identity, either. Unfortunately, this corollary is obviously inconsistent with Duncan's earlier claim in his paper (2020) that anti-criterialists should acknowledge at least some non-trivial necessary conditions for personal identity (recall the first paragraph in Section 5.1)!

The internal inconsistency in Duncan's claims suggests that he misses the point of Merricks' argument. There is no problem with a necessary connection between two contingent states of affairs. Rather, it really matters whether the necessary connection in question is *well-grounded*.

In fact, nearly all criterialists argue that the necessary connection involved in (F') is well-grounded: it is grounded in the essence of personhood (or, for example, animalhood for animalists)! This is why they tend to accept the thesis of Criterion Necessity. Similarly, many soul theorists also claim that the necessary connection involved in (B2) is grounded in the essence of personhood or soulhood. So they tend to accept the thesis of Necessity-Condition Necessity.

By contrast, BPIers deny Criterion Necessity or Necessity-Condition Necessity because they do not think that any non-trivial necessary and/or sufficient condition for personal identity is *essence-grounded*.

It is worth noting that there is something subtle here. BPIers, just like many soul theorists, deny any *essence-grounded* sufficient condition for personal identity. But

unlike many soul theorists, they can still acknowledge the presence of some *contingently* sufficient condition in some cases! In those cases, they are indeed committed to a necessary connection between two contingent states of affairs. But since Sufficient-condition Contingency shows that such a necessary connection only contingently obtains, BPIers would not be thereby in a worse situation than criterialists or soul theorists.

5.4 Graduality

Another motivation against criterialism is said to come from *graduality*. The idea is very intuitive: Personal identity is *all-or-nothing*, whereas many candidate conditions serving as criteria for personal identity *admit of degrees*. Therefore, to establish a criterion for personal identity, criterialists have to determine a precise threshold above which the supposed condition is met for a person to persist. For example, Parfit (1984) defends his psychological criterion by requiring an overlapping chain of *"strong connectedness"*, which involves *at least half* of the psychological connections between any two times at which a normal person has (Parfit 1984, 206). However, such determination of a threshold is undoubtedly arbitrary.

Duncan (2020) argues that an anti-criterialist would be subject to the same objection if she acknowledges some non-trivial sufficient condition for personal identity. In that case, she has to determine an arbitrary threshold for a certain condition admitting of degrees to be sufficient for personal identity. However, if anti-criterialists should deny any non-trivial sufficient condition for this reason, why shouldn't they deny any nontrivial necessary condition for a similar consideration? After all, needn't they also determine a threshold for a certain condition admitting of degrees to be necessary for personal identity? So Duncan's claim is again inconsistent with his earlier claim that anticriterialists should acknowledge at least some non-trivial necessary condition for personal identity.

Here two contingency theses involved in BPI are conducive to addressing the above graduality problem. While a criterialist has trouble in determining a precise threshold for the *unique* criterion for personal identity, a BPIer is free to acknowledge that there are different sufficient/necessary conditions in different cases, each of which has a certain threshold. There is no need for a further explanation why a sufficient/necessary condition has the threshold it has in a certain case. It is simply a contingent brute fact in reality.

Xie 5.5 Fission

5.5.1 A Problem for Criterialism

Finally, we reach the most important motivation against criterialism: fission. Suppose a person, say, Bruce, undergoes fission, resulting in two distinct persons, Lefty and Righty, who are two nearly perfectly qualitative duplicates. The same striking amount of qualitative connections obtain not only between Bruce and Lefty, but also between Bruce and Righty, so Lefty and Righty seem equally good candidates for being Bruce. If the amount of qualitative connections in question is the criterion for personal identity, then Bruce would be not only identical with Lefty, but also identical with Righty. And then we can infer from the symmetry and transitivity of identity that Lefty is identical with Righty. But it is clear that they are two distinct persons – a contradiction.

It is worth noting that it won't help criterialists very much if they argue that the qualitative continuity in question constitutes a criterion for personal identity only when it is *non-branching*. It is because the non-branching constraint makes the personal identity of Bruce and, say, Lefty, dependent on an *extrinsic* matter of whether a third candidate, say, Righty, is present. However, it is more reasonable to argue that the personal identity of x and y only depends on their *internal* relationship. In light of this, many criterialists have attempted to directly refine their criterion, finally leading to three theoretic options available to them: either that Bruce would cease to exist after fission, or he would be identical with either Lefty or Righty, but not both.

5.5.2 Two Solutions from Soul Theory

Duncan (2020) points out that the same contradiction would be generated again even if the amount of qualitative connections in question is not a criterion but merely a sufficient condition for personal identity. Therefore, he argues that anti-criterialists have to deny any non-trivial sufficient condition for personal identity (Duncan 2020, 8-9).

In fact, this is exactly what soul theorists usually do in the case of fission. In their view, no qualitative continuity is sufficient for personal identity. So it is not the case that Bruce would be identical with two different post-fission persons. Rather, Bruce would be at most identical with only one of the post-fission persons.

Following the above line of argument, two distinct solutions are available to soul theorists. A *soul naturalist* might say, the soul inhabited in Bruce's body goes with one of the new bodies, say, Lefty's body, while a new soul emerges from, or pairs with, Righty's body. Since Lefty and Righty are nearly perfectly qualitative duplicates, however,

why isn't it the opposite case that the original soul goes with Righty's body and a new soul emerges from, or pairs with, Lefty's body? So a soul naturalist has to rely on some naturalistic process to *prevent* this alternative from occurring, but often such a naturalistic account is lacking.

"No further explanation is needed." A *soul theist* says so, on the other hand. She may argue that it is God that chooses the original soul to go with Lefty's body while creating a new soul inhabited in Righty's body. There is no further explanation of God's choice because His choice is "like us considering which of two qualitatively identical snacks to eat" (Hershenov and Taylor 2014, 25, endnote 11).

5.5.3 A BPI-based Solution

Then, what can BPIers say about fission? Unlike many soul theorists, BPIers needn't deny all sorts of sufficient conditions for personal identity. Rather, they may accept some contingently sufficient condition, and then claim that the amount of qualitative connections in question, though sufficient for personal identity in other cases, is insufficient in Bruce's case. So Bruce's case is not that he is identical with two different post-fission persons. Even if Lefty and Righty look like equally good candidates for being Bruce, at most one of them, say, Lefty, is in fact identical with Bruce. When asked why it is Lefty but not Righty that is identical with Bruce, BPIers could happily answer, "No further explanation. It is just a fact grounded in brutal personhood."

This solution based on BPI falls between the solution proposed by soul naturalism and the solution presented by soul theism. BPI is a form of **ontic naturalism** because it asserts that the kind *Person* is a natural kind. However, unlike soul naturalists, BPIers do not owe us a further naturalistic explanation about *"why not the opposite"*. In their view, the question of whether Bruce's soul goes with Lefty or Righty does not require any further explanation beyond brutal personhood. In this sense, BPI is better than soul naturalism when facing fission.

On the other hand, it is clear that the BPI-based solution is more similar to the solution proposed by soul theists because they both deny any further explanation of personal identity in Bruce's case. However, they have a substantial difference in their ontological posits. While BPIers posit *Person* as an absolutely fundamental natural kind, soul theists (in Hershenov and Taylor's sense) posit God to prevent a further explanation. But why do we bother positing God if a fundamental-kind posit of *Person* has been enough to provide at least an equally good elucidation of personal identity? Here a methodological principle is: if two distinct ontological posits are equally good

in explaining the same set of phenomena, **ontological parsimony** always requires us to choose the sparser one rather than the richer one. So according to this principle, BPI does a better job in explaining fission than soul theism.

Based on the above considerations, I conclude that BPI is better than common versions of soul theory when facing fission.

6 Conclusion

In this paper, I give a precise formulation of BPI, the view that personal identity is a quasi-fundamental fact, which is metaphysically grounded in facts about absolutely fundamental personhood. Such an account of personal identity is immune from the metaphysical challenge from mysterious identity, and it can even get rid of a general epistemic objection to anti-criterialism if it buys some plausible externalist conception of knowledge.

Moreover, a comparative justification is available to BPIers by demonstrating that BPI is better to address four problem cases than common versions of soul theory. Of course, such a justification is not decisive. But at least it shows that BPI is a very attractive option in the debate over personal identity, so it should not be so easily ignored.

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