

Adam and MRCA Studies

The problem of sin in theistic evolution.

Theistic Evolutionists have to take into consideration that *Homo sapiens* is known to have existed for many tens of thousands of years. One of the biggest problems, theologically, for this approach is the origin of evil, and particularly dealing with the various Scriptures relating to the story of Adam and Eve.

Many TEs are happy to consider Genesis 2-3 as an ANE creation myth (without any pejorative connotation), just as Genesis 1 has very clear features of that genre, as ably handled by John Walton in *The Lost World of Genesis 1*. However, on the *Biologos* (TE) website, when the arguments against a historic Adam and Eve have been raised in articles, a substantial majority of those posting replies from a TE perspective would prefer to maintain their essential historicity. This is largely because the alternative leaves sin as a merely phenomenological reality: i.e. we know it exists from experience, which validates the message of salvation covered in the rest of Scripture.

The main problems with this latter view are:

1. That a Scriptural explanation for sin has been replaced with no explanation,
2. That the existence of sin is by no means universally acknowledged through natural revelation and so ought to be part of the spiritual revelation Scripture gives about the state of man. The Bible tells us why we are sinners, how that makes us enemies of God, and what God has done to deal with it. To reduce the first of those to an experiential axiom is to handicap the gospel message, and
3. It raises problems with theodicy. In classical evangelical theology, the sin of one man with its imputation and transmission to his progeny is a single tragic event. If sin is merely a product of evolution, then as has been rightly pointed out God has simply defined as “unacceptable” in man what was “acceptable” in every other non-human species. Neither is there any explanation for the wilful rebellion that causes, in Paul’s teaching, sin to go from bad to worse.

Adam the first Homo sapiens?

One way round this would be to accept Adam and Eve as the first human pair. This raises a mountain of problems.

There is no clear emergence of new species in evolutionary theory: any one human would be genetically similar to his parents, with changes emerging only after many generations. How can sin, and consciousness of it, emerge gradually? How can judgement for sin be graded accordingly? If death is the judgement, how can a primitive man be half-dead? Furthermore, genetic studies show that the smallest population of humans that has existed has consisted of a few thousand individuals. Unlike some species (like the cheetah, apparently) there is no genetic possibility of a single original pair. That is why confidence in “Mitochondrial Eve” or “Genetic Adam” is misplaced: these show only examples of mitochondrial DNA and the Y chromosome that have not gone extinct from the many others in existence at the time. In any case these two individuals existed tens of thousands of years apart.

Additionally, a sinful pair so long ago is completely divorced from the world described in

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early Genesis, which is bronze age, agricultural, Mesopotamian and only a few generations removed from identifiable ANE events, places and people. It also raises the question of why God should leave all mankind with no apparent means of salvation for many hundreds of generations, or invent a new way thereafter.

Adam the first Homo spiritus?

An alternative is to place Adam and Eve where the Bible places them, in the identifiable land of Mesopotamia (with problematic, but specific, localising geographical pointers) at a time just a few thousand years BC. They would, in some way, be the first pair in relationship with God, and the first to lose that relationship through sin. Though not the genetic forebears of all mankind, yet in some way their guilt and fallen nature would then pass to the rest of mankind via his federal headship of the race *Homo spiritus*, making the interpretation of Scriptures like Romans 5 unchanged in essence from the classical understanding.

All that is necessary to satisfy our historical curiosity is to find a plausible setting for Adam in an already populated world. Dick Fischer, in *Historical Genesis from Adam to Abraham* has done a good job of this, though in a book which is probably too speculative on specifics.

All that is needed for our theological curiosity is to explain the spread of sin to the rest of mankind – and therein lies the big problem. It seemed impossible for Adam to have passed his nature on in some procreative fashion, not only because one would have to suppose a “sin gene” but because there would be too little time since then to have spread this “gene” to all mankind, especially in isolated communities.

Various solutions have been proposed to this, such as that Adam was only the progenitor of the Hebrew covenant race which is the Bible’s primary concern. However, in my view this fails to take enough account of the solidarity of the whole race with Adam that the New Testament assumes.

Rohde and the MRCA simulations

An interesting development is the work of Douglas Rohde, then of MIT, who produced papers in 2004 and 2005^{1,2} describing complex computer simulations designed to find the date of the most recent common ancestor (MRCA) of all living people.

Unlike the Mitochondrial Eve and Genetic Adam studies, this deals with the fact that common ancestry covers all genes, and that we might have over time lost most or all of the actual genes of someone who is nevertheless our ancestor. Currently the only way of exploring this situation is to run computer simulations, factoring in variables such as population growth, birthrates, migration both near and far and so on, which can uncover the time-frames involved in common ancestry.

¹ [Rohde DLT, Olson S, Chang JT \(2004\) "Modelling the recent common ancestry of all living humans". *Nature* 431: 562-566](#)

² [Rohde, DLT, *On the common ancestors of all living humans*. Submitted to *American Journal of Physical Anthropology*. \(2005\)](#)

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Initial simulations were relatively crude, but as the methods became familiar Rohde's team refined their model to take in not only the actual features of continents and populations, but known historical patterns of migration. The simulations were run using both liberal and conservative estimates of the variables. The net result was a surprising uniformity of outcome, however the parameters were set, which suggested the MRCA of every living individual existed between two and five thousand years ago, a surprisingly short time, and of the same order of magnitude as the time from an ANE Adam living say 7,000 years BP.

This is not, of course, to be taken as evidence that Adam is our MRCA. Indeed, the papers suggest that the most likely location for that ancestor would be southeast Asia, not Iraq. But further simulations showed that MRCA would have become the ancestor of everyone living in Eurasia within five or six hundred years, so that other sets of genes could easily have passed in the reverse direction in around the same time.

It is also true that, the further we go back in time, the more common ancestors we will have had. Therefore, it seems that under the providence of God, 7,000 years would be ample time for an ANE Adam to be one of our common ancestors. This is counter-intuitive, but seems warranted by Rohde's evidence. So let's see if we can use this to construct a theory that makes sense of both the Biblical material (in a legitimate context) and the science.

An approach to a literal ANE Adam

Who was Adam?

The first stage is to ask, on the assumption that Adam was not the first Homo sapiens, what made him unique.³ Genesis pictures him, essentially, as the priest of Yahweh, tending the garden that one can view as his temple precinct. He was the first man to be in a covenant relationship with Yahweh – and that, as far as the Bible is concerned, is the purpose of man on earth. Along with this came access to the Tree of Life, which (we know from its later loss) gave him, as a gift of grace, eternal life. Arguably this, and/or the breath of God, constituted the image of God. Adam then, together with his wife Eve, is the first true example of man – man in covenant with God⁴.

The forbidden tree was the Tree of the Knowledge of Good and Evil which, as I have argued elsewhere, is as much as to say “The Tree of Conscience”. Adam had only one

³ Incidentally, I would argue that the Bible writers were likely well aware of this. Writing in a style related to the Sumerian and Akkadian myths they were happy to speak of their subject in isolation from other people (e.g. Adapa), whilst assuming they existed (e.g. Cain's wife). Not only did the Sumerians believe their mythical protagonists to be historical, but in the case of Gilgamesh at least it seems likely he was, for all the legendary accretions.

⁴ And also, probably, what is intended by man (adam) in ch1.

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command from Yahweh, and felt no shame because he had not broken it⁵. Perhaps (speculating somewhat) he had the “evils” of the animal nature, but having no awareness of them they did not have the nature of sin. As Paul says, “Where there is no law, sin is not imputed.” No doubt a growing relationship with God would, in time, have educated him in a positive manner into God’s ways.

What was the fall?

As it was, breaking the commandment, Adam became a sinner. And the first punishment (through God’s wisdom) was linked directly to the sin – the sense of shame that made him aware of his sinfulness and of God’s wrath. His innocent nature had become corrupted by sin. As the federal head of the race, he would, we may assume, have been expected to spread the knowledge of God and eternal life. Instead he robbed both himself and his progeny of divine relationship and eternal life, and instead spread to his biological offspring the dignity of spiritual accountability and the image of God, but also original guilt, the sinful nature, and the conscience of good and evil that makes us painfully aware of sin (negatively) and points us to God (positively). (I omit Eve from consideration for the same reason that Scripture does – Adam was the head, the “priest”, who bore responsibility for following her disobedience more than she bore it for being first to sin.)

What exactly was spread from Adam is a purely theological matter. It was not genetic as such, but spiritual (which is why it cannot be detected biologically and why it spread to all men rather than selectively by some Mendelian mechanism). For convenience’s sake, one could call it the soul, but whether one sees that as a specific entity or not, it is Adam’s God-given spiritual nature that, for both good and evil, was transmitted. Adam’s descendants, then, are fallen mankind – created in him as spiritual beings for relationship with God, but cursed by sin and needing the salvation the rest of the Bible teaches.

Non-adamic man

Meanwhile, then, what is the status of non-adamic man, both before, during and after Adam’s life? It is not only the knowledge that Adam occupied quite an advanced bronze-age culture that forces us to explore this, but the biology of human evolution. Neanderthal Man cared for the sick and buried their dead – human? Sinful? Saved? Chimpanzees show some human characteristics, including murder – human? Sinful? Saved?

At some point God had to draw a line and say that an innocent animal, that lives and dies in the material realm, becomes a human being in the image of God, capable of sin and, in practice, needing salvation in the eternal realm. I would argue that that point came at the point God entered into covenant with Adam. Before that, he or his forbears evolved all the animal features that made man a suitable vessel for communion with God, and there is no reason to exclude from that things like care for the sick, culture or even religious practice.

⁵ Whether the trees are literal or metaphorical is of little consequence.

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What he lacked was the personal knowledge of Yahweh, the only true God, and the gift of eternal life that came with knowing him, and which would have been his through Adam had the latter not sinned. He also lacked any sense of conscience – he was not conscience of sin, nor was he stirred by it to wilful evil. His society would have been truly amoral, like the society of the great apes – often cohesive, sometimes violent, but neither spiritually great nor morally evil. It was earthly, rather than either heavenly as it was intended to have become, or hellish as Adam’s heritage would make it.⁶

One valid criticism of the idea of pre-Adamic man (long before evolution was postulated) was that it divides the present world into just such categories as I have described above. One basis for the racism of slavery was that the black races were held to be non-Adamic, and this was also the background for sects like the British Israelites.

But the Bible gives us no warrant for that in the Gospel age – all men to the ends of the earth are to be treated as brothers and, moreover as sinners in need of Christ. As for our times, the concept of the MRCA renders that non-problematic. There have been maybe 7,000 years since Adam, ample time for the transmission, by procreation, of both the image of God and the sinful nature that has marred it. Nowadays the issue is exactly as we would expect it from evangelical theology.

God’s timing in salvation history

But what of the past, especially salvation history? If Adam’s sin was only gradually spreading through the human race, what of sin and salvation in the ancient world? In one sense, those who make Adam specifically the ancestor of the Jews are right. As far as the Old Testament is concerned, the question of salvation has to do with Seth’s line up to the Flood, and with Abraham’s line (with some exceptions like Rahab or Ruth) until the coming of Jesus.

If we take the Flood story literally, its extent has only to be enough to eradicate Adam’s corrupted line, for that is coterminous with both the accountability of conscience and the sinful nature. In theological terms that was “the world of that time”⁷.

Switching to “MRCA” mode, for a moment, it would take only a few hundred years (even after a flood) for the tribes of the Near East to be thoroughly “Adamised”, thus

⁶ This is a possible explanation of the “sons of God/daughters of men” story of Genesis 6. It is often said that the Jews considered this to be about angels taking human women to produce nephilim, and this view, seen in 1 Enoch, may even have influenced 1 Peter. But actually it was disputed, the alternative being the mixing of Seth’s and Cain’s (mixed) line – the controversy possibly, it is said, being reflected by Jesus in Luke 20.34-36.

⁷ In Sumerian terms Mesopotamia was “the world” anyway. Their kings were called “King of the World” or even “King of the Universe”. In Biblical terms, too, “cosmos” is the realm God has organised with man as his co-regent, which could well have local reference.

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allowing the Canaanites, say, to be accountable for their sin, and for non-Hebrew outsiders to be adopted into the covenant. One might think that a society consisting both of Adam's sinful descendants and non-Adamic "animal man" would be dysfunctional while it lasted, but I don't see why it should be any more so than the average mixed city now.

The focus of God's salvation plan throughout the Mosaic period was the people of Israel, and their land. The farthest the action takes us is Persia to the east, Greece to the west, Assyria (or Gog and Magog, maybe) to the north and Egypt to the south. And all these well after the time when the Adamic heritage would have thoroughly infiltrated their areas – and still be spreading around to even the most isolated places on earth, as Rohde's work demonstrates.

What actually matters in God's scheme of things is that, by the time his Son Jesus came not only to save the Jews, but to offer salvation to all men, all men should be capable of, and need salvation. The genetic question is, then, whether the world in Jesus' time could have had a common ancestor in a 7,000 BC Adam? That work has not been done, but ought to be possible using Rohde's methods should anyone care to attempt it. My reading of his papers suggests there would have been ample time.

It is interesting to consider whether such an ongoing process might have contributed to God's timing in the sending of Jesus. After all, why was he born in 4BC rather than 400 years earlier? Why was that "just at the right time" (Rom 5.6), and "when the time had fully come" (Gal 4.4)? Perhaps because only then was the whole human race fully prepared both for judgement and for salvation.⁸

Conclusion

It seems to me that the consideration of MRCA studies adequately fills one of the biggest problems for an old earth theology that is thoroughly Biblical. Indeed, since it contributes to an understanding of Genesis 1-11 consistent with what we know of the genre and purpose of the text, it makes it possible to reconcile science with a truly evangelical understanding of Scripture, without compromising a belief in its divine inspiration and essential inerrancy.

[The Hump of the Camel](#)

⁸ In fact, there is even more time "to play with". Strictly, all that was necessary is that men should be prepared (through Adam) for the Gospel by the time it reached them. If small tribal communities in the distant East or West remained "Pre-Adamic" until several centuries after Christ, the validity of the case is not altered, so long as we remember to proclaim the word to every creature under heaven now.