

Evolution, Sin, and Redemption: Multiple ways to harmonize human evolution and original sin
Loren Haarsma – *Christian Perspectives in Science* seminar, Calvin College, May 2, 2014

Not just one scenario, but a range of scenarios with a common core:

My project¹ is to look at competing strengths and challenges of several different scenarios which have been proposed by Christian scholars for human origins and original sin.

Each scenario under consideration affirms the inspiration and authority of scripture. Each shares a core doctrine of original sin including:

- the centrality of atonement through Christ's incarnation, death, and resurrection;
- a biblical view of God's goodness and justice;
- sin as a rebellion of God's revealed will;
- the earliest acts of sinful disobedience by our ancestors had consequences for them and for their descendants;
- all humans today are prone to sin and are incapable of not sinning.

Note the distinction between doctrine and doctrinal theory. Christians can agree about a doctrine while disagree about doctrinal theories (*e.g.* theories of Atonement).

Note the distinction between doctrine of original sin and historically first sin(s).

Outline

- A very brief summary of Augustine on original sin
- Scientific evidence regarding human ancestry
- Scientific evidence regarding human brains and behavior
- Brief overview of scenarios under consideration
- Biblical-hermeneutical issues
- Some long-standing theological questions related to human origins
- Some long-standing theological questions specifically about original sin
- Summarizing different scenarios and theological challenges facing each

A very brief summary of Augustine

Driving concerns:

- (1) *Soteriology (studies of the doctrine of salvation)*: Jesus is humanity's sole Savior – none are saved apart from Christ.
- (2) *Theodicy (theories about why does God permits evil)*: Theodicy includes a cluster of questions. God is wholly good and sovereign, so: Why does God permit animal suffering? Why does God permit human suffering? Why did God create humans capable of sinning? Why are all humans today incapable of not sinning? Why are all humans – even infants who have not yet willfully sinned – in a state where they need Christ's atonement?

¹ Thanks to the BioLogos Evolution and Christian Faith grants program for funding, and to Calvin College's McGregor fellowship program for student support. My views are not necessarily those of either organization.

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Theodicy lead Augustine to some particular hermeneutical and metaphysical choices, including:

- (1) A much more literal-historical reading of Genesis 2-3 than Genesis 1
- (2) Humans were created sinless, in a state of grace
- (3) Humans were able to sin because creation was *ex nihilo*. (Creation was *out of nothing*. Creation was not out of divine substance, or there would have been no sin. Creation was not out of anything else eternally pre-existing, because only God is eternal.)
- (4) *Transducianism* – new souls *naturally generated from parents during reproduction*. (Souls not pre-existing, and new souls not individually created each time by God – so God is not directly creating sinful human souls.)
- (5) Guilt of sin passed from parents to children
- (6) Damage to human nature (will and desires) passed from parents to children

"In summary, in the context of developing the dogmatic principle (derived from the confession that Jesus is humanity's sole Savior) that all human beings are sinners in need of salvation, an Augustinian theology needs to defend three claims regarding the fall and its effects: 1) an ontological claim affirming the solidarity of all subsequent generations of human beings with the first human being *in sin*, 2) a psychological claim that postlapsarian humanity suffers from a congenital bondage of the will *to sin*, and 3) a moral claim that all postlapsarian human activity unaided by grace *is sin*. If the primary motivation behind the Augustinian turn in Christian reflection on the fall is soteriological, each of these corollaries amplifies the questions of theodicy that earlier Christian theologies of the fall were intended to help resolve. Is it just of God to ascribe Adam's sin indiscriminately to all of his descendants? Or to condemn human beings for sin that they are constitutionally unable to avoid? Or to view all deeds human beings perform by their own power as equally damnable? The theological challenges posed by these questions were already the focus of opposition to Augustine during his lifetime, and they continue to set the agenda for criticism of his doctrine of original sin. Even those sympathetic to Augustine have recognized their seriousness, and some have tried to retain Augustine's soteriological emphasis on the decisive role of grace in salvation (and, with it, on universal human sinfulness) without resorting to these problematic corollaries." (Ian McFarland, *In Adam's Fall*, p. 35.) (underlines added)

Scientific evidence regarding human ancestry

Homo sapiens fossils. In Africa nearly 200,000 years ago, spread out, reach Americas by 15,000 years ago.

Hominid fossils. Intermediate types between humans and other primates; going back several million years.

Multiple genetic similarities between humans and animals. Consistent with common ancestry.

Genetic diversity in Homo sapiens population. Implies a "bottleneck" in human ancestral population of not two individuals, but a few thousand individuals, around 200,000 years ago.

Genes from other populations. Earlier ancestral populations (*e.g. Homo erectus*) migrated from Africa to Eurasia starting 1.8 million years ago. Some interbreeding with *Homo sapiens*. (Neanderthal and Denisovan genes in some but not all *Homo sapiens* populations.)

Scientific evidence regarding human brains and behavior

The genes and brain structures involved in both “nasty” and “nice” behavioral dispositions in humans are similar to those involved in related animal behaviors.

- There are genetic and neurological correspondences between animal "self-seeking" behavior and human "immoral/selfish" behavior. While we don't assign moral status to animal behavior, it is very likely our earliest human ancestors (unless they were significantly supernaturally transformed in some way) would “naturally” have had such behavioral dispositions.
- There are genetic and neurological correspondences between animal nurturing, social, and "altruistic" behaviors and human "moral" behavior. Our earliest human ancestors also would “naturally” have had such behavioral dispositions.

Genetics under-determines how our brains “wire up” and what kinds of persons we become.

The old “nature vs. nurture” distinction is too simplistic.

- *At the level of individuals:*
 - Gene expression (especially during development) is influenced by environmental factors.
 - Neuronal wiring of the brain (especially *learning*) is heavily influenced by interacting with the environment.
 - At some point in human evolution, human societies became the principally important “environment” affecting brain development and learning.
- *At the level of populations:* Evolutionary biologists write about “co-evolution” of genes and culture. Individual human decisions shape society. Society forms the environment which shapes individual human behaviors, and over time this influences human population genetics through selection.
- Humans seems “hard-wired” for morality and religion. While culture can greatly influence the content and the extent of moral and religious beliefs, it is also true that moral and religious thinking are found in all cultures.

Tentative conclusion: The evolutionary processes that God used in creating us suggest that our earliest ancestors “naturally” would have had a mixture of “nasty” and “nice” behavioral dispositions, natural abilities (empathy, reason, conscience) to understand how their behaviors hurt and helped others, moral impulses, religious impulses, societies which could shape the content of moral and religious beliefs. And so our ancestors (both as individuals and as societies) would also “naturally” have had the ability to receive and be shaped by divine special revelation.

Brief overview of proposed scenarios. Adam and Eve are ...

1. *A pair of recent ancestors of all humanity*
2. *A pair of ancient ancestors of all humanity*
3. *A pair of recent representatives of all humanity*
4. *Symbolic of all our disobedient ancestors (emphasis on general revelation)*
5. *Archetypal of all our disobedient ancestors (emphasis on special revelation)*
6. *A small ancient group of representative-ancestors of all humanity*
7. *A small ancient group of miraculously transformed representative-ancestors*

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Biblical-hermeneutical issues

Symbolic elements in Genesis 2-3 (talking snake, two miraculous trees)

Genesis 2-3 as heard by original audience: Mesopotamian setting; important similarities with – and differences from – similar stories from surrounding cultures.

Genesis 4-5 might suggest Adam’s family interacting with other people. (e.g. Cain’s wife; existence of cities)

Genesis 4-5 tell a very “compressed history” (music, agriculture, iron smelting invented within just a few generations in those chapters)

Genesis 6-11 assume a global flood reducing human population to 8; all languages of earth developed from a single concentrated, miraculous source at the Tower of Babel.

Romans 5 talks about sin entering the world “through one man,” Adam:

Paul seeks to understand and explain the astonishing revelations that *Messiah was crucified and Messiah is also for the Gentiles.*

Paul sees Adam and Eve as an archetype of Israel, and also as a way to bring Gentiles into the story.

Paul mentions Adam but not Eve. (Over the centuries, most theological discussions of “one man Adam” have either ignored Eve, or blamed Eve.) Did Paul think Eve’s disobedience was unimportant? Or was Paul rhetorically compressing at least two individuals and at least two sinful acts into “one man”?

Paul probably assumed Adam and Eve were historical when making his case in this passage. However, consider some comparable New Testament passages.

Phil. 2:10 and Rev. 5:3,13 assume an ancient 3-tiered picture of the universe in order to proclaim the universal lordship of Christ.

II Peter 3:5-6 assumes everything was created out of water, and was destroyed by a global flood, to teach the reality of Jesus’ second coming.

Tentative conclusion:

- From a *hermeneutical* standpoint, we should assume Genesis 2-3 has the same level of historicity, not a greater level of historicity, as Genesis 1, 4-11 (which include the global flood and Tower of Babel stories).
- An argument might still be made from considerations of *systematic theology* that a greater historicity of 2-3 is necessary.

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Some long-standing (not recent) theological questions (doctrinal theory) related to human origins

The “image of God”: Does the idea of being made in God’s image refer to our intelligence, or our personal relationship with God, or our position as God’s stewards on earth, or perhaps all three? How do these answers fit with each of the scenarios?

The soul. What are the pros and cons of *wholistic-dualism* and *nonreductive-physicalism* views, and how do those views interact with different scenarios of human origins?

Creation declared “very good,” but also in need of “subduing” (and Genesis 2-3 is set in a “garden”). *Job 38-41 especially*, God claims sovereignty over wild/chaotic things which sometimes cause human suffering.

Eschatology: *The “new heavens and new earth” are implied not merely a restored Eden, but something different.* (Images given: no sun, no sea, no marriage, lion+lamb.)

Death before the fall. Do passages which link death and sin refer only to spiritual death, or were they intending to imply physical death of humans as well?

God’s action and miraculous transformation. In addition to (A) God sustaining and governing natural evolutionary processes, and in addition to (B) God’s *revelatory* acts to early human beings, what are the pros and cons of supposing that God used at least some *miraculous transformational* acts at some point in human origins? Would such miraculous transformations (1) be an empowering by the Holy Spirit, (2) include a miraculous transformation of the human “soul” (assuming some form of dualism); (3) also include some neurological and possibly genetic changes?

Some long-standing (not recent) questions (doctrinal theory) specifically about Original Sin

General revelation, special revelation, and sin. “Sin” is a theological term meaning disobedience to God. What sort of revelation from God must have been in place for an act to be counted a sinful? Must there have been an explicit command to be violated (“divine command theory”)? Are general revelation and common grace (conscience, empathy, reason, altruistic feelings, etc.) sufficient revelation for disobedience to be counted as “sin”? (Compare: Romans 5:13, “For before the law was given, sin was in the world. But sin is not taken into account when there is no law.” with Romans 2:14-15, “Indeed, when Gentiles who do not have the law, do by nature things required by the law, they are a law for themselves, even though they do not have the law, since they show that the requirements of the law are written on their hearts, their consciences also bearing witness, and their thoughts now accusing, now even defending them.”)

Extent of original obedience expected: Were the first humans who disobeyed God, and sinned, only expected to obey simple commands they could reasonably be expected to obey? Or were they expected to obey the entire moral law, and expected to live in “true holiness” (James 2:10, “For whoever keeps the whole law and yet stumbles at just one point is guilty of breaking all of it.”) – which would have been impossible for our ancestors without miraculous empowerment / transformation.

Original intelligence. How intellectually and socially advanced were the first humans who sinned? Barely beyond animal? Child-like? Nearly modern? Super-human?

Original innocence. For the first humans who sinned, prior to their disobedience, in what sense were they innocent? Was their innocence more like an animal sinlessness, or a moral innocence with a human childlike mentality, or a fully developed adult intellectual and moral innocence? Or was it more like a “legal innocence”? Was a state of fully developed

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moral righteousness a potential state that humans might have grown into through obedience over time, or was it an actual state that some humans lived in for some period of time?

Damage to human nature from the first sin. Is it primarily a loss of a supernatural gift, or damage to our creaturely nature? Damage to the will (Augustine)? Damage to desires (Luther)?

Single or multiple acts? In each scenario, there was historically a “first sin.” How “impactful” was that historically first sin, immediately and by itself, on all of humanity? Should we think of humanity's general rebellion into sinfulness, the damage to our shared human nature, and spiritual consequences for all humans, as resulting primarily from that first disobedient act (two acts), or primarily the result from an accumulation of many disobedient acts over a long period of time? What are some of the theological consequences of each answer?

Transmission. Augustine and other theologians wrote about a “sinful nature” being passed by inheritance from parents to children. Is there a biological component to this idea? To what extent is it a legal status before God? To what extent is “legal status” a good metaphor? To what extent is it socially/culturally transmitted? To what extent is it a spiritual status? In scenarios where Adam and Eve are seen as *representatives* of other human beings, what are the theological implications (e.g. regarding God’s goodness and justice) of their sinful status being applied to humans who are not their descendants?

Was human sin avoidable? Was human sin unavoidable? Was human sin avoidable in principle but very unlikely to be avoided in practice? Or was the possibility of humanity remaining sinless a serious possibility beyond just being possible “in principle”? What was God's intention from the beginning: a sinless humanity, or a redeemed humanity? If sin is not God's intention, why would God create humans who were capable of sinning?

What do we even mean by the Fall being “avoidable” or “unavoidable”? This gets at very long-standing questions about divine sovereignty and human free will.

“Augustine most explicitly teaches that Adam had the possibility not to sin (*Rubuke and Grace*, 12:33), and held that the Fall was foreknown and permitted by God but not positively ordained (*City of God*, 12:22). Calvin famously went further and claimed that Adam fell because God decreed it, his *decretum horrible*, (*Institutes of the Christian Religion*, 3:23:7), but even he held that Adam fell solely by his own will, of his free choice, having the power not to sin (*Institutes* 1:15:8)” (A.N.S. Lane, “Irenaeus on the fall and original sin” in *Darwin, Creation, and the Fall* edited by R.J. Berry and T.A. Noble; p.138,

If humanity’s sin was unavoidable, how do we answer questions about God’s goodness and justice? If sin was avoidable, how do we answer questions about God’s sovereignty?

Theodicy: Several theodicies, like Augustine’s, emphasize human choice and “protect” God in some ways from blame for humanity’s sinfulness and the consequences. This fits many biblical passages, but there are some difficult passages (Ex. 9:12, 34; II Sam. 24:1; I Chron. 21:1; Hab. 1:5-11). These theodicies favor scenarios where the Fall principally happens in a single event or over a short period of time involving only a few individuals.

Theodicy: Other theodicies – e.g. connecting *free-will theodicy* with God choosing to create us through evolutionary processes, combined with a theodicy of *kenosis* and the cross as God’s ultimate self-revelation – are easier to reconcile with the idea of humanity’s fall being in more “unavoidable.” This can fit most scenarios, including those in which the Fall involves many individuals and is spread over time.

Theories of Atonement. Do different theories of the Atonement favor some scenarios of human origins and original sin over others?

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Seven general types of scenarios proposed for the Fall. Some theological strengths & challenges.

1. *Adam and Eve as two recent ancestors of all humanity.* God specially created a pair of individuals in Mesopotamia around 8,000 years ago; they are ancestors of all humans today.
 - Hermeneutical issue: A literal-historical reading doesn't address symbolic elements in Genesis 2-3, or take into account the surrounding ancient near eastern culture, literature, and mythology used and addressed by the inspired author.
 - Theological issue: God seems to be telling two very contradictory stories in general and special revelation. This scenario ignores the hominid fossil record, and it ignores genetic, developmental, and neurological evidence for human common ancestry with animals. It conflicts with archeological evidence showing humans living around the globe by 15,000 years ago, and with genetic diversity in the human population.
2. *Adam and Eve as two ancient ancestors of all humanity.* God used evolution to create pre-human hominids, then miraculously transformed a pair of individuals in Africa around 200,000 years ago; they are ancestors of all humans today.
 - Hermeneutical issue: Why is Genesis 2-11 put in a more recent Mesopotamian setting with agriculture, cities, etc.? How does this deal with the "compressed history" of Genesis 4-11, global flood, and other events in those chapters?
 - Theological issue: God seems to be telling two contradictory stories in general and special revelation. This scenario still conflicts with genetic diversity in the human population pointing to a much larger population bottleneck, and Neanderthal and Denisovan genes.
3. *Adam and Eve as two recent representatives of all humanity.* God created humans through evolutionary means. God specially selected a pair, somewhere between 40,000 and 8,000 years ago to receive special revelation and to act as representatives (not ancestors) of all humans. They disobeyed, and so fell into sin in a concentrated historical event. Because they sinned as representative of all humanity, all humanity fell into sin.
 - What was the spiritual status of all those humans living and dying, being nice to each other and nasty to each other, in the thousands of years before "Adam and Eve" were chosen?
 - This scenario seems to require a sort of "divine command theory" of sin; the (sometimes nasty) actions of all those humans living before Adam and Eve weren't considered "sin." So what about general revelation; for all those people living prior to Adam and Eve, wouldn't conscience and empathy and reason also count as revelation telling them how they ought to behave?
 - Human brains and behavior (will and desires) are very much shaped by the evolutionary history God used to create us. In what sense is there any damage due to the Fall? Is it just the loss of a "state a grace" – loss of a potential empowering by the Holy Spirit that would make it possible for us not to sin? Was there damage to our created nature and if so, what?
 - Why should the sins of Adam and Eve affect the spiritual status of humans who are not their descendants and who are living thousands of miles away – is there a problem here with God's justice?
 - How did the effects of sin spread to humans who were not descendants of Adam and Eve and weren't even in cultural contact with them?
 - Was sin unavoidable or not – and what are the consequences for each answer?

4. *Adam and Eve as symbolic of all our ancestors disobeying God's general and special revelations*. God created humans through evolutionary means. Over their long developmental history, whenever they were ready, God used both general and special revelation to tell them how they ought to behave and consequences of disobedience. They chose disobedience again and again. We might never know, from genetics or archeology, when our ancestors transitioned from animal self-interest to human sinful disobedience, although God does know.
- Even if no particular human sin was inevitable, it seems likely that humanity's sinful rebellion was inevitable – what are the theological consequences of this?
 - Does this scenario remove too much responsibility from humanity, even if we accept that God's plan all along was for redemption through Christ?
 - Humanity's intellectual / social / moral / spiritual creation is theologically distinct from humanity's sinful rebellion from God, but both happen spread out in time and overlapping: does that too much conflate Creation and Fall? In what sense, then, is sin something that "breaks in" to God's good creation rather than simply being something God created?
5. *Adam and Eve as archetypal of many disobediences to special revelations among our ancestors*. God created humans through evolutionary means. Over the long developmental history of our ancestors, at various times when individuals or groups were ready, God added special revelation to general revelation to tell them how they ought to behave and consequences of disobedience. These are especially important events in our history. (General revelation – e.g. reason, empathy, conscience, social learning – only become spiritually important after these events of special revelation.) There was a historically first such event, but we don't picture all of the consequences of the fall affecting all humans from just a single such events. There were many such sinful rebellions, and eventually all human individuals and cultures had such events in their ancestral history.
- This scenario raises all of the same challenges as #4 Symbolic, although some of the answers might seem easier in this scenario (e.g. less conflation of Creation and Fall).
 - It requires a little more thought about the interplay between special and general revelation regarding the question, "What sort of revelation from God must have been in place for an act to be counted a sinful?"
6. *Adam and Eve as a small group of ancient representative-ancestors of all humanity*. God created humans through evolutionary means. At some point around the population "bottleneck," perhaps about 200,000 years ago in Africa, God specially selected a pair or small group to receive special revelation (without miraculous transformation). Although they potentially could have lived according to God's expectations for them, they chose to sin. We might picture the Fall as a singular event, or we might picture it as a process taking place during a "probationary period" for this group. That first small group who sinned are ancestors, but not the sole ancestors, of all humans today. In the centuries following their revelation and disobedience, that group and their descendants mixed culturally, and eventually genetically, with other groups, and in this way the spiritual, psychological, and cultural effects of sin eventually spread to the entire population.
- This scenario raises all of the challenges of #3 Recent Representatives, although some of the answers seem easier in this scenario. Some thought is required about the interplay between special and general revelation. There is a shorter history of humanity, and a less developed humanity, before the Fall. There is more time for effects to spread after. We can imagine this group mixing culturally, then genetically, with nearly all other *homo sapiens* in the space of a few dozen generations, so questions about the status of *homo sapiens* not

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part of the original group are reduced, by not eliminated (however, there are still questions about Neanderthals and Denisovans).

- This scenario also raises the challenges of #4 Symbolic, although some of the answers seem easier in this scenario. (Perhaps sin was not so inevitable. It's still the case that considerable human social and intellectual development happens after the Fall, but we can think of the Fall as altering their shape and trajectory from how they were intended.)

7. *Adam and Eve as a small group of transformed ancient representative-ancestors of all humanity.* God created humans through evolutionary means. At some point around the population “bottleneck,” perhaps about 200,000 years ago in Africa, God specially selected a pair or small group not just to receive special revelation, but also to be miraculously transformed to make it possible for them to be “truly holy” obeying all of God’s spiritual and moral requirements. Nevertheless, they sinned, and the special grace which allowed them to be sinless was withdrawn. In the centuries following, that group and their descendants mixed culturally, and eventually genetically, with other groups, and in this way the spiritual, psychological, and cultural effects of sin eventually spread to the entire population. That first small group who sinned are ancestors, but not the sole ancestors, of all humans today.

- What was the form of this miraculous transformation? Is it only an empowering by the Holy Spirit to make full righteousness and holiness possible? Or did it also include some neurological, and possibly genetic transformation?
- Our modern human brains and behavior (will and desires) are very much shaped by the evolutionary history God used to create us. In what sense is there any damage due to the Fall? Is it just the loss of a “state a grace” – loss of a potential empowering by the Holy Spirit that would make it possible for us not to sin? (Would this just be a “fall back” to our natural state?) Or was there damage to our created nature – and if so, what?
- How did the effects of sin spread to humans who were not descendants of Adam and Eve and weren’t even in cultural contact with them? Did the sins of Adam and Eve affect the spiritual status of humans who are not their descendants and who are living thousands of miles away? If “yes” – if this small group of early humans were miraculously empowered to live truly holy and moral lives but chose not to do so – why would their failure affect other *homo sapiens* alive at the time, and after, who had no such chance to be transformed and no such chance to choose between obedience and disobedience? If “no,” does that mean there are two human populations (those descended from the group who sinned and those who are not), with very different spiritual status, for at least dozens of generations?

Conclusion

Each scenario under consideration affirms the inspiration and authority of scripture and a common core doctrine of original sin. Many of the disagreements about doctrinal theory center on very old theological questions, while some disagreements arise from new considerations. Intuitions about how best to answer questions of theodicy prompt many of the disagreements.

There is unity on the centrality of Christ. The problem of sin is so vast that it requires such an astonishing solution as the Incarnation and Atonement! So perhaps we will also need multiple theories of original sin; one theory alone might never be enough. If we do our job carefully, the church will be well served by the time spent working through the theological implications of these differing scenarios. Some theories of will be discarded as being inconsistent with God’s revelation in scripture. Those that remain should deepen our understanding and our appreciation of God’s grace and the immensity of the rescue God undertook through Jesus Christ.