INTRODUCTION

Let me begin by thanking the Henry Center for asking me to respond to this paper, by thanking Dr Swamidass for this stimulating and helpful piece, and, finally, by congratulating Dr Swamidass on his recent promotion at Washington University.

Perhaps I have already tipped my hand in saying that I find the paper stimulating and helpful. Indeed, Dr Swamidass has entitled his own blog “Peaceful Science,” and I count this paper as just such an effort, offered in good faith.

At the same time, my task is to be iron sharpening iron (Prov. 27:17). Remarking on that passage, Derek Kidner mentions what he calls “the healthy clash of personalities or views”; “A true friendship,” he explains, “should have both elements, the reassuring and the bracing.”

I view Dr Swamidass’ paper as an entry in a conversation;¹ and I could describe my response, and the rest of the responses, and his reply, and so forth, in terms of what in linguistics is called “conversation analysis,” or even “game theory.” But I much prefer to appeal to the authority of St Eeyore in the Sacred Pooh canon, in the story “In which Eeyore find the Wolery and Owl moves into it” (ch. 9 of The House at Pooh Corner, Dutton edition, p. 314):

“Not conversing,” said Eeyore. “Not first one and then the other. You said ‘Hallo’ and Flashed Past. I saw your tail a hundred yards up the hill as I was meditating my reply. I had thought of saying ‘What?’ — but, of course, it was then too late.”

“Well, I was in a hurry.” [said Rabbit]

“No Give and Take,” Eeyore went on. “No Exchange of Thought. ‘Hallo—What” — I mean, it gets you nowhere, particularly if the other person’s tail is only just in sight for the second half of the conversation.”

¹ Derek Kidner, Proverbs, TOTC (Downers Grove: IVP, 1964), 45.
² As he says on page 17, “The model proposed here should only be regarded as tentative, as a starting point for further reflection.”
For my part in the conversation, I will offer comments on three general subjects: First, I will identify some of the positives I find in the proposal (and I find a fair few). Second, I will make a couple of Biblical-theological clarifications that need not affect the value of the proposal as such, but might shape the way one envisions its outworking. And third, I will outline a sampling of Biblical and theological concerns that a good scenario needs to address — things that, in my judgment, will also govern the shape of the scenario. Right, then, here goes.

1. **Positive Features of the Swamidass Proposal**

   (a) The first positive feature to list is the very fact that the proposal has sought to preserve orthodox Christian theology, and to make space for its adherents in their scientific practices.

   (b) Related to this is the second positive, namely that the proposal takes historical referentiality seriously, without resorting to the more wooden kind of scientific concordism. There are those who, in renouncing this wooden concordism (in hopes of preserving Christian faith from conflict), wind up renouncing all kinds of respect for historical referentiality — and they do not appreciate that they have undermined the fundamental shape of the Biblical story (and therefore harmed the robustness of their Christian faith).³

   (c) A third positive feature is the way that Dr Swamidass, knowledgeable in the biological sciences, has criticized what he sees as a misuse of the biological results by those who would advocate that we abandon any traditional notion of Adam and Eve. These advocates have, in my judgment, framed their understanding of the role that Adam and Eve play in the story unsatisfactorily. Further, they have professed that science and theology are in a *complementary* relationship, but they do not themselves practice complementarity: they use their notion of the science to overthrow some core theological positions (invalidly, as I judge). Of course I have focused on the exegesis and

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theology, and Dr Swamidass is one of those who have addressed the biology.\(^4\) I will come back to some of the theological side shortly.

(d) Fourth, Swamidass’ focus on the *genealogy* rather than the *genetics* and his motivation for it is spot on: namely, the Biblical language is concerned with line of descent, or genealogy; to appeal to the genetic questions, important as they may be for some purposes, foists a misleading anachronism on the Biblical text. The same may well be true of the notion of *human*.\(^5\) One could wish that all discussions of these matters were as respectful of the language level and communicative concerns of the Biblical authors!\(^6\)

(e) Fifth, Swamidass has offered a *scenario* for envisioning how the Biblical events might have taken place. The literary and rhetorical features of the Biblical materials are rarely oriented to giving us what we would have seen had we been there when these primordial events happened (even when they are asking us to be confident that there are indeed events to which the accounts refer). Hence the production of scenarios is a reasonable enterprise, so long as we do not confuse the referent and our scenario in their epistemic status. More on this in a moment as well.

(f) And sixth — Swamidass does not raise this directly, but it stood out to me as I read his paper — we need to consider the possibility that biology, as it is currently constituted, does not capture enough of what it means to be human (or perhaps other animals as well). By this I mean that the *relational* side of humans eludes what is at present done as biochemistry — our *interconnectedness*, for example, and our relations that theologians call *solidarity* and *interchange*. No doubt these faculties ride on our chemical mechanism, just as our rational and moral faculties do (which are conventionally recognized as going beyond our material components). At the same time,


\(^5\) Here he draws on a distinction between the theological and biological species, noting (rightly, as I judge) that the Bible would focus on the former. More on this below.

with Warfield, I would not like to suggest that one could take an evolved hominid, and simply add soul to it, and hey-presto!, you have a human. So I would say that our physical components are arranged in such a way as to support these relations and activities, but do not fully account for them.

2. BIBLICAL-THEOLOGICAL CLARIFICATIONS

(1) The Swamidass paper applies its biological theory under the reading of Genesis 1–2 that sees them as sequential accounts, in the way that John Walton has argued for. I will here simply note that this reading is exceedingly vulnerable to critical review. Another reading is better-attested, both within the canon and up close to it, and more readily supportable, namely that Genesis 2:4–25 narrate an expansion of certain events in the sixth day. My preliminary judgment is that the value of the proposal does not depend on the Walton-esque reading.

(2) Swamidass refers to a class of scenarios that involve representation (including one offered by me), in which the representation is potentially “independent of a genealogical connection to Adam.” I need to clarify that these scenarios are not all the same — those that have the representation at the “headwaters” of humankind are specifically responding to exactly the issue that Swamidass rightly concerns himself with, namely the seeming arbitrariness of God otherwise. The clarification, then, is that those who posit an imputation based on representation downstream from the headwaters of

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8 As C.S. Lewis put it in his characteristically punchy fashion, “A man’s Rational thinking is just so much of his share in eternal Reason as the state of his brain allows to become operative”; see Lewis, Miracles: A preliminary study (New York: Macmillan, 1960), 39 (ch. 6).

9 I have given some reason for this in my contributions to Matthew Barrett and Ardel Canaday, eds., Four Views on the Historical Adam (Grand Rapids: Zondervan, 2013), especially 127–29 (and more fully in Reading Genesis Well: Navigating History, Poetry, Science, and Truth in Genesis 1-11 (Grand Rapids: Zondervan, 2018).

10 Joshua Swamidass, “The overlooked science of genealogical ancestry,” PSCF 70:1 (2018), 19–35, at 31; see also Swamidass, “Genealogical Adam and Eve,” 25, 30. Also, as a matter of detail, I do not think that Stott and Kidner actually support the proposal of Denis Alexander, as the question of timing does not enter in for them. That is, they do not consider whether the dates predate human migration.
humankind suffer from this critique; I recognize that this is not what Swamidass is proposing.

3. IMPORTANT EXEGETICAL AND THEOLOGICAL CONCERNS A SCENARIO SHOULD ACCOUNT FOR

I would argue that, at the least, the Christian story assumes as true the following points:

1. The human race is one family with a unified origin (regardless of the initial population size);
2. Humans arose by a process that goes beyond the impersonal;
3. Sin is an alien intruder into God’s good creation, and entered into human experience at some point in the headwaters of human history.

(We can get more specific, and I would indeed do so. But I am opening my arms as widely as I can for now.) I think that Swamidass wants to allow us to preserve these, so these final remarks are aimed at enabling that preservation.

(a) The notion of “original sin” as such should be defined carefully. For many, the very name is so associated with Augustine, that rejecting details of Augustine’s views equates to rejecting the whole notion. However, it is standard among Greek-speaking Christians, well before Augustine, to see the disobedience of Adam and Eve, at the beginning of humankind, as the event that made all of us, their children, into sinners. They might differ in the details of how this works: the Greek-speakers tend to focus on the result of the fall as both the lost chance for immortality and the subjection to moral and physical corruption, while the Western Christians have perhaps laid more stress on the guilt that follows. Even though there are differences of emphasis, there is so much

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12 I would also leave aside the question of whether Augustine depends on a “mistranslation” of Rom. 5:12 (Swamidass, 25). First, it is more accurate to say that most New Testament scholars do not follow that reading today — which is not the same as saying that it is impossible. Second, I do not think the argument depends on that matter anyhow, as any modern (“Augustinian”) commentary on Romans will show.

13 Athanasius, On the Incarnation, §§3–5, is clear on this. See Wisd. 2:23–24a, “God created mankind for incorruption and made him in the image of his own character; but through the devil’s envy death entered the world.” I have explored some of these matters in “Mortal before the Fall? I Don’t Know, I Don’t Think You Do, and It Doesn’t Matter,” Sapientia post, May 24, 2018.
common ground that we can say that some notion of “original sin” (or whatever we want to call it) is part of Mere Christianity,\textsuperscript{14} and is therefore not itself any kind of open question.\textsuperscript{15}

The main thing is that humankind fell. Now, these writers always, whether explicitly or implicitly, assume the historicity of Genesis 3, with only two people at the headwaters — although at times some fathers can speak of humankind as a population having fallen (Athanasius, \textit{Contra Gentes}, 3.1–5):\textsuperscript{16}

  In this way, then, as has been said, did the Creator fashion the human race (τὸ τῶν ἄνθρωπων γένος, the race of human beings), and such did he wish it to remain. But humankind (οἱ ἄνθρωποι, “human beings”), contemptuous of the better things and shrinking from the apprehension of them, sought rather what was closer to themselves — and what was closer was the body and its sensations.

Most notions of “original sin” depend on a version of \textit{representation}, or, perhaps, \textit{inclusion}. There is nothing distinctively Reformed or even Augustinian in referring to Adam as a covenantal representative, since this occurs as early as Irenaeus (and even earlier, in Ben Sira 14:17).\textsuperscript{17} The way it works is straightforward, once we accept solidarity as real: the actions of one member affect the whole group, and the \textit{proper} representative (or “head”) can act on behalf of the whole body. We have a sense of how this works on the natural level: I was born into a family of US citizens, and had my parents emigrated from the USA before I was born, I would have legitimately “inherited” their new citizenship. But if my older cousin had emigrated, that would not have entailed me or my younger siblings; he is not a proper representative.

(b) Second, the question of what the image of God is requires further work in the current environment. Explanations tend to fall into one of three camps, which I have dubbed \textit{resemblance}, \textit{relational}, and \textit{representative} views.\textsuperscript{18} I wonder how the scenario might change according to how we understand the image.

\textsuperscript{14} See the blog of Jon Garvey, “Irenaeus (and others) on original sin,” for helpful spade-work on the early Christians. See also the spectrum of theological views represented in Hans Madueme and Michael Reeves, \textit{Adam, the Fall, and Original Sin} (Grand Rapids: Baker, 2014).

\textsuperscript{15} Hence the approach of McKnight is outside this mainstream.

\textsuperscript{16} As C.S. Lewis put it, “man, as a species, spoiled himself”; see Lewis, \textit{Problem of Pain} (London: Geoffrey Bles, 1940), 73, 76 (ch. 5).

\textsuperscript{17} See discussion in Collins, \textit{Reading Genesis Well}, §8D.

I suspect that the preferred articulation of one’s view of the image has changed with both the intellectual environment, and the pastoral needs, of the articulators.¹⁹ I would like to see studies that investigate this. For example, respected Hellenistic figures spoke of “likeness” to God, especially in the realm of morality;²⁰ and perhaps that had an influence on how early Christians interpreted the image. They would have said that Plato got his wisdom from above (possibly even from Moses)! Certainly they would have seen the image as something that distinguishes humans from the other beasts, contrary to some moderns (see Athanasius, De Incarnatione, 11.11–20; 13.1–13), and of course they focus on “rationality” (with all that means) — that is, a version of the resemblance view.²¹ They do at times include the others, as in the Epistle to Diognetus 10:1 —

For God loved men for whose sake He made the world, to whom He subjected all things that are in the earth, to whom He gave reason and mind, whom alone He permitted to look up to heaven, whom He created after His own image.

For my own part (and to cut a long story short), I prefer, all other things being equal, to go with a view that is recognizably in continuity with qualified readers in the Second Temple period and early Christianity. I think that 1 Clement 33:8 leads the way into what I take to be the most defensible, namely the image of God is a calling; the ideal life of a person and a community consists in imitating God, and the community should conduct its life in such a way as to foster this.²² This involves all three of the triad, and views the function of the Genesis text in relation to the fallen humans who first received it.

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²² I am aware that some dispute this. Walter J. Houston, “The character of יְהֹウェ and the ethics of the Old Testament: Is imitation Dei appropriate?” JTS n.s. 58:1 (2007): 1–25, suggests that imitatio Dei is inadequate; but this is because he takes a fairly wooden and unqualified reading of the principle.
However we define the image, we also have to discern the mode by which it is transmitted — specifically, in what way procreation is involved in such transmission.

(c) I wonder what kind of “evolution” is in view? Is it simply “descent with modification,” without prejudging how the modifications are introduced? If so, I do not see any strong theological objection to it: whatever natural processes are involved are, after all, God’s processes. And even some kinds of progressive creation can be accommodated, with the kinds being initiated by separate infusions. (That view is not theologically needed, mind you; but we are trying to lower unnecessary barriers.)

Of course theists will allow that God is free to govern, and even add to, this process, should he wish to. This question is separable both from the question of whether he has in fact done so, and from the question of whether, should an addition have taken place, we might be able to discern it. Like many, I consider the origin of the human array of linguistic, moral, and reasoning capacities to be the result of such an addition, but I would differentiate that from a scientific theory. Nevertheless, I do not expect naturalistic theories to be adequate.

On the other hand, in many venues “evolution” is set over against “intention”; even in something as simple as the development of the domestic dog, the “evolutionary” scenario is opposed to the intention selection scenario. I would like clarity on this word.

Actually, the old scholastic distinction between communicable and incommunicable attributes of God might help!


24 This is a critical thinking issue, not an empirical one as such; and it leads us to expect that experiments based on naturalism will fail, as they have done. Most recently, see Acoustical Society of America. “Can chimpanzee vocalizations reveal the origins of human language? While closely related to humans, researchers discover that chimpanzees’ vocalizations resemble human language less than you’d expect,” ScienceDaily, 8 May 2018. <www.sciencedaily.com/releases/2018/05/180508081505.htm>.

In this light, I'd also like clarity on evolutionary theory as science. I consider the study of whatever processes are involved processes to be a proper scientific endeavor. I also count the critique of the dominant theories to be a proper endeavor, since that's part of science. There is a sentence in the paper that is capable of a benign interpretation, but I should draw attention to it nonetheless: “Where science is silent, theology has legitimate autonomy” (21). It is fine in context; but, I would argue, we should not make this a general rule: things are far more complicated than that, as we all know.26

(d) Fourth, the question of “biological compatibility” needs clarification. Probably those who both doubt that Neanderthals and Denisovans are properly “of us” (whatever that means), and also accept the geneticists' verdict that it looks like they have contributed to our genome, implicitly accept some form of this. We are familiar with hybridization amongst separate species; but this nevertheless is a tension. Is it a perceived tension only, or is it a real one; is it resolvable, or do we simply have to live with it? At what point does it transgress into bestiality (credible for fallen humankind, hard to accept for unfallen). The suggestion of differentiating the different kinds of species — the biological, theological, and philosophical — might be fruitful and finds support against critique from Edward Feser.27 It needs development, though. I suspect that an expanded notion of “biology,” adapted to capture more of what it means to be human, will help.28 (I would not want to apply this distinction to the unborn, disabled, or elderly, mind you.)

(e) I have already raised the question of how both “original sin” and “the image of God” are transmitted, and I return to it here. Certainly the biological process of procreation has something to do with it; but so do such phenomena as “membership” and “solidarity.”

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26 I find the writings of Alvin Plantinga (among others) helpful here.
28 Unless the biologically human and, say, philosophically human are so clearly distinct that these features can only be said to apply to the latter. My experience with other animals leads me to expect that this is not so.
I once heard Peter Harrison say that if certain theological views are well-founded, and fundamentally important to a well-grounded system of belief, it can be rationally responsible to maintain those views, even if, for the time being, the science seems to call them into question. I believe he was right, at least for these basic beliefs about the origin of humankind and of sin. These are too well-connected to the kind of experiences that are universally accessible and all-but-universally recognized. Sometimes, if we wait, new light will come in the scientific thinking. And sometimes, as well, someone with enough imagination will propose a workable scenario that helps us past the apparent hump. I still want to do some more thinking; and I feel the need for the expertise and wisdom of the DABAR conferees. But it looks like Dr Swamidass has indeed provided an imaginative and serviceable tool for our toolkits, to promote “peaceful science.”