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Fission theories of Original Guilt

Nikk Effingham¹

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Abstract

One reading of the Doctrine of Original Sin has it that we are guilty of a sin committed by Adam, thousands of years ago. Fission theorists account for this by saying that Adam fissioned after he sinned and that each of us is one of his ‘fission successors’. This paper recaps the current discussion in the literature about this theory, arguing that the proposed version does not work for reasons already raised by Rea and Hudson. I then introduce a new version of fission theory that avoids the Rea-Hudson objection.

Keywords Original Sin · Original Guilt · Temporal parts · Perdurantism · Fission · Miracles

Original Sin and Original Guilt

It is a standard Christian belief that we are born in a state of Original Sin, resulting in our standing in need of redemption (Harent, 1911). (The key passage is Romans 5:12; see also §§396–409 of the *Catechism of the Catholic Church*.) It is traditional, but less uniformly acknowledged, to further believe (1) that this state is a result of the actions of a human (or humans) born long ago and (2) that we are born guilty of those actions (or otherwise guilty of some sin connected to them).

Regarding (1), an extreme literalist reading of the Bible is that the human in question is Adam. More moderate readings (Hudson, 2009; Rea, 2007: 320; van Inwagen, 1988: 185n4) instead have it that our early ancestors committed some unspecified sin (or set of sins), removing themselves from a Paradise-like environment. Solely for the purpose of exposition, I tend to assume the extreme literalist view whereby Original Sin is the result of Adam eating the forbidden fruit; I will, however, comment on the more moderate version when appropriate.

Regarding (2), it amounts to the following claim:

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ORIGINAL GUILT: Humans born today are all born guilty of a sin committed by someone born (at least) thousands of years ago.

Not every theory of Original Sin accepts ORIGINAL GUILT (Rea, 2007: 319). For instance, some believe a ‘corruption only’ theory, whereby Original Sin just involves being born in a certain state rather than being guilty of eating the apple (Timpe, 2021: §4.3). But some people defend an understanding of Original Sin involving ORIGINAL GUILT (Madueme, 2020; Rea, 2007; Wainwright, 1988: 31; see also Crisp, 2017: 113–29) and it is that baton which this paper picks up. So set aside theological concerns about whether ORIGINAL GUILT is truly part of Original Sin, for this paper assumes it to be the case.

There is an obvious problem for ORIGINAL GUILT. Consider:

CULPABILITY: Agent τ is guilty concerning agent τ^\dagger 's ϕ -ing only if, at some earlier time, τ could have prevented τ^\dagger from ϕ -ing.

For example, given CULPABILITY, if my father committed a crime before I was born, I cannot be guilty of it for I could not have prevented that crime. The problem for ORIGINAL GUILT is clear-cut: I cannot be guilty of Adam's sin because Adam committed that sin thousands of years before I was born and I could not have stopped him. CULPABILITY, an eminently plausible principle, conflicts with ORIGINAL GUILT.

The jury is out on how we can make sense of Original Sin (Connor, 1968: 215; Crisp, 2015: 256); similarly, no conclusive verdict has been returned as to how to make best sense of ORIGINAL GUILT. Having assumed ORIGINAL GUILT, there are only two options. One is that CULPABILITY is false. This paper sets aside that solution. The other option is that we could, in fact, have stopped Adam sinning. It is that option that this paper discusses by defending ‘fission theory’. This paper proceeds thus: the version of fission theory currently discussed in the literature is susceptible to a serious problem; I introduce a new version immune to that problem; I then defend that new theory from objections.

Fission theories

To allow for a fission theoretic understanding of ORIGINAL GUILT, we first need two assumptions about personal identity. This section introduces them and then explains fission theory.

Assumption one: Successor Responsibility

Introduce ‘fission cases’. Consider two examples:

Example One An amoeba splits into two amoeba through a process of nucleus elongation followed by nucleus and cytoplasmic division. We say that the amoeba has ‘fissioned’ into two amoeba.

Example Two Consider the fictional case of a teletransporter (Parfit, 1984: 199ff). Those who step into the teletransporter are whisked away to another location (à

la *Star Trek*). However, on occasion, through either malfunction or intentional design, the teletransporter *duplicates* the person who steps into it. On those occasions, one person fissions into two.

It is best practice to talk neutrally as to whether the person prior to fission is numerically identical to (or the same person as) the post-fission people. Call the person prior to fission the ‘principal’. Call the people that result from the fission process the ‘successors’. For instance, I step into the teletransporter on Earth and am simultaneously duplicated and teleported—one of me arriving on Jupiter and the other on Saturn. We would say that the principal used the teletransporter on Earth to result in two successors, one going to Jupiter and the other arriving on Saturn.

This paper’s first assumption is that a successor is morally responsible for the actions of their principal. For instance, if I murder someone and then split amoeba-like into two, both of the resulting Nikk Effinghams should be punished for the crime. Call this assumption SUCCESSOR RESPONSIBILITY. It is relatively popular. Consider some theories that endorse it.

‘Multiple occupancy theory’ says that if a principal splits into n successors then there were originally n people, all co-located with one another. Given this theory, it’s false to talk about ‘the’ principal; rather, we should talk about there being many principals (each of whom goes their separate way after the fission process). Given multiple occupancy theory, if any principal ϕ s, every principal ϕ s (e.g. if one principal steals from the charity box, they all do). If one principal is morally responsible for ϕ -ing, every principal is responsible for ϕ -ing (for it’d be arbitrary for just one to take the blame). And, assuming that responsibility tracks numerical identity, since each successor is numerically identical to exactly one such principal, each successor is morally responsible for that ϕ -ing i.e. SUCCESSOR RESPONSIBILITY is true. Multiple occupancy theorists include Braddon-Mitchell and West (2001), Langford (2007), Lewis (1976a; b), Mills (1993), Noonan (2003), Perry (2002), and Robinson (1985).

Consider an alternative theory. ‘Stage theory’ says that the world is made up of instantaneously existing ‘stages’. People (indeed, all everyday objects) are identical to some such stage. Even though a person exists for only an instant, there are nevertheless facts about what did or will happen to them. Between certain stages there is an intimate relation, the ‘temporal counterpart relation’ (or gen-identity, or immanent causal connection, call it what you will); standing in temporal counterpart relations grounds truths about what did or will happen to a person. That I was once a child is grounded by me being counterpart related to a past stage that is a child. That my 15-year old niece will be a lawyer in 2040 AD is grounded by her being counterpart related to a stage located in 2040 AD that is a lawyer. And so on. The temporal counterpart relation is explicitly not numerical identity; indeed, it is explicitly not an equivalence relation. Thus, a single stage can be counterpart related to multiple stages at a later time even though those later stages are neither identical to, nor temporal counterpart related to, one another. Fission is a case where such a scenario comes about; the principal is a stage that is counterpart related to the multiple stages of its successors. If we add that moral responsibility tracks the counterpart relation, SUCCESSOR RESPONSIBILITY is true. Stage theorists include Hawley (2001), Kaiserman (2019), and Sider (2001, 2018).

Multiple occupancy theory and stage theory are ‘big beasts’ of the metaphysical world. But there are also other, less widely accepted, theories that commit to SUCCESSOR RESPONSIBILITY. For instance, Walker (2020) likens the situation to the type-token distinction: principals/successors are like tokens and people themselves are like types. Where I step into the teletransporter, I stand to the principal and the successors as a type stands to a token. (And Walker is explicit that the successors are morally responsible for the actions of their principal (2020: 187).) Another theory is Wright’s, which likens fission successors to co-located time travellers (Wright, 2006). Given Wright’s theory, successors are straightforwardly numerically identical to their principal (and one another!). Again, since you are responsible for the actions of your earlier numerically identical self, SUCCESSOR RESPONSIBILITY is true. In short, many theories commit to SUCCESSOR RESPONSIBILITY (and I am sure more will be added in the future).

Assumption two: Amnesiac Responsibility

Imagine Shannon commits a heinous crime. Later, she pays a nefarious neurosurgeon to remove all of her memories in order for her to live a guilt-free life. To remain neutral over whether the resulting person is numerically identical to (or the same person as) Shannon, call the post-operative person ‘Shaz’. Shaz’s mind is a *tabula rasa*; post-operation, she acquires a new personality and remembers nothing of Shannon’s life. The question is this: Is Shaz responsible for Shannon’s crimes? Say that those who believe that Shaz *is* responsible for Shannon’s actions endorse AMNESIAC RESPONSIBILITY. That is the second assumption needed for fission theory.

Those who deny AMNESIAC RESPONSIBILITY generally do so because of an antecedent commitment to the psychological continuity theory of personal identity (see, e.g., Chan (2020) and Locke (1990: 46, 62–63)). So it follows from AMNESIAC RESPONSIBILITY that this paper must likewise assume that the psychological continuity theory of personal identity is false and that a competing theory of personal identity is true (e.g. the bodily continuity theory, an anti-criterialism that doesn’t rule out Adam’s survival, a further-fact view etc.). But such competing views are not minority views. In the 2020 PhilPapers Survey, 44% of philosophers accepted psychological continuity whilst 40% accepted some such alternative view (Bourget and Chalmers 2020). So this paper’s denial of the psychological continuity theory is not a crazy fringe belief.

Of course, one cannot conclude merely from the psychological continuity theory being false that AMNESIAC RESPONSIBILITY is true—to do so would be to fallaciously deny the consequent! However, once we ignore psychological continuity theory, AMNESIAC RESPONSIBILITY seems quite credible.

When we discuss whether people are responsible for the crimes they have forgotten, I suspect people will think of geriatric patients with dementia, who long ago committed a serious crime that is now beyond their recall. In those cases, I agree that there’s an intuitive tug that we should not force such people to face trial, and be punished, during their twilight years. But, the case of people living with dementia pumps intuitions about punishment having nothing to do with mere memory loss.

Rather, our intuitions about not punishing such people has more to do with the associated ailments of dementia and the position of weakness one finds oneself when one has dementia. It is in virtue of those features, not the mere loss of memory, that a trial and concurrent punishment would be unjustly arduous. (For discussion along similar lines, see Buchanan (1988: 291) and Douglas (2019: esp. 341–42).)

The case of Shannon/Shaz itself makes this clear. Imagine that we capture Shaz minutes after the neurosurgeon has completed the amnesia operation ridding her of the memories of the atrocities she has committed. Imagine Shaz is otherwise in rude health (quite unlike the imaginary geriatric we might have had in mind above). If you have set aside the psychological continuity theory of personal identity, it strikes me as natural to then hold Shaz to account for the atrocity (Locke, 1990: 63). Or, at the least, I would demand to hear arguments to the contrary. If you deny the psychological continuity theory of personal identity, you should at least *default* to believing AMNESIAC RESPONSIBILITY.

So AMNESIAC RESPONSIBILITY is not the claim that, come what may, we should punish amnesiacs. Those living with dementia can be responsible for a prior crime but we can nevertheless decide it's wrong to hold them to account. More generally, this paper does not assume that amnesiacs should be *punished* for what they have done earlier on in life. Rather, it needs only the weaker claim that it can be just for amnesiacs to be in a situation brought about by their earlier pre-amnesiac selves. Consider how plausible that claim is when it comes to those living with dementia. Imagine one such person worked hard in their pre-dementia life, amassing enough money for relatively lavish healthcare treatment and a home full of luxuries. Imagine further that they had a fruitful romantic relationship leading to a large family. Now imagine another person who, not through unluckiness or the position they were born into but through sheer laziness alone, amassed only moderate money and failed to maintain any successful relationships at all. The end of life experience of anyone suffering from dementia is saddening, but that of the former—surrounded by a loving family, tended to by attentive private nurses, lying on a sun-kissed beach—is clearly better than that of the latter—comfortable, but lonely and spent in less salubrious surroundings. Even though both people have forgotten their earlier lives, intuitively the better end-of-life experience of the more successful person is well-deserved. And, whilst we should have sympathy for the latter person, we can nevertheless acknowledge that the reason they are in the situation they find themselves is a result of their own actions. It is a sad situation to be in, but there is nothing unjust about it. This paper requires only this weaker claim that the situation an amnesiac finds themselves in can be justly attributed to the actions of their pre-amnesiac self.

Fission theories of Original Guilt

Those assumptions in place, we can introduce the fission theoretic response to the problem for ORIGINAL GUILT. Imagine that, when Adam sinned by eating the forbidden fruit, God miraculously caused Adam to fission. Rather than fissioning into two successors (like an amoeba), God caused Adam to fission into billions (or more!) of successors. Indeed, Adam fissioned into a number of people equal to the number

of people who would ever come to live (with the exception of Jesus and Eve; those attracted to the Immaculate Conception may also exempt the Virgin Mary). It transpires that everyone who has ever lived is one of those successors i.e. I am a fission successor of Adam, as are you, and everyone else around us. Our memories of these events have, by God's intervention, been scrubbed so we do not remember eating the apple (or the rest of Edenic history).

Given SUCCESSOR RESPONSIBILITY, a successor is morally responsible for the actions of the principal, thus we are responsible for Adam's eating of the apple. And that we have forgotten eating the apple, and forgotten the Edenic events, is unproblematic given AMNESIAC RESPONSIBILITY. Moreover, given the prior discussion, it is morally just for God to allow us to be in a situation that is a result of those Edenic actions.

Given substance dualism, Adam's fissioning could be 'purely spiritual': the principal is Adam's soul; the billions of successors would also all be souls. The resulting theory is very similar to traducianism (Dubray, 1912; see also Crisp, 2006). Traducianists believe that, at the point of conception, the soul of one (or both) of the parents splits to create the soul of the child. The mechanism of spiritual generation in fission theory would be similar to traducianism (though still different for, given fission theory, it is only Adam's soul that fissions, rather than the souls of every parent).

But fission theory is not limited to the dualist picture. It also works with materialism. Given materialism, Adam is his body and it is his body that fissions into billions of successors. In the rest of the paper it is the materialist picture that I will assume. This is mainly because, as discussed below when considering objections, it is strictly *harder* to accommodate the materialist picture than it is to accommodate the dualist version—my materialist assumption is therefore a concession to possible critics. Those wedded to dualism will easily be able to translate the theory I present below into their own terms.

Gapless fission theory

There are (at least) two types of fission theory. The first is 'gapless fission theory' (which shares some similarities with Zimmerman's (1999) 'falling elevator' model of resurrection). Gapless fission theory says that there is no 'gap' in Adam's personal time between the eating of the apple and that of his successors. Consider Queen Elizabeth I. We standardly think that her personal history begins in Anne Boleyn's womb in the year 1533 AD. But, given gapless fission theory, her personal history starts in the Garden of Eden in, say, the year 4004 BC, where she is a man and not a woman. Years later, in 3904 BC, he/she is sinking his/her teeth into an apple and thinking about how succulent it is. Then, from Elizabeth's point of view, the next point in her personal history is that she has shrunk, changed DNA, lost all of her memories, and is now in the womb of Anne Boleyn, thousands of years later in 1533. There is a gap of thousands of years (i.e. between 3904 BC and 1533 AD) during which Elizabeth does not exist. But that is a gap in her *external history*. From the *viewpoint of her personal*

history there is no gap. (If you are unfamiliar with this distinction between ‘personal time’ and ‘external time’ see Lewis (1976b) and Effingham (2020: 42–45) for an introduction.)

Gapless fission theory has a problem (Hudson, 2009; Rea, 2007). It requires Adam/Elizabeth to undergo a radical change over an instantaneous period of personal time. One facet of that radical change is unproblematic: In a single instant of Adam/Elizabeth’s personal history, Adam loses all of his memories/psychological states. Given AMNESIAC RESPONSIBILITY, that isn’t going to be a concern. But this is not the only worrisome facet to Adam/Elizabeth’s radical change for surely no person can survive being shrunk in an instant to the size of a zygote or having their DNA utterly change in an instant etc. Those sorts of changes are intuitively too radical for Adam to survive.

One response to this problem—which I don’t endorse—is the ‘decree response’. Ordinarily, we believe that certain temporal parts compose me and certain temporal parts compose Adam—similarly for you and everyone else. Say β_{Adam} is the set of Adam’s temporal parts, whilst $\beta_1, \beta_2, \beta_3 \dots$ are the sets of everyone else’s temporal parts. Ordinarily, we believe there is some relation, R , which maximally inter-relates the members of each such set. Further, we standardly believe that it’s in virtue of those temporal parts being maximally inter-related by R that the thing they compose is a person (rather than, e.g., a mere extended temporal part of a person). But relations are plentiful. For any sets $\gamma_1, \gamma_2, \gamma_3 \dots$, there is some relation maximally inter-relating all and only the members of $\gamma_1, \gamma_2, \gamma_3 \dots$. So consider the sets $\beta_{\text{Adam}} \cup \beta_1, \beta_{\text{Adam}} \cup \beta_2, \beta_{\text{Adam}} \cup \beta_3 \dots$. There is then some relation, R^* , that maximally inter-relates all and only the members of those sets. Where we ordinarily think that it is R that underpins personhood, imagine instead that God decrees that it is R^* that underpins personhood i.e. all and only those temporal parts that are maximally R^* -related compose a person. In decreeing that this is the case, God makes it the case that Adam *can* survive the radical change involved in becoming Elizabeth I.

The decree response makes Adam’s fissioning a ‘purely metaphysical’ miracle. That is: We are holding fixed the physical facts that we ordinarily believe in (e.g. that there are such-and-such temporal parts distributed throughout space and time). The only difference is the purely metaphysical matter of which relation grounds personal identity, for the decree response says it is R^* that does that work. But decreeing that R^* grounds personal identity would require God to bring about the impossible. At least, that is how it seems to me. Not any old set of things can be a person e.g. some temporal parts of myself and some from a bannister from the eighteenth century presumably cannot compose a person. Indeed, it’s precisely that assumption which drives the initial worry that the decree response is trying to respond to; our initial suspicion that Adam cannot survive the stated radical changes is one and the same suspicion that the members of $\beta_{\text{Adam}} \cup \beta_1$ (and $\beta_{\text{Adam}} \cup \beta_2, \beta_{\text{Adam}} \cup \beta_3$ etc.) cannot compose a person. So, for God to decree that R^* is the relation grounding which temporal parts compose people is for God to decree the metaphysically impossible to be actual. That seems problematic for three reasons.

- *First* If you believe it satisfactory that God brings about the impossible, you have given up on Christian philosophical theology in the analytic tradition. As soon as you allow that God does the impossible, that solves every possible problem with theology. You don't need a complex theory explaining the Trinity; if God decrees the impossible, then just have it that God decreed that He is three people and yet one substance. You don't need to read the copious philosophy written on the Incarnation; just accept that God miraculously ignored a metaphysically necessary ban on humans being divine. There's no reason to worry about the problem of evil; it *is* a contradiction to believe God and evil exist, but why should God care of such things? And so on. In short: If you have read this paper this far, you should not be interested in such 'solutions'. (Perhaps this is too quick, since some have argued there is room for dialetheism concerning such matters (Beall, 2021; Chowdhury, 2021; Cotnoir, 2018). I leave the door open for someone to develop a 'paraconsistent fission theory' in light of such moves, but will not pursue it further here.)
- *Two* Moral claims are logically necessary claims. So it's impossible for CULPABILITY to be false. But if we allow that God can do the impossible, you may as well instead believe that God just suspends CULPABILITY's truth, at least when it comes to our being guilty of Adam's eating of the apple. That alone would solve the problem of ORIGINAL GUILT and there would be no need for this extra madness about everyone being a fission successor of Adam! Similarly, God might instead allow that CULPABILITY is always true, but simply ignore the contradiction that thereby arises by our being guilty of Adam's actions. Either ways, there's no need to defend gapless fission theory in the first place.
- *Third* Consider the Paradox of the Stone of whether God can create an object too heavy for him to lift. The two best solutions to that Paradox are: (1) that God cannot do the impossible but that this is no offence to his omnipotence (Anderson, 1984); or, alternatively, (2) God can do the impossible, but always chooses to refrain from doing so (Effingham, 2020: 139). Either solution entails that God did not decree R^* to be the relation underpinning personal identity.

Given the decree response is the only extant response to the problem for gapless fission theory, we should set aside gapless fission theory.

Regression fission theory

Gapless fission theory looks set to fail because it relies on 'purely metaphysical' miracles. But whilst such metaphysical miracles are problematic, physical miracles are not. Christians readily believe physical miracles occur e.g. God temporarily suspending the laws of physics to allow Jesus to walk on water or be resurrected. Philosophers like van Inwagen (1978) believe that God *routinely* conducts such physical miracles. Van Inwagen worries that when something is destroyed it cannot be brought back into existence by being reassembled. Since human corpses rot away (or are cremated etc.) this is a problem when it comes to God resurrecting our bodies on the Day of Judgement. Van Inwagen's solution is that God teleports our bodies away

after we die but before the corpse has ceased to be. The corpse is instantaneously replaced by a simulacrum (which we then come to erroneously believe was once that person). Such miraculous teleportation would be a physical miracle routinely taking place around us.

If we allow for such routine miracles, we can rescue fission theory. Imagine that, when Adam fissions in 3904 BC, God whisks away the fission successors in exactly the same fashion that God whisks away our corpses given van Inwagen's theory. So, in 3904 BC, God teleported billions upon billions of successors of Adam to a place far away. Further, imagine that God puts those billions of people into suspended animation. Kept suspended by God's miraculous intervention, they could last forever in that state.

Next, where we think a person has been naturally conceived, that is not the case. Instead, God takes one of those successors out of suspended animation. God then miraculously regresses that person, biologically de-aging them until they are the size of a zygote. That done, they then also undergo a (gradual) change of DNA. What we are left with is a zygote that is a regressed fission successor of Adam. Back on Earth, where conception has led to the creation of a zygote in someone's womb, God miraculously swaps out that zygote for the regressed fission successor. In this manner, the person who is then born is morally responsible for everything that Adam did—crucially, they are responsible for the eating of the forbidden fruit. Call this 'regression fission theory'.

Obviously, as with gapless fission theory, this theory relies upon AMNESIAC RESPONSIBILITY. But the other problems faced by gapless fission theory are not faced by regression fission theory. The changes Adam/Elizabeth undergo are no longer as swift; they can be as slow as they need for Adam/Elizabeth to survive them. Whilst a person might not survive instantaneously changing to be the size of a zygote, they could survive that change if only it took long enough. Whilst a person might not instantaneously survive having all of their physical and biological properties changed, they can survive if the change is unhurried. And God can arrange for Adam/Elizabeth to lose her memories, change her DNA etc. over the course of centuries if need be (although it requires God to be able to use His foreknowledge to foresee the time at which Adam/Elizabeth needs to be zygote-sized, ready for insertion into someone else's womb). Regression fission theory doesn't face the same problem that gapless fission theory faces.

Objections

This section discusses objections to regression fission theory. Some are only applicable to a materialist version of the theory; as already noted above, I will take the high road by assuming materialism, so respond to those objections without resorting to substance dualism.

Objection One Regression fission theory requires psychological continuity theory to be false. But above, I relied upon theories like multiple occupancy theory and stage theory to justify the appeal of SUCCESSOR RESPONSIBILITY. Multiple occupancy theorists like Lewis (1976a) are also psychological continuity theorists. Similarly,

we might think that stage theorists are attracted to psychological continuity theory. So the very philosophers I'm bringing under my banner when it comes to SUCCESSOR RESPONSIBILITY are the same philosophers who will deny AMNESIAC RESPONSIBILITY.

Answer Distinguish between multiple occupancy theorists *being committed* to the psychological continuity theory of personal identity and their *happening to often believe it*. As a matter of purely sociological fact, multiple occupancy theorists may well often be psychological continuity theorists—unsurprising, given that over 40% of philosophers believe that theory!—but it is not the same as the two theories being logically connected. For instance, if you are a bodily continuity theorist you still need to say something about the philosophical problems concerning fission. Multiple occupancy theory is just as viable and live an option for the bodily continuity theorist as it is for the psychological continuity theorist. Even if we assume that no-one has declared in print that both are true, that's no reason to think that people aren't attracted to their combination.

The same sentiment applies to stage theory. Even if stage theorists tend to think temporal counterpart relations between people stages track psychological connectedness, there's no reason to think that's part-and-parcel of the view. Like modal counterpart theorists (Lewis, 1971), the stage theorist will relativise counterpart relations to a sortal e.g. a stage identical to a clay statue is 'statue-counterpart' related to later (statue shaped) stages and 'lump-counterpart' related to those stages plus more stages besides (i.e. stages that are not statue shaped). Similarly, people stages can stand in 'mind-counterpart' relations and 'body-counterpart' relations. Psychological theorists would say that the relata of those relations differ (e.g. I am a stage which is body-counterpart related to a future stage that is a corpse, but not mind-counterpart related to that stage). Bodily continuity stage theorists, on the other hand, will say that the relata never differ (e.g. the body-counterpart relation and mind-counterpart relation are the same relation). So, the stage theorist can easily accommodate theories of personal identity other than the psychological continuity view.

And if we are looking for philosophers who believe both views, then count me in! I believe AMNESIAC RESPONSIBILITY. I am attracted to the bodily continuity theory of personal identity. I eschew fanciful claims from the psychological continuity theorist that if you upload my mind to a computer then that is somehow 'me'. I am also attracted to a theory of fission whereby successors are personally identical to their principal (and, further, accept SUCCESSOR RESPONSIBILITY). So I am on the lookout for a theory bearing out those claims (and multiple occupancy theory and stage theory are both high on my list of possible theories to opt for). I suspect a good number of other philosophers will likewise be attracted to such a combination, though I accept that few (if any) have tried to defend that position in print. (Indeed, given that it is a relatively natural pairing, it would be difficult for a paper to get published defending such a position, since papers merely pointing out the logical consistency of positions (rightly!) get rejected. So we should not *expect* this particular combination of views to have received an extensive detailed defense in the literature.)

In conclusion, it is still quite reasonable to believe both AMNESIAC RESPONSIBILITY and SUCCESSOR RESPONSIBILITY.

Objection Two This theory requires Adam to become a zygote. Nobody could survive becoming a single celled organism.

Answer Either a zygote can be a person or it cannot. (For discussion about whether a person can or cannot be a zygote, see Anscombe (1984), Baker (2005), Burgess (2010), Curtis (2012), Oderberg (2008), and Rohrbaugh (2014).)

If a zygote can be a person—that is, if you believe that at the start of your personal history you were once a zygote—then I see no reason why someone cannot regress *back into being a zygote*. If you were once a zygote, why think that it is impossible for you to become a zygote again in the future?

If it cannot be a person, then only more developed embryos, foetuses, or antenatal human stages can be people. In that case, simply switch out all mention of ‘zygote’ from the above for whatever stage of human development it is during which you think one becomes a person. For instance, assume that a person comes about when a foetus develops. In that case, God does the cosmic switcheroo on foetuses rather than zygotes and the claim would now be that God regresses Adam’s fission successors back into being foetuses rather than zygotes. And the same thinking as before still applies: if you believe a person can *once have been* an *F*, why doubt that they cannot be *regressed back into being* an *F*? So, Adam can survive regression into a foetus.

Objection Three Everyone has different DNA, so each fission successor of Adam will have different DNA. But no human can survive the changes to their DNA that regression requires, so no fission successor of Adam can survive the changes its polynucleotide chains will undergo.

Answer Certainly, we cannot survive any old change to our DNA. For instance, I would not survive having all my DNA changing to be that of a mayfly. But I see no reason why I cannot change my genetic characteristics from being one way that a human being could be to being a different way that a human being can be. (For the Christian, this should be quite plausible given that we might well expect our resurrected bodies to have no DNA at all.) And, again, bear in mind that this change in DNA can be as gradual as required.

Objection Four This theory requires Adam to change sex, which is impossible.

Answer Even if (big if!) one believes sex is an essential property of humans, one could simply introduce Eve into the literal story—men are successors of Adam and women are successors of Eve.

You may be concerned that sex is not binary and that there are more than two sexes. I suspect that those inclined to recognise such concerns are the least likely to think sex is an essential property of a person. In any case, one can always retreat from the extreme literalist interpretation whereby the fission principals must either be Adam or Eve to a more moderate interpretation of the Genesis story whereby thousands (or more) of our ancestors committed the primal sin and then fissioned. As long as all sexes were represented amongst those ancestors—and why think they weren’t?—this problem would be resolved.

Objection Five Where are all of Adam’s fission successors kept prior to being implanted in wombs?

Answer Wherever our corpses are whisked away to after we die given van Inwagen's theory. A planet in the Andromeda galaxy, perhaps. Maybe some region of a hyperspatial dimension (Hudson, 2008). Possibly the core of Mars. Who knows!

Objection Six Why would God create a world at which regression fission theory was true? Regression fission theory makes God's actions seem ridiculous!

Answer It's dialectically appropriate to assume that God has some reason to populate the world with lots of humans. God would then be faced by a variety of ways to achieve that goal. God might summon them from the void *ex nihilo*. Or have them delivered by giant storks. Or, as most people believe, have them brought into existence through the biological process of conception. Or, as regression fission theory has it, God might cause Adam to fission. It is difficult to see by what criteria we could judge that any one method is better or worse (or more 'ridiculous') than any other. For instance, imagine an atheist argued that God does not exist because God would have ensured that a giant stork dropped babies from the sky rather than having people come into existence through gestation. That's a bad argument precisely because there's no good way of adjudicating which method of 'population creation' God would use.

The only exception would be if there was a moral reason to disprefer population creation via fission. If there was something morally wrong with God creating us via fission, then He would not do it. But there doesn't appear to be anything wrong with God sustaining Adam's life by causing him to fission, so there is nothing morally wrong involved in regression fission theory.

Objection Seven There is something morally wrong with God populating the world via fission. By removing zygotes, God is killing unborn children. God would never do that.

Answer No children were harmed in making the human race. Let t be the first instant at which a person comes into existence. At t they are composed of some atoms. At instants arbitrarily earlier than t , those atoms compose something very similar to the person. But, because the person comes into existence only at t , that thing is *not* a person; call it an *apersonal composite*. Regression fission theory maintains that God regresses Adam to the stage at which, were he regressed any further, he would cease to exist in virtue of becoming an apersonal composite. God destroys the appropriate apersonal composite in someone's womb the instant before the laws of nature would lead to it becoming a person; He then replaces it, an instant later, with the regressed version of Adam. So, God is *not* killing an unborn child, but is instead destroying an apersonal composite.

Admittedly, God intercedes in a process that would have otherwise led to the creation of an unborn child. For certain Christians, that is an act that humans aren't allowed to engage in (for instance, Christians against contraception or early stage abortion might believe this). So God would be doing something He prohibits humans from doing. This is not a serious problem. Presumably, God's prohibition against interfering in the natural process of conception is a prohibition placed on humans partially because of their limited capacities. God, having unlimited capacities, need obey no similar prohibition. Compare: It's immoral to drop anvils off of bridges into fast moving traffic. But an omniscient being, who can foresee all the consequences of such an action and can precisely drop it in

such a way that no-one is harmed, need obey no such prohibition; this is particularly the case if the outcome of the anvil-dropping foreseeably had good consequences further down the line.

Objection Eight A referee had the following objection. Either Jesus is a successor of Adam or Jesus is not a successor of Adam. If Jesus is a successor of Adam, then since Adam sinned then Jesus sinned, which is impossible. If Jesus is not a successor of Adam, then Jesus is quite unlike everyone else i.e. Jesus is not fully human. It is contrary to Chalcedonian Christology that Jesus is not fully human. So, either option leads to a problem.

Answer Jesus is not a successor of Adam, but this is no challenge to his humanity. Whilst it is contingently true that every human who has ever lived (except Jesus and Eve) is a successor of Adam, that does not indicate anything about the essential nature of humanity. Certainly, we cannot draw from every human (contingently) being *F* that human nature involves being *F*. (For instance, if Adam and Eve had never sinned then every human who existed would have always human who existed would have been naked, but nudity would not thereby be a part of human nature.) So, Jesus may be exceptional in that he was conceived naturally rather than being a successor of Adam like everyone else, but that doesn't make him *less human*. Foetal development does not feed into one's degree of humanity. (Further, note that on the extreme literalist story, Adam and Eve did not gestate in a womb so, if foetal development was important to human nature, we wrongly have to say Adam and Eve weren't fully human.)

You may disagree. You may believe that foetal development *does* feed into whether one is more or less human. But, it then strikes me that Jesus is *more* human in that his body developed naturally, unlike everyone else. If anything, Adam's sin makes us all 'less human' because that sin resulted in a thoroughgoing interference in the process of foetal development. The point becomes more obvious when we consider moderate reading of the Genesis story whereby there were many people in the Edenic state (and perhaps had been for many generations). Were that more moderate reading true then lots of humans have been born naturally. It is only post-Fall that the natural order of things is interrupted. Jesus's birth would be a brief, rare return to that natural order. So, even if you believe that foetal development is relevant to human nature, it bears out Jesus being more, not less, human than the people around us.

Objection Nine Another objection from a referee: Those readings of Christian doctrine which accept ORIGINAL GUILT do not say that we are all the same person as Adam, only that we are responsible/guilty of what Adam did. So this theory goes against Christian doctrine.

Answer Christians can take seriously astounding theories about who we are and what our nature is, even though those theories are not explicitly stated in the Bible. The theory of evolution would be a prime example (of course, only given a more moderate reading of the Genesis story). Or consider an example from modern philosophy, such as Berkeley's idealism. Or more recent scientific claims e.g. that we are all holographic projections of a two-dimensional surface (Bousso, 2002; Susskind, 1995). Fission theory would be in the same position of being an astounding theory about humans that is not discussed in the Bible.

One might press the objection harder, pushing the stronger claim that Christian Doctrine explicitly rules out that we are fission successors of Adam. But whilst I don't deny that it's natural to read the Bible as implicitly assuming that we are different people from Adam—who could deny that!—I see no evidence that the Bible explicitly says that we are not. (Bear in mind that fission theory accepts that there are *currently* many distinct people; even if we accept a theory about fission whereby we are all numerically identical to Adam, something about fission—e.g. multiple occupancy theory being true—means that we are no longer identical to one another.)

Alternatively, the objection may be pressed harder by instead arguing that we should *expect* the Bible to have made fission theory explicit were it actually true. But, just as it is unreasonable to expect the Bible to comment on evolution, idealism, and holographic projection even if they are true, it seems unreasonable to expect the Bible to comment on fission theory even if it were true. Indeed, imagine the Bible explicitly laid out the details of fission theory. That would have made the proselytization of Christianity harder to bring about; it would have been hard for Christians from two millennia ago to convince people to sign up to a religion that explicitly committed to such a strange claim. So, there's a reason for God to ensure the Bible doesn't mention it explicitly, even if it is true (see also Effingham, 2018: 309–10).

Objection Ten The incredulous stare! Regression fission theory is crazy, or utterly unbelievable, or obvious nonsense, or being dishonestly defended by me solely to get a publication in a journal.

Answer Either regression fission theory is the only acceptable way to reconcile ORIGINAL GUILT with CULPABILITY or it is not.

If it is not, then ORIGINAL GUILT and CULPABILITY are consistent (and Christians can rationally believe in ORIGINAL GUILT/Original Sin without being morally revisionary). In that case, the conclusion of this paper—that it's not unreasonable for the Christian to believe ORIGINAL GUILT—is true.

If, instead, regression fission theory is the *only* acceptable way to reconcile ORIGINAL GUILT with CULPABILITY then I submit that this means that it is not crazy, or unbelievable, or intellectually dishonest for the Christian to defend. Given it's the *only* acceptable theory allowing such reconciliation, that is itself a reason to believe it! (At least, it is if you're a Christian in the business of believing both ORIGINAL GUILT and CULPABILITY.)

Indeed, the same lesson applies if you are worried about making sense of Original Sin in general. Either Original Sin involves ORIGINAL GUILT being true or it does not. If there is some way to make sense of Original Sin without relying on ORIGINAL GUILT, then you accept that there is some way to make sense of the Christian Doctrine of Original Sin. And if there is no way to make sense of Original Sin without ORIGINAL GUILT, then regression fission theory is one way to do that. Either ways, those sceptical of the Christian Doctrine of Original Sin should accept that it can be made sense of.

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