



Bible-study: 2020/03/01 (St. Matthew's Episcopal Church, McMinnville) – Genesis 2:15-17; 3:1-7

[Ask for volunteer to read passage.]

We continue to go back in time with our apportioned Old Testament readings: our last session was an episode from *Exodus*; before that, contrary to their arrangement and chronology, *Deuteronomy*; now and next week we're offered two "slices" from *Genesis*. And though there is coming from this very book a *large* bloc in the summer – *eleven* weeks, no less(!), of chapters in ascending order; *this* pair of passages supply content for two gaps in that coming "bloc," so they deserve a *close* inspection. And this morning's narrative is *especially* important, for [it] sits at a crossroads, touching on a large range of deep questions in theology, science, and society...[in regard to] the grand mystery of our origins.¹

Now, given that our passage's concern is not to explain the existence of a human creature *per se*, but to explain, rather, how *we* – the text's audience – came to have *our* existence, that's what I want to focus on too. (We shall return to the other question later in the year.) But, frustratingly – as you're probably *keenly* aware, there isn't *one*, *obvious* answer to such: Theologians, "on the back foot," have attempted, in various ways, to come to terms with the conclusions pouring out, "thick and fast," from a wide, *wide* range of disciplines such as palaeontology, geology, etcetera. Consequently we find ourselves, it appears, 'in a bitter conflict';² which is proving, *tragically*, to be a *major* 'credibility problem' for the Gospel,³ which is 'the words of eternal life.'^[Jn. 6:68]

Thus, writing (online) for 'Reasons to Believe', a non-profit whose mission is to "demonstrate" "that sound reason and scientific research – including the very latest discoveries – consistently support, rather than erode, confidence in the truth of the Bible and faith in a personal, transcendent God",⁴ the scientist Anjeanette Roberts points out that there exists 'a *range* of perspectives [as] how best to understand Adam and Eve'; and 'the three most prominent' are these – that the couple are a:

1. 'Sole progenitor pair';
2. 'Representative pair';
3. 'Non-historical figures'.⁵

¹ Swamidass, S. Joshua (2019), *The Genealogical Adam & Eve: The Surprising Science of Universal Ancestry*, Downers Grove, I. L.: InterVarsity Press, 202.

² Venema, Dennis R. and McKnight, Scot (2017), *Adam and the Genome: Reading Scripture after Genetic Science*, Grand Rapids, M. I.: Brazos Press (Baker Publishing Group), vii.

³ *Ibid.*, viii.

⁴ See: 'About Reasons to Believe': <https://www.reasons.org>

⁵ 'How Can Christians Disagree over Adam and Eve?' (19th December 2019), *Reasons to Believe*, available at <https://www.reasons.org/explore/blogs/theorems-theology/read/theorems->

The first possibility – that Adam and Eve are supposed to be understood as the “sole progenitor pair” from whom, *exclusively*, all of humanity descended, is, you might say, the *default* interpretation. The one presumed both within *and* without the Church. ‘Answers in Genesis’, for example – ‘a [prominent] American fundamentalist Christian apologetics parachurch organization’⁶ – describe “Perspective 1” this way on their website: ‘Adam and Eve were real people. ...the first human beings on the planet.’⁷ It is a simple, appealing thesis – it flatters our ego, which hungers to believe that we’re ‘a little while lower than the angels’ [Heb. 2:7], and you can diagram this line of thinking easily, as so: [Figure 1].

And perhaps this is what you imagine the Scriptures *require* you to believe? No “ifs” or “buts”? Well, though this reading is prevalent *today* – and likely is that which has been dominant for most of history, we mustn’t lose sight of this intriguing fact: ‘Though the Bible itself does not change... [t]he history of interpretation of *Genesis* 1-3...is anything but monolithic, and neither doctrine nor exegesis is characterized by complete homogeneity.’⁸

As to “Perspective 1,” truthfully, it does face, you can imagine, some *serious* challenges, which the authors Daryl Domning and Monika Hellwig put succinctly in a single, short chapter [5] of their book, *Original Selfishness* – I quote: ‘Biologically, of course, it is not impossible that a human population of the present size might have descended from a single couple. [H]owever, ...[o]n the whole, monogenism finds no positive support [outside of the Church]’. Indeed, ‘[a]dvances in molecular genetics’ rules it out, they say. ‘Our present population includes far more genetic variety of a very ancient sort than could possibly have been transmitted to us [in that] way...’

The evidence [establishing] this has been summarized by the geneticist Francisco Ayala [in an article for the journal, *Science*, (*‘The Myth of Eve’*, published in 1995)], and has to do particularly with a segment of human DNA known as the DRBJ gene. This gene, part of a large and important set of genes whose functions are involved in tissue compatibility and defense against pathogens and parasites, exists in many alternate forms among humans as well as other primates. ... In fact, some of the forms of DRBJ found in humans are more closely related to forms found in monkeys and apes than they are to other versions of the same gene found in humans! What this means is that these different versions of the gene originated in populations of primates that lived long before the first humans. Those early primates passed along some of the versions to us, and other versions to other species of primates living today. Based on the times (estimated from the fossil record) when different lineages of primates diverged, Ayala and his co-workers have calculated that the human DRBJ genes started diversifying some 60 million years ago (very early in primate history, not long after the extinction of the dinosaurs), and that 32 out of the 59 human versions of DRBJ were already in existence around 6 million

[theology/2019/12/19/how-can-christians-disagree-over-adam-and-eve](https://www.answersingenesis.org/2019/12/19/how-can-christians-disagree-over-adam-and-eve), (accessed December 21, 2019). (Mu italics.)

⁶ See: ‘Answers in Genesis’, https://en.wikipedia.org/wiki/Answers_in_Genesis.

⁷ See: <https://answersingenesis.org/adam-and-eve/>.

⁸ Walton, John H. (2015), *The Lost World of Adam and Eve: Genesis 2-3 and the Human Origins Debate*, Downers Grove, I. L.: InterVarsity Press, 11-12.

years ago, at the time our ancestry diverged from that of chimpanzees and gorillas.

Now we come to the crucial point: as Ayala explains, 'If 32 DRBJ gene lineages have persisted since 6 [million years ago], it follows that no fewer than 16 individuals could have lived at any given time over that long span. The minimum number of individuals must have been much larger, because the probability is effectively zero that all 16 individuals in a population would be heterozygotes (that is, carrying two different genes), each for two genes different from all others.'

In fact, the number must have been very much larger indeed. After taking into account a variety of relevant factors and using several different approaches (including computer simulations) to estimate the population size at any given time that would have been needed over the long haul to preserve those 59 different genes, Ayala concludes that 'human ancestral populations must have consisted of 100,000 or more individuals over their long history.'

But could there not have been even one, very brief time in all the history of *Homo sapiens* when our population was much smaller than that? As Ayala indeed notes, '[i]t has been suggested that a population bottleneck occurred at the transition from archaic to modern *H. sapiens*, some 100,000 to 200,000 years ago.' He then goes on to calculate the smallest size of this bottleneck that could be consistent with the genetic data, and concludes that 'the minimum possible number of individuals at a bottleneck is at least 4000...' However, this number (like the population estimates above) refers only to the approximate number of synchronously reproducing individuals, which was probably no more than about two-ninths of the actual "census" population. Hence, to maintain a long-term reproductive population of 100,000 we must reckon with an actual population size of 400,000 to 500,000, and even a "bottleneck population" of 4000 would correspond to 15,000 to 20,000 actual individuals. Given the present genetic makeup of humanity, therefore, a bottleneck population as small as two people...[i]s clearly a mathematical impossibility.⁹

Additionally, in a recent collaboration by *another* pairing of authors – Dennis Venema and Scot McKnight raise this extra obstacle for "Perspective 1": 'As humans left Africa, ...we encountered other hominin species that had left previously. Scientists have long wondered what the nature of those encounters was like. Some fossils, for example, have long been thought to suggest that Neanderthals and humans had interbred with each other... With the advent of paleogenomics, the opportunity arose to test this hypothesis directly by sequencing Neanderthal DNA. Not surprisingly, Neanderthal DNA is nearly identical to our own, ...according to their [very similar] skeletal morphology. [And, as predicted,] *some modern humans do indeed have Neanderthal DNA in their genomes.* [Evidently, then, w]hen our two species encountered each other, there was a limited amount of interbreeding. Some of the offspring of those unions were raised as human, and some of those individuals have passed their DNA down to us in the present day. In part because the group of humans that left Africa was so small, this Neanderthal DNA is present in every present-day

⁹ *Original Selfishness: Original Sin and Evil in the Light of Evolution* (2006), Abingdon, Oxon.: Ashgate Publishing, 71-72.

human who is not a sub-Saharan African... Not long after, however, a second discovery would complicate things even further. Once it was worked out that ancient DNA could be recovered and sequenced from hominin remains, researchers have been busy sequencing DNA from an increasing number of samples. One such sample turned out to [be from] a previously unknown species ...[f]ound in Denisova Cave in the Altai Mountains of Siberia, the remains would be called the Denisova hominin or, when referring to the species as a whole, Denisovans. [Now, W]e have little sense of their skeletal form, since all that has been found to date are finger bones and teeth...[but it transpires] that we interbred with this species as well. Present-day humans of Asian and Oceanic descent inherit about 3-5 percent of their DNA from this extinct species. A further finding of note was that the Denisovan genome seems to contain stretches of DNA from yet another hominin species.¹⁰

“Game over,” then? (Just see how much this evidence modifies “Perspective 1” in Figure 2.) Should we “pack up” and go home? And embrace ‘neo-Darwinism...that we have a purely natural origin, fully explicable by unguided natural selection acting on random variation.’¹¹ No. Or rather, not necessarily, or not altogether: In spite of this we’ve just heard, I’m actually with the scholar John Walton who says: ‘..the perceived threat posed by the current consensus about human origins is overblown.’¹² The “key;” the way through this seemingly impenetrable assault lies, I think, in ‘honesty – *fearless honesty* about what the texts and empirical studies actually say, honesty about what they don't say, and perhaps most of all, honesty about what each permits the thinker to conclude.’¹³

Put to one side the science, you see, and there emerge certain details *intrinsic* to the biblical story (itself) that problematise the status of “Perspective 1” as *the* definitive reading of *Genesis*. Specifically, I’m referring to the ‘wife’ of Cain: she is suddenly introduced in chapter four, verse seventeen. Rightly, Stephen Greenblatt asks: ‘Where...did the woman Cain married come from? The traditional answer, scandalously enough, was that she was one of his sisters, though no daughters of Adam and Eve had been mentioned up to this point in *Genesis*.’¹⁴ And what about the strangers that Cain worries “‘may kill me” in punishment for the murder of his brother? [Gen. 4:8-14] Let me be blunt: ‘there are other people around.’¹⁵ They stare out at us from the page, and yet we tend to ignore them! Could these ignored strangers provide the genetic diversity that “Perspective 1” can’t explain? Are they, in others words – if you will allow me to, *mischievously*, misapply the phrase, which yet feels appropriate – the “missing link”?

(Of course, if they – *potentially* – play such a significant role, is it odd

¹⁰ *Adam and the Genome: Reading Scripture after Genetic Science* (2017), Grand Rapids, M. I.: Brazos Press (Baker Publishing Group), 60-61.

¹¹ Gauger, Ann K. (2017), ‘The Battle over Human Origins’, in Moreland, J. P.; Meyer, Stephen C.; Shaw, Christopher; Gauger, Ann K. & Grudem, Wayne (Eds.), *Theistic Evolution: A Scientific, Philosophical, and Theological Critique*, Wheaton, I. L.: Crossway, pp. 431-436, 432.

¹² Walton (2015), 13.

¹³ Venema & McKnight (2017), 101. (My emphasis.)

¹⁴ *The Rise and Fall of Adam and Eve* (2017), New York, N. Y.: W. W. Norton & Company, Inc., 232.

¹⁵ Campbell, Antony F. (2010), *Making Sense of the Bible: Difficult Texts and Modern Faith*, Mawah, N. J.: Paulist Press, 80.

that their presence is so subtle? Well, ‘Mary Joan Winn Leith suggests that while the Israelite storyteller knew that other men and women in *Genesis* existed outside of Eden, they did not matter to him or factor into his account.’¹⁶ This is because: ‘In the ancient Near East, sometimes those outside of a particular group or society were considered less “human” by those inside of the group.’¹⁷ And that sounds plausible, right?)

Another issue is that the first family seem to enjoy a sophistication in the text that would not have existed at the primeval stage in which these things needed to have happened; Cain in particular: Having ‘settled in the land of Nod, east of Eden’, he ‘built a city’ there: [4:16-17]. This ‘places Adam and Eve in the Neolithic [period] after the advent of farming and [animal] husbandry]...in southern Mesopotamia, not in Africa.’¹⁸ ‘... [S]ome 12,000 years ago, the era when Eurasian humans gradually began to abandon their ancient nomadic hunter-gatherer ways’.¹⁹

On this one issue Larry Hart “pushes back,” however, saying: ‘[P]erhaps we have read too much into *Genesis* 4 as far as seeing a Neolithic culture is concerned.’²⁰ And, accordingly, in his commentary on the book, Donald Gowan wonders if the author envisioned merely ‘the caravan-cities [“]built[”] in oases far out in the desert’, consisting of tents pegged to the ground; not a place of cut-stone dwellings separated by paved roads, with sewers and so forth.’²¹

And, okay, this might be *all* the text means in this regard; but what about Cain’s great-great-grandson, Tubal-Cain, who, we’re told, ‘was the forger of all instruments of bronze and iron.’[4:22] Either we must read *into* *Genesis* outlandish claims for the existence of implausibly advanced antediluvian civilisation so far undiscovered by archaeologists – famously as American Congressman Ignatius Donnelly thought [1831-1901];²² or, see this detail for what it more likely is – as a modest “signpost” to when these events *actually* happened: at a time in the more *recent* past. Specifically, the period immediately prior to that when we *know* blacksmithing with iron was becoming widespread, which is hard to say: the oldest example of a man-made iron artefact is a short string of necklace beads from a tomb in Gerzeh, an ancient cemetery in northern Egypt. Made from meteoritic material, they have been carbon-dated to circa 3200 B. C.²³

¹⁶ Various (12th of January, 2020), ‘Who Was the Wife of Cain?’, *Biblical Archaeology Review*, available at <https://www.biblicalarchaeology.org/daily/biblical-topics/hebrew-bible/who-was-the-wife-of-cain/>, (accessed February 27, 2020).

¹⁷ *Supra*.

¹⁸ Hill, Carol (2019), *A Worldview Approach to Science and Scripture*, Grand Rapids, M. I.: Kregel Academic (Kregel Publications), 149.

¹⁹ LeCain, Timothy J. (2017), *The Matter of History: How Things Create the Past*, Cambridge, U. K.; New York, N. Y.: Cambridge University Press, 29.

²⁰ *Truth Aflame: Theology for the Church in Renewal* (2005), Revised Edition, Grand Rapids, M. I.: Zondervan, 230.

²¹ *From Eden to Babel: A Commentary on the Book of Genesis 1-11* (1988), Grand Rapids, M. I.: Wm. B. Eerdmans Publishing Co., 73.

²² See: https://en.wikipedia.org/wiki/Atlantis:_The_Antediluvian_World.

²³ See: Skurie, Jaclyn (24th of August, 2013), ‘Scientists: Meteorite Beads Oldest Example of Metalwork’, *National Geographic Magazine*, available at <https://www.nationalgeographic.com/news/2013/8/130822-ancient-egypt-beads-meteorites-iron-gerzeh/>, (accessed February 29, 2020).

Liberal biblical commentators are, in the main, unperturbed by all this, of course: That '[t]he Genesis account of creation is set forth...in measured and majestic...almost liturgical style', causes some to wonder if *Genesis* 'is partly literary...?'²⁴ In *Four Views on the Historical Adam*, for example, a volume in the very popular 'Counterpoints' series by (the publisher) Zondervan, Denis Lamoureux is quite unembarrassed to declare: 'Adam never existed'.²⁵ For, '*Genesis* 1-11 [is] a unique type of literature...distinct from the rest of the Bible.'²⁶ '*Real history*', he says – and those are his italics, '...begins roughly around *Genesis* 12 with Abraham.'²⁷

Eve, at least, is *certainly* viewed by some Feminist critics as a fabrication; a misogynistic device created by a man to excuse himself – and his fellows – of responsibility for the troubles in the world. Karen Edwards, for instance, argues that she is the 'mother of all *femmes fatales*', a mythological corruptionist in a fable about puberty: 'When Eve', who we're *explicitly* told is naked – 'offers the fruit to Adam, she...offers Adam a choice: be my partner (that is, a man[, and enjoy with me what that means, but also come to face the moral complexities of adulthood, that the "apple" represents]), or remain a[n "innocent" but lonely, unfulfilled] child. A[nd so, at first, A]dam seems to choose to be a partner [by eating of the fruit too], but the choice [and its ramifications] turns out to be too frightening, and he repudiates it and her [by refusing to personally shoulder the blame].'²⁸ – 'The man said, "The woman whom you gave to be with me, she gave me fruit from the tree': [Gen. 3:12].

That was "Perspective 3." But let's return to Walton, who advocates for "Perspective 2" – the interpretation that Adam and Eve are presented in *Genesis* as "representatives:" 'My view is that Adam and Eve were real people in a real past; they were individual persons who existed in history. ... Nevertheless, I also believe that the biblical text is most interested in Adam and Eve as archetypes – ...who represent humanity.'²⁹ In what way, *exactly*? Specifically, he argues – and he has become notorious among evangelicals for this point of view: '[T]he Garden of Eden is not simply beautiful green space (though it is) to provide people with food (which it does). Far more than anything else, it is sacred space that reflects the fact that God is dwelling there...' – *it is a temple!* And: 'On the basis of [a] priestly understanding of the verbs that describe Adam's commissioning[, which he claims the (original) Hebrew permits], I [Walton] would conclude that the specific point that *Genesis* 2 contributes to the book is not in relation to Adam's unique material origins or to human origins in general, but rather to Adam's elect role in sacred space.' – *as a priest!* That is,

²⁴ Youngblood, Ronald F. (1999), *The Book of Genesis: An Introductory Commentary*, Eugene, O. R.: Wipf & Stock Publishers, 26.

²⁵ 'No Historical Adam: Evolutionary Creation View' (2013), in Barrett, Matthew & Caneday, Ardel B. (Eds.), Grand Rapids, M. I.: Zondervan, pp. 37-65, 38.

²⁶ *Ibid.*, 44.

²⁷ *Supra*.

²⁸ 'The Mother of All *Femmes Fatales*: Eve as Temptress in *Genesis* 3' (2010), in Hanson, Helen & O'Rawe, Catherine (Eds.), *The Femme Fatale: Images, Histories, Contexts*, Basingstoke, U. K.: Palgrave Macmillan, pp. 35-45, 43.

²⁹ Walton, John H. (2013), 'A Historical Adam: Archetypal Creation View', in Barrett, Matthew & Caneday, Ardel B. (Eds.), *Four Views on the Historical Adam*, Grand Rapids, M. I.: Zondervan, pp. 89-118, 89.

as the *first* priest.³⁰

‘But’, as the highly regarded evangelical, Anglican presbyter John Stott observes, in his commentary on *Romans*, there’s “a catch” – and an *awfully* big one: ‘[B]iblical genealogies trace the human race back to Adam; Jesus himself taught that ‘at the beginning the “Creator made the male and female” and then instituted marriage [Mt. 19:4ff., quoting Gn. 1:27]; Paul told the Athenian philosophers that God had made every nation ‘from one man’ [Acts 17:26]’.³¹ And John Piper, an influential and prominent preacher, argues that the Gospel itself demands Adam as the one through whom sin entered the world.³² Isn’t that what the Apostle himself suggests?

It appears, then, we’ve come up against a conundrum: [E]volution does not appear in Scripture, nor does Adam and Eve appear in evolution.³³ What are we to do? Well, Joshua Swamidass associate professor in the Laboratory and Genomic Medicine Division at Washington University in St Louis, offers what looks, to me, like a solution – *it’s brilliant!* – one that alleviates the tension that young people in particular struggle with; one that eliminates the impression of having to choose between two, unhappy, *divergent* worldviews: his hypothesis is that,

1. God created Adam and Eve ‘by a direct act, *de novo* from dust and a rib (or Adam's side)...[according to] how most people in history have understood *Genesis*.’
2. They were not, however, as I think is clearly indicated by the text, alone (on the planet); there were people elsewhere, *outside* of the Garden, who ‘share[d] common descent with the great apes’.
3. Adam and Eve's lineage eventually interbred with people outside the Garden.
4. By the first century, Adam and Eve had become ‘a couple from whom all humans across the globe descend.’³⁴ That is to say: ‘Adam and Eve are genealogical ancestors of everyone to the “ends of the earth” by AD 1 [- i.e. before the ministry of Jesus and by the time Paul wrote], at the latest, but [are] not necessarily our genetic ancestors.’³⁵ (What’s the difference? ‘Genealogical ancestry does not imply genetic ancestry. Consider a child’s father and grandfather. They both are fully the child’s genealogical ancestors. However, they are only partially the child’s genetic ancestors, approximately ½ and ¼, respectively.’³⁶)

In sum, what Swamidass is saying is that we’ve ‘two different origin stories...[which] could, nonetheless, be simultaneously true.’³⁷ One is demonstrable (by scientists) and visible in the world around us – evolution; and

³⁰ See: Walton, John H. (2015), *The Lost World of Adam and Eve: Genesis 2-3 and the Human Origins Debate*, Downers Grove, I. L.: InterVarsity Press, 104-108.

³¹ Stott, John R. W. (1994), *The Message of Romans: God’s Good News for the World (The Bible Speaks Today)*, Leicester, U. K.; Downers Grove, I. L.: Inter-Varsity Press, 163.

³² ‘Was Adam For Real, and Does It Matter?’ (14th of January, 2013), *Desiring God*, available at <https://www.desiringgod.org/interviews/was-adam-for-real-and-does-it-matter> (accessed January 1, 2020).

³³ Swamidass (2019), 204-205.

³⁴ *Ibid.*, 25-26.

³⁵ 31. (See also p.58)

³⁶ 35.

³⁷ 25.

the other – the Bible’s, by a “plain” reading – is *un*-disprovable! But why would God make Adam and Eve in such an odd way, ‘without parents, when everyone else was created through a process of common descent? They had a special purpose,’ says Swamidass, ‘one that require them to be created entirely sinless, with a clean slate. Their creation parallels, in theologically important ways, the Virgin Birth of Jesus.’³⁸ And that He chose to act in this way means it must have been important to do so, even if the reason eludes us. [See: Figure 3]

³⁸ Swamidass (2019), 25.

Figure 1: Perspective 1. – “Sole Progenitor Pair”

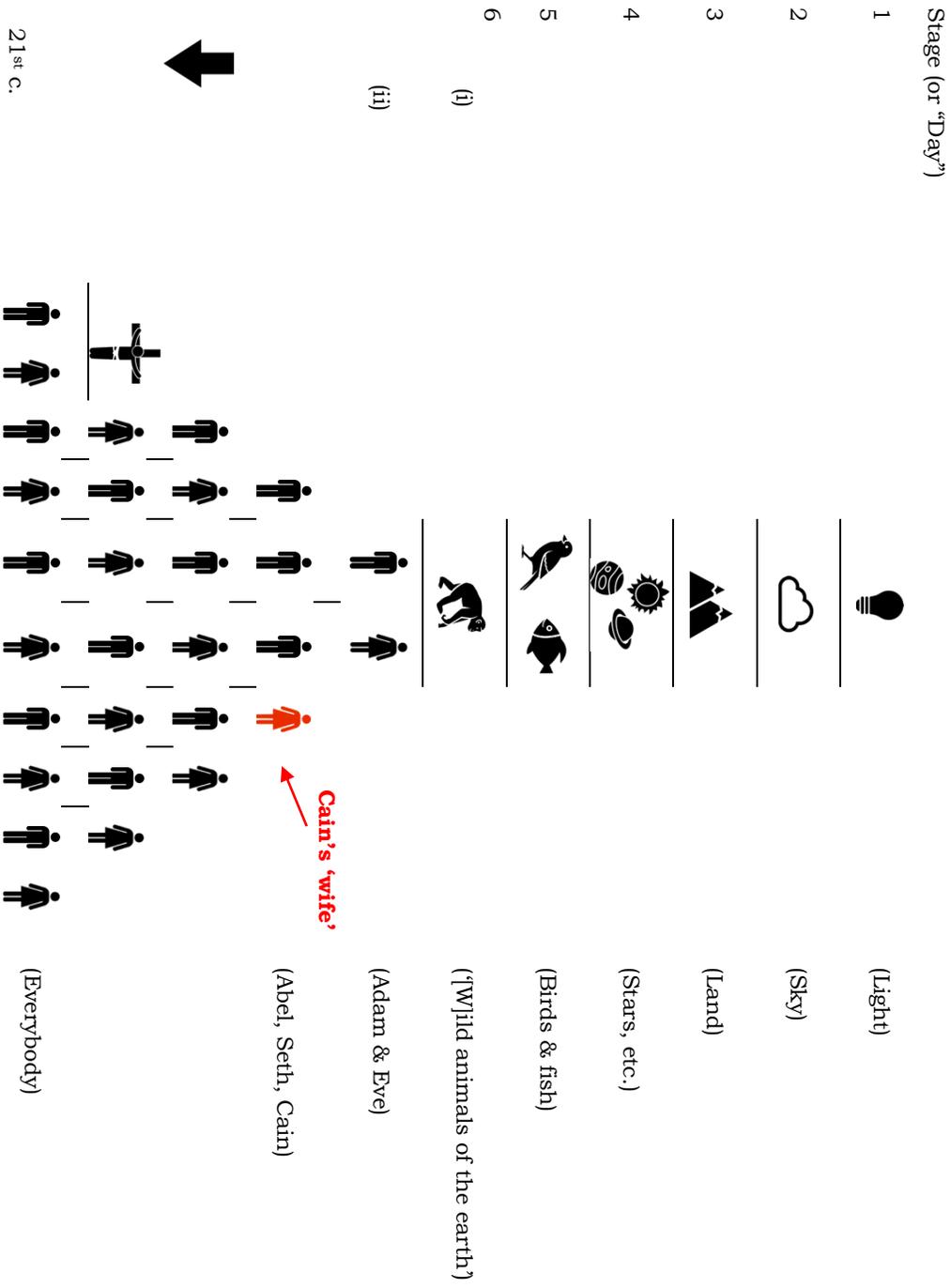




Figure 2: Neo-Darwinian Perspective

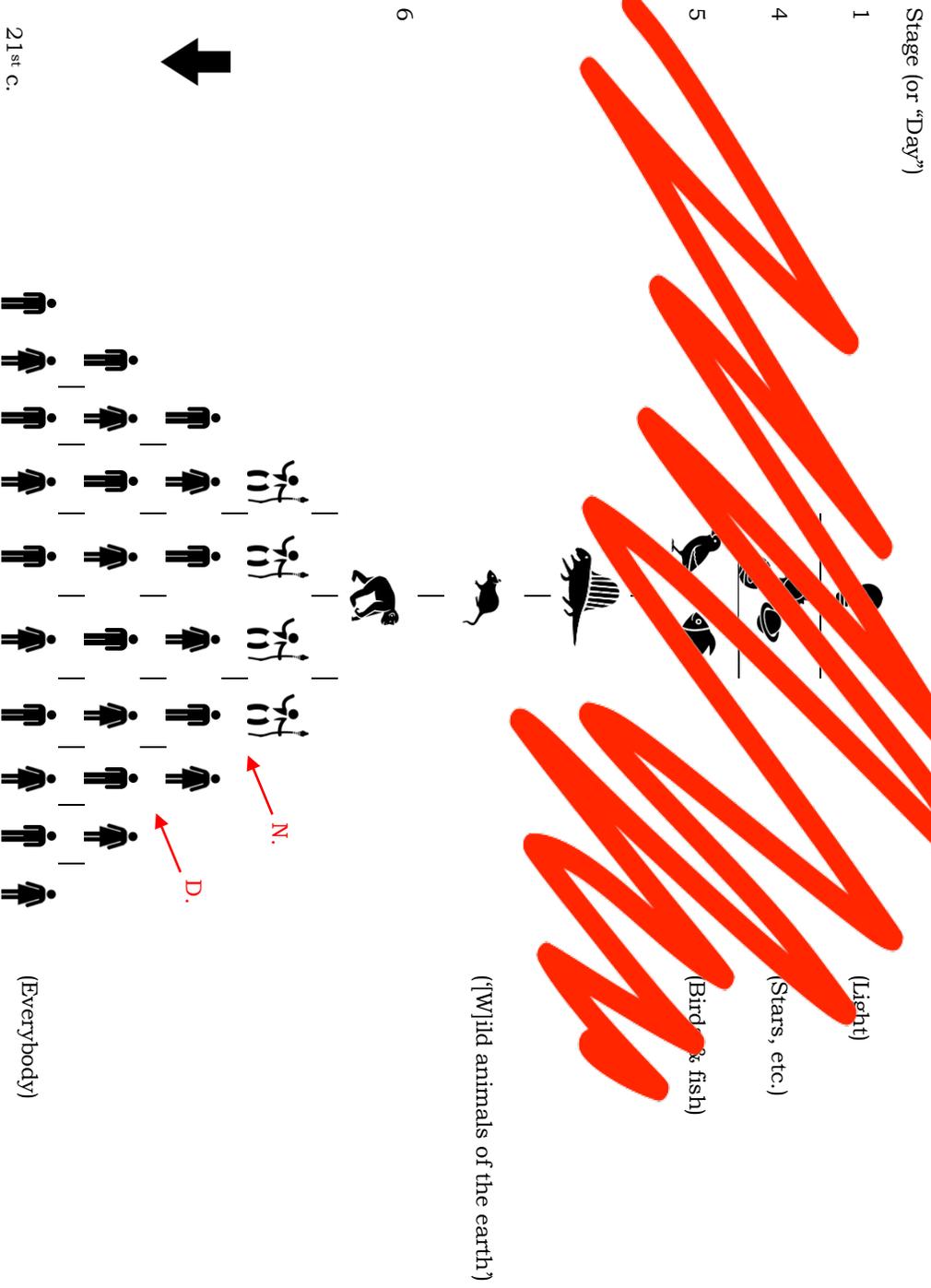


Figure 4: Swamidass' Perspective

