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Swinburne's Substance Dualism

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In a recent article published in the philosophy journal *Think,* Richard Swinburne propounds a revised version of his now familiar argument for substance dualism (Swinburne, Richard, 2021). The argument is again proffered as a putative solution to the problem of personal identity. In what follows, I demonstrate that Swinburne's revised argument fails. I show that the argument is invalid, either through the commission of an illicit conversion and a modal scope fallacy, or by begging the question.

Swinburne employs a fission example as an intuition pump, whereby person P1 at t_1 undergoes a surgical operation to remove the two cerebral hemispheres. The left hemisphere is transplanted into one body, the right hemisphere into another. Person P2 at t_2 is the recipient of the left hemisphere. Person P2* at t_3 has the same physical parts and psychological properties as person P2 at t_2.

Swinburne allows that (i) person P2* at t_3 is identical with person P2 at t_2, and (ii) that person P2 at t_2 is psychologically continuous with person P1 at t_1, *ceteris paribus*. He concludes that unless P2 and P1 share the same non-physical part, they cannot be identical, and that since it is possible that they are identical, that they do in fact share the same non-physical part.

I have removed irrelevancies from the formulation of Swinburne's argument below; and, for reasons of consistency and clarity, I have chosen to omit the use of the metaphysical term 'soul'. I have not drawn extensively on the ancillary material or here considered previous versions of Swinburne's argument. All errors of translation in the following simplification, analysis and evaluation remain mine and mine alone.

Swinburne's simplified argument runs as follows: It is possible that the recipient of the left hemisphere is identical to the person who donated it. It is also possible that the recipient of the right hemisphere is identical to the person who donated it. It is possible that neither recipient is identical to the doner, or that both are. If persons do not have non-physical parts, then there is no fact about the physical parts or properties of the recipients that will make any of these four options the case. If and only if persons have non-physical parts, is it possible that the recipient of one hemisphere is identical to the person who donated it. Personal identity is determined by the possession of the non-physical part. Swinburne concludes that persons must, by necessity, have non-physical parts, otherwise it would not be possible that the recipient of one hemisphere is identical to the person who donated it (Swinburne, R., 1997).

(1) P2 shares some parts and properties with P1.
(2) If P2* shares all parts and properties with P2, then P2* is identical with P2.
(3) If it is not the case that P1 shares all physical parts and properties with P2, then it is not the case that P1 is identical with P2.
(4) If it is possible that P1 is identical with P2, then it is necessarily the case that P1 and P2 share the same non-physical part.
(5) It is possible that is not the case that if P1 shares all physical parts and properties with P2, then P1 is identical with P2.[1]
(6) It is necessarily the case that P1 and P2 share the same non-physical part.
(7) Therefore, P1 is identical with P2 if and only if P1 and P2 share the same non-physical part.

It is important to note that premise (6) of Swinburne's argument is proffered as a sub-conclusion and is seemingly derived from the conjunction of premises (1) to (5).

The argument can be formalised in in L_1 to:

(1) $(\exists z)(\mathrm{P}zx \wedge \mathrm{P}zy)$
(2) $(\forall \phi)(\phi y' \equiv \phi y) \rightarrow (y' = y)$
(3) $\sim (\forall \phi)(\phi x \equiv \phi y) \rightarrow \sim (x = y)$
(4) $\Diamond (x = y) \rightarrow \quad (\forall \Psi)(\Psi x \equiv \Psi y)$
(5) $\Diamond \sim ((\forall \phi)(\phi x \equiv \phi y) \rightarrow (x = y))$

[1] Swinburne's original wording for (5) is: "the physical parts and their properties (mental and physical) of P2 *may* be quite *insufficient* to determine whether P2 is or is not P1." (Swinburne, 2021) .

(6) $(\forall \Psi)(\Psi x \equiv \Psi y)$
(7) $\therefore (x = y) \leftrightarrow (\forall \Psi)(\Psi x \equiv \Psi y)$

Where:

P = Parthood (Mereological Overlap)

x = Person P1 (transplant donor at t_1)

y = Person P2 (transplant recipient at t_2)

y' = Person P2* (transplant recipient at t_3)

z = Person P1's Left Hemisphere

ϕ = Physical properties

Ψ = Non-physical property

A higher order analysis is beyond the scope of this paper. The main part of Swinburne's argument is therefore simplified in L_0 to:

(3) $\sim p \rightarrow \sim q$
(4) $\Diamond q \rightarrow r$
(5) $\Diamond \sim (p \rightarrow q)$
(6) r
(7) $\therefore q \leftrightarrow r$

Where:

p = P1 shares all physical parts and properties with P2.

q = P1 identical with P2.

r = P1 and P2 share the same non-physical part.

Premises (1) & (2) are independent assumptions. The former is an instantiation of the mereological principle of overlap, the latter the identity of indiscernibles. Jointly, these two premises comprise Swinburne's principle of the Identity of Composites. Swinburne's formulation makes certain ontological assumptions regarding substance, but in simple terms the principle states that for any composite entity, if it consists of the same constituent parts, in the same logical arrangement, all with the same history, then it will, by necessity, be the same entity in all possible worlds (Sally Latham, 2014). A related principle, which Tooley refers to as Swinburne's quasi-Aristotelian assumption, is that unless two objects have at least one part in common, they cannot possibly be identical (Tooley, 1999).

Further discussion of this principle is outside the purview of this brief paper, but neither premise seems to serve a logical role in establishing Swinburne's conclusion in his recent paper. Both are therefore redundant for our purposes. Since they are accepted here as uncontroversial, they have been omitted from the simplification above and from the remainder.

Fig. 1

							P3	P4	P5	P6	C
	p	q	r	$\sim p$	$\sim q$	$p \rightarrow q$	$\sim p \rightarrow \sim q$	$q \rightarrow r$	$\sim (p \rightarrow q)$	r	$q \leftrightarrow r$
1	T	T	T	F	F	T	T	T	F	T	T
2	T	T	F	F	F	T	T	F	F	F	F
3	T	F	T	F	T	F	T	T	T	T	F
4	T	F	F	F	T	F	T	T	T	F	T
5	F	T	T	T	F	T	F	T	F	T	T
6	F	T	F	T	F	T	F	F	F	F	F
7	F	F	T	T	T	T	T	T	F	T	F
8	F	F	F	T	T	T	T	T	F	F	T

The truth table - Fig.1 shows that when stripped of modalities, the simplified argument above is invalid. The possible world indicated by line #3, highlighted in grey, shows that the premises are conjointly true and the conclusion false. Equally invalid is the derivation of the sub-conclusion (6), shown to be invalid by the possible world given in line #4, again highlighted in grey.

In deriving sub-conclusion (6), *r,* Swinburne appears to argue as follows:

(i) If it is possible that P1 is identical with P2, then it is necessarily the case that P1 and P2 share the same non-physical part.
(ii) It is possible that P1 is identical with P2.
(iii) Therefore, it is necessarily the case that P1 and P2 share the same non-physical part.

Formally:

(i) $\Diamond q \rightarrow \quad r$
(ii) $\Diamond q$
(iii) $\therefore \quad r$

Leaving aside the modal question for a moment, we can see that this part of Swinburne's argument has the basic non-modal form:

(i) $q \rightarrow r$
(ii) q
(iii) $\therefore r$

Swinburne's argument is enthymematic, since $\Diamond q$ is unstated in his formulation. On the presumption that we can legitimately derive $\Diamond q$ or even just q (P2 is identical with P1), the crux of the argument looks to be a straightforward *modus ponens.* However, it is important to realise that $\Diamond q$ (or q) is not an independent premise. Neither can it be derived from the other premises in the way Swinburne seems believes that it can. Critically, to assume either $\Diamond q$ or q would be to beg the question.

Why is it question begging to assume q? It is question begging because the identity of person P2 with person P1 is precisely what Swinburne is attempting to establish in the conclusion (7).

So, if Swinburne does not beg the question, how, we might ask, does he hope to derive q in order to infer r?

Perhaps Swinburne's error is that he inadvertently assumes the negation of a sufficiency conditional, e.g., $\sim (p \rightarrow q)$, to be logically equivalent to $\sim p \wedge q$, as is shown in (a) below. Presumably, such a move would be made with the intention of deriving r from premise (4) and the protasis of (5) via *modus ponens,* as above.

However, $\sim (p \rightarrow q)$ is logically equivalent to the conjunction $p \wedge \sim q$, as is shown in (b) below; and *not* equivalent to the conjunction $\sim p \wedge q$ as is shown in the inequivalence (a) below, and from which q cannot be derived.

(a) $\sim (p \rightarrow q) \not\equiv \sim p \wedge q$
(b) $\sim (p \rightarrow q) \equiv p \wedge \sim q$
(c) $\sim (q \rightarrow p) \equiv \sim p \wedge q$

I have used the phrase 'illicit conversion' to convey the error of converting the relative positions of the protasis and apodosis in a material conditional statement. Thus, I contend that, at least in this reading of his revised argument, Swinburne may have made an illicit conversion in mistaking (c) for (b). For it is wholly possible to derive q from (c) through simplification, whereas it is not possible to derive q from (b).

Consider the following:

(3) $\sim p \rightarrow \sim q$

(4) $\Diamond q \rightarrow r$

(5) $\Diamond \sim (p \rightarrow q)$

(6) r Sub-conclusion

(7) $\therefore q \leftrightarrow r$ Conclusion

(8) $\Diamond \sim (p \rightarrow q) \equiv \Diamond (\sim p \wedge q) \equiv \Diamond \sim p \wedge \Diamond q$ False Conversion 5.

(9) $\Diamond q$ Simplification 8

(10) r Modus Ponens, 9, 4.

If Swinburne did not intend to derive r from $\Diamond q$ in this way, then, as stated above, perhaps r is an assumption. Since r (it is necessarily the case that P1 and P2 share the same non-physical part) is the very conclusion that Swinburne is hoping to establish, this, again would imply that Swinburne's argument begs the question.

This interpretation might be considered uncharitable and something of a strawman. However, although Swinburne may not have deliberately made such a move; without the protasis of the conditional (5), he cannot derive the sub-conclusion (6), r.

The circularity, and thus the vacuity of the argument, becomes more apparent on consideration of Swinburne's own wording:

"It follows that if the only parts of P2 are physical parts, and *it and the parts* have had a certain past history (including having certain past experiences), then it would not be possible for P2 still to be either P1 or not P1 (and so some other person)." (Swinburne, 2021, my italics)

It is easy to miss this important point in Swinburne's argument, but it belies his ontological commitment to an Aristotelian hylomorphism, and thus reveals the tacit circularity of his argument. Swinburne conceptually separates the person from its parts in his premises, in order to prove the existence of the person as being separate from its parts in his conclusion.

But if the only parts of a person are physical parts, then we cannot legitimately say that the person *and* their parts have had a certain past history; but rather that the parts alone have a certain history. Otherwise, we are positing the existence of some primitive substance, qua a soul, upon which we can append an identity, in order to prove that such a primitive substance exists.

Returning now to the issue of modality, perhaps Swinburne is attempting to exploit a principle of modal logic in order to derive sub-conclusion (6) and conclusion (7), but it is difficult to see how this could be so.

In modal logic S5, reflexivity axiom T states: if p is necessary, then p is the case.

$$\Box p \rightarrow p$$

Similarly, axiom 5 of S5, states: if p is possible, then it is necessarily the case that p is possible.

$$\Diamond p \rightarrow \Box \Diamond p$$

As Simpson demonstrates (Simpson, 1994) a corollary of axiom 5 is that:

$$(\Diamond q \rightarrow \Box r) \rightarrow \Box (q \rightarrow r)$$

These are all legitimate modal inferences, where we can substitute equivalent expressions under the scope of modal operators (Rostalska & Urbaniak, 2009). However, in deriving (6), r, Swinburne appears to argue as follows:

$$((\Diamond q \rightarrow \Box r) \wedge \Diamond q) \rightarrow \Box r$$

Distribution axiom K states:

$\Box (q \rightarrow r) \rightarrow (\Box q \rightarrow \Box r)$.

Given the above, it would be illegitimate in S5 to move from possibility to necessity in the following way: If q is possible, then it is necessarily the case that r.

Consider the following two arguments:

Non-modal Argument CK_1

(i) If Plato has a large fruit cake, then Plato has a cake.
(ii) Plato has a large fruit cake.
(iii) Therefore, Plato has a cake.

Alethic Argument CK_2

(i) If it is possible that Plato has a large fruit cake, then it is necessarily the case that Plato has a cake.
(ii) It is possible that Plato has a large fruit cake.
(iii) So, it is necessarily the case that Plato has a cake.
(iv) Therefore, Plato has a cake [From (iii) via axiom T]

It is hoped that alethic argument CK_2 strikes the reader as obviously invalid – one cannot logically infer an existential necessity from a possibility in this way. Premise (i) is excluded from standard modal logics, particularly S5.

However, since premise (i) cannot be true, it follows that there is no possible world in which the premises are true and the conclusion false, and so by some lights, the Argument CK_2 may be considered formally valid. But this is perhaps more suggestive of issues concerning the interpretation of existential quantification in modal logics, than of the possible soundness of Swinburne's argument (Quine, 1947). The admission of (i), implies that anything that is logically possible must, by necessity, exist. In the non-modal argument CK_1, both premises are, *ceteris paribus*, uncontroversially true, and so the conclusion follows. But simply because it is possible that Plato has a cake, does not make it a necessity. Swinburne's argument commits the same modal scope fallacy.

That Swinburne can conceive of of a non-physical part that determines whether person P1 is identical with person P2, does not entail that such a non-physical part necessarily exists (Rostalska & Urbaniak, 2009).

So, Swinburne either commits an illicit conversion and a modal fallacy, or he begs the question by assuming what he is attempting to demonstrate. Thus, Swinburne has not shown that a soul exists or that personal identity is dependent on the existence of a such soul. In conclusion then, Swinburne cannot have his cake and eat it.

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