#### Discussions

# Monogenism: A Reply to Fr. Chaberek

# Kenneth Kemp

In some articles published over the past fifteen years, I have tried to show that the scientific arguments that have been made against there ever having been merely two human beings do not require a revision of the Catholic doctrine of the monogenetic origin of the human race. In a recent issue of *Forum Philosophicum*, Fr. Michał Chaberek says that my argument fails. Here is my reply.

The argument that such a revision is required goes something like this:

- (P1) Scientific evidence shows that there was never a time in which there were only two human beings, the ancestors of all other human beings) (= scientific polygenism).
- (P2) Catholic theology teaches that there was once a time in which there were only two human beings, the ancestors of all other human beings (= theological monogenism).
- So: (P3) With respect to human origins, what scientific evidence shows contradicts what Catholic theology teaches.
- So: (P4) Catholic theology has to be revised.

Chaberek and I agree that that argument is unsound, but disagree about why. He thinks that *my* critique is deeply flawed. Here is why I think that he is mistaken.

#### 1. OUR DIFFERENCE OVER P1

The presumption in favor of polygenesis generated by Darwin's populationist account of the evolutionary origin of species (Darwin 1871, 1:235;

Huxley 1865, 275; Haeckel 1880, 304) received reinforcement in the 1990's from an argument advanced by the American geneticist Francisco Ayala (1995, Ayala and Escalante 1996), based on observed trans-species polymorphisms in man and chimpanzee—the one which he was invited to present to the American Catholic bishops in 1998.

Chaberek seems to have misunderstood Ayala's argument.

First, he thinks that it was based on single nucleotide polymorphisms rather than on trans-species polymorphisms (numerous distinct nucleotide strings at a single gene locus). Each of the four nucleotides could exist in a single human couple. Each of the fifty-some alleles at a particular gene locus could not. Ayala's argument has its critics (e.g., Craig 2021, 240) and may ultimately prove unsound, but there are other trans-species polymorphisms (Azevedo 2015) that could form the basis of similar arguments.

Second, he cites Richard Buggs, who offered a critique of Dennis Venema's argument from intra-specific genetic diversity to minimum effective population size, but does not address Ayala's argument, which is based, not on intra-specific diversity but the significant overlap in the range of allelic variation found in chimpanzees and in man. The problem is not calculating the minimum effective population, but rather the much simpler task of determining the minimum bottleneck sufficient to transmit the number of distinct alleles that constitute the trans-species polymorphism.

The *details* of the particular scientific argument used for P1, however, are not important to my argument. There was a good dialectical reason for my having conceded *arguendo* that Ayala's argument was sound: namely, that doing so allows us to see what we cannot infer from its alleged truth, which is that Adam and Eve never existed. Denying that his, or similar, arguments are in fact sound does not affect my thesis. There have been, and no doubt will be, other arguments for P1 (e.g., Hu et al. 2023). His authority, Richard Buggs, does not support Chaberek's claim that "recent research has ultimately dismissed the genetic challenge against the possibility of an historical Adam and Eve." Although Buggs recently wrote that "no studies estimating past effective population sizes should be taken as absolute truth," he added that "Christians must be cautious about how they interact with studies exploring past human effective population sizes from genomes" (2023).

Chaberek says that I "adopt[ed] polygenism" because I believe that "population genetics excludes the very possibility of a single pair at the dawn of humanity." That would be true only after the addition of crucial qualifications that would have been easy to add, and that there is no justification for his having omitted. The fact of the matter is that I am a monogenist

because I believe that there was a single pair of fully human beings, the only fully human beings who are ancestors to all other fully human beings, at the dawn of humanity, which is all that the relevant theological doctrines require.

More importantly, he entirely misses the point of my paper. Its thesis was *not*:

The existence of trans-species polymorphisms having shown polygenism to be true, my scenario must be the correct account of the origin of the human race.

#### It was rather this:

My scenario being scientifically possible and theologically orthodox, *any* scientific arguments over polygenism are theologically irrelevant.

My thesis was thus the *logical* point that there is no inconsistency between a scientific polygenism (focused, as it is, only on the reproductive aspect of human being) and theological monogenism. This consistency argument is important because it will hold not just against Ayala's argument for polygenism, but for any biological argument that might replace it.

Buggs' view (that arguments against a bottleneck are uncertain) and mine (that, even if they were certain, they would be theologically irrelevant) can perhaps best be seen as supplementing one another. Anti-monogenists now have two objections to meet, not just one.

#### 2. Our Difference over P2

Monogenesis, I said, is a consequence of the doctrine of original sin as articulated at Trent:

- (T1) The actual unity of the original sin (peccatum originale originans),
- (T2) the propagation of original sin (*peccatum originale originatum*) through biological descent, and
- (T3) the universality¹ of original sin.

Chaberek says that monogenism must include two points—the "real existence of Adam and Eve" and their being "the exclusive origin of humanity" (2024, 159). The first is clear enough, and I was quite explicit about asserting it. The second is unclear both with respect to its source and to its meaning.

He does not quote the phrase from anywhere, and the documents which he mentions as "confirming this perspective" (2024, 159n5) do not use it. What one finds in those sources is only:

- (G1) Adam and Eve are fully human and the ancestors of all other (fully) human beings.
- 1. Strictly, near universality, of course; Jesus and Mary being excepted.

One can get from G1 only as far as

(G2) Adam and Eve are the *only fully* human beings who are ancestors of all other (fully) human beings.

What he needs for his criticism of my article to succeed is a different, stronger, thesis which is beyond what his sources assert:

(G3) Adam and Eve are the *only biologically* human beings who are ancestors of all other (fully) human beings.

To get to G3, he must not just deny (as he does), but refute (as he does not) the very possibility of there being animals that are biologically human, but (not having been given created souls) not rational, i.e., not fully human—a *possibility* that is central to my argument. So to that point of difference we must now turn.

## 3. OUR DIFFERENCE OVER P3

The primary purpose of my original paper was to refute the argument from P1 and P2 to P3 by showing that it depends on an equivocation. The apparent contradiction can be dissolved by a distinction.

The necessary distinction emerges when we consider an entirely possible history of the human race, one that embeds a central thesis of Catholic evolutionism into Darwin's populationalist account of the origin of species—one that, whether actual or not, shows that P1 does not contradict P2.

In that possible history, the origin of the human race lies in God's infusion of two created rational souls into animal bodies that were themselves the product of evolution, but did not necessarily differ in any significant way from those of the other animals in the population into which they were born. The next step in that history is God's infusion of rational souls into the descendants of those two. At some point, some of those descendants interbred with the non-rational ("merely biological") human beings² among whom they lived, with God infusing rational souls into the products of those unions as well.³ Eventually, the entire population of biologically human beings would have rational souls (i.e., would be fully human) as well.

<sup>2.</sup> Chaberek takes particular exception to this term: "confusion stems from the fact that Kemp calls human (even if a merely biological one) a non-rational creature whereas the very notion of humanity entails rationality" (2024, 160). This objection is based on an insufficient appreciation of what adjectives can do. Though red foxes are foxes, flying foxes are not (they are bats); foreign money is still money, but counterfeit money is not money at all. Similarly with "merely biologically human being."

<sup>3.</sup> It is this interbreeding that causes my scenarios to fail the version of exclusivity of ancestry that Chaberek incorrectly reads into the traditional Catholic conception of monogenesis.

On that scenario, P1 would be true, understood as referring to the biologically human species (a community of interfertile and interbreeding organisms not necessarily rational but in other respects like fully human beings). P2 would be true, understood as referring to the philosophically human species of rational beings and their (also rational) descendants. If the common term, "human being," means something different in the two propositions, then the two propositions do not contradict one another.

Chaberek objects to this scenario, partly on theological and partly on metaphysical grounds.

The theological problem, he says, is that, because it posits the existence of human beings (even if merely biological ones) not descended from Adam, my scenario is not monogenistic in "the way Catholic tradition holds" (2024, 162). The sources he cites discuss only fully human beings, without addressing the question of whether there ever were anything like the merely biological human beings the existence of which would resolve the putative contradiction. My position is monogenistic in the perfectly ordinary Catholic sense of the term—one first couple, ancestral to all other fully human beings that ever lived.

He also thinks, however, that there are two metaphysical problems. First, "a creature with the human body deprived of reason (i.e. a rational soul) cannot exist" (2024, 160). Second, humans entering sexual relations with non-humans cannot produce fertile offspring (2024, 162). Here is the most philosophically interesting part of our difference.

The existence of animals shows us that it is possible so to dispose matter that it has, among others, the powers of reproduction, sensation (perception and imagination) and emotion (i.e., appetite). Some of those animals have relatively complex sense powers.

Why could God not create, and infuse into animal bodies that have relatively complex sense powers, thereby replacing their animal souls, a substantial form that does everything that their animal soul did, but adding the intellectual powers that would enable them to abstract concepts from the images that the sense powers make possible as well as to make free choices about how to act (Kemp 2020)? Such a being would be, by philosophical taxonomy, a different species from its animal ancestors, but would still be, because of its bodily structure and the fact that the intellectual "supplement" did not affect its reproductive powers (that were duplicated in its created soul), interfertile with the members of the larger population from which God had drawn it.

It is this that Chaberek thinks is a biological and metaphysical impossibility. Why? He gives three reasons (2024, 162–64). Even if they are ultimately

three ways of looking at the same reason, it is worth looking at them separately.

First: "The taxonomical gap between 'biological species' ... and philosophical human is simply too large to allow interbreeding." But there is no biological taxonomic gap; the philosophical gap does not require any difference in reproductive powers.

Second: "The human soul ... requires an entirely new disposition in matter, ... completely different from any other body we see in the animal kingdom." Why would the existence of an additional, intellectual, power require an entirely new kind of eyes, or, more to the point, incompatibly different reproductive organs? Intellectual thought is not even the power of any bodily organ at all (Thomas Aquinas, ST, Ia, q. 79). Although it surely requires bodily organs capable of sustaining the images from which concepts can be abstracted, there is no reason to think that those bodily organs would have to be different in order to make that abstraction possible (Kemp, 2020). It is only an additional power, not a re-organized body, that thought requires.

Third: "The human soul would initially animate a non-human body which is impossible for metaphysical reasons" (2024, 164). The word "initially" is not quite right, but the point is clear enough. Nevertheless, it is mistaken for reasons that the remarks above should make clear. To sustain his point, Chaberek has to explain why a particular disposition of matter could not be capable of being informed by either of two different substantial forms, one that merely actualized the organs of that material body and another that did all that in the same way, but in addition included the power of intellect, the power to do more with the images its sensitive (animal) soul made possible than "use" them as causes of emotional and locomotional response.

# 4. Our Difference over Getting from P3 to P4

Given that I consider P3 to be false, giving an answer to the question of how one would get from P3 to P4 is not necessary to my argument. The question being of more general importance, however, and my view having been incorrectly summarized by Chaberek, I want to say a few words about this as well.

Chaberek says that I failed to adopt "a 'healthy' science and faith relation" (2024, 158), and makes two attempts at characterizing my position: first, "that if science presents a doctrine contrary to theology it is theology that needs to be reshaped in such a way as to fit the scientific account", and second, worse, "whatever science proposes, no matter how well confirmed

(or not) by evidence, should modify our understanding of the faith" (2024, 154). Of course, I said no such thing. Indeed, I concluded the paper by saying something quite different—that "contradictions are sometimes to be resolved not by the rejection of one of the apparently contradictory theories but by the recognition of . . . a previously overlooked distinction" and that, in general, patience (I meant, sometimes withholding judgment) is important when faced with such an apparent contradiction (Kemp 2011, 236).

Chaberek, by contrast, offers a rather different approach, *saying* that "Catholic *dogma* might require some modification in understanding if it clashed with hard facts" (2024, 164; emphasis mine). Dogmas, the *Catechism* says, "oblig[e] the Christian people to an irrevocable adherence of faith" (¶88). Charity requires that we think that he only *meant* to say something weaker. Perhaps he only meant something like "traditional teaching," a term that he uses elsewhere (e.g., 2024, 155), for about these the *Catechism* does say that they "can be retained, modified or even abandoned under the guidance of the Church's Magisterium" (¶83).

His failure to define "hard facts" leaves unclear what exactly warrants the modifications which he allows. Does the term extend beyond the boiling point of water to water as composite of hydrogen and oxygen? To the existence of atoms? Is heliocentrism a hard fact? It is certainly not *observed*. It was inferred—it explains why planets sometimes seem to reverse their course in the night sky and is supported by stellar parallax.

Here is what I think about the warrant necessary for arguments from P3 to P4. P3 contains two vague terms, greater precision about which is crucial to the formulation of the warrant.

A well-established feature of Catholic theological epistemology distinguishes different grades of certainty. While there are theological theses that are *de fide nota*, others are less certain. That is to say, while there are truths that it would be heretical to deny, there are others the denial of which would not be heretical, but would still be rash, i.e., theses that it would be wrong to deny without sufficient reason.<sup>4</sup> There is, however, no theological reason to think that such good reasons could never possibly emerge, at which point the denial of a traditional belief would no longer be rash. Rashness was, incidentally, the theological note commonly attached by Catholic anti-evolutionists to the idea of the animal origin of the human body in the early twentieth century (Kemp 2025).

<sup>4.</sup> There are, of course, also other, intermediate, grades of certainty, and of censure (see Cartechini 1951).

Scientific results also vary with respect to their degree of certainty. There are not only "hard facts" and "learned speculations" (the terms, both undefined, in Chaberek—see 2024, 156 and 164). The scientific theses relevant to this controversy, if not "hard facts," are not mere "learned speculations" either.

The warrant authorizing inference of P4 from P3 requires attention to both spectra. Chaberek's article uses an epistemologically oversimplified account of both theology and science, one which is a serious obstacle to the articulation of a healthy relation between science and faith.

#### 5. CONCLUSION

So, whether there is good scientific evidence for *biological* polygenesis or not, the idea constitutes no challenge to Catholic doctrine about Adam and Eve really having existed and having been the only fully human (i.e., rational) beings who were the ancestors of all other fully human beings. If it requires us to admit that we also had other *biological* (but not fully human) ancestors, it only requires us to give up the alternative that many Christians (forgetting about Cain's wife, one is tempted to add) once held, but that the Church has never taught. Perhaps those things could be called "traditional teaching," though they are not as explicitly present in the relevant sources as Chaberek suggests, and in any case such teachings, as the *Catechism* indicates, are not irreformable.

### **BIBLIOGRAPHY**

Ayala, Francisco J. 1995. "The Myth of Eve: Molecular Biology and Human Origins." *Science* 270 (5244): 1930–36. https://doi.org/10.1126/science.270.5244.1930.

Ayala, Francisco J. 1998. "Evolution and the Uniqueness of Humankind." Origins: CNS Documentary Service 27 (34): 565–74.

Ayala, Francisco J., and A. A. Escalante. 1996. "The Evolution of Human Populations: A Molecular Perspective." *Molecular Phylogenetics and Evolution* 5 (1): 188–201. https://doi.org/10.1006/mpev.1996.0013.

Azevedo, Luisa, Catarina Serrano, Antonio Amorim, and David N. Cooper. 2015. "Transspecies Polymorphism in Humans and the Great Apes is Generally Maintained by Balancing Selection that Modulates the Host Immune Response." *Human Genomics* 9 (21). https://doi.org/10.1186/s40246-015-0043-1.

Buggs, Richard. 2023. "Science Moves Closer to Adam and Eve?" Accessed October 8, 2024. https://richardbuggs.com.

Cartechini, Sixtus, SJ. 1951. De valore notarum theologicarum et de criteriis ad eas dignoscendas. Rome: Editrice Pontificia Università Gregoriana.

Catechism of the Catholic Church. 1994. Vatican City: Libreria Editrice Vaticana.

Chaberek, Michał. 2024. "Original Sin, Monogenesis and Human Origins A Response to Kenneth W. Kemp." *Forum Philosophicum* 29 (1): 153–65. https://doi.org/10.35765/forphil.2024.2901.08.

- Craig, William Lane. 2021. The Problem of the Historical Adam: A Biblical and Scientific Exploration. Grand Rapids, MI: Eerdmans.
- Darwin, Charles. 1871. *The Descent of Man, and Selection in Relation to Sex.* London: Murray. Haeckel, Ernst. 1880. *The History of Creation*. Translated by E. Ray Lankester. New York: Appleton.
- Hu, Wangjie, Ziqian Hao, Pengyuan Du, Fabio Di Vincenzo, Giorgio Manzi, Jialong Cui, Yun-Xin Fu, Yi-Hsuan Pan, and Haipeng Li. 2023. "Genomic Inference of a Severe Human Bottleneck during the Early to Middle Pleistocene Transition." *Science* 381 (6661): 979–84. https://doi.org/10.1126/science.abq7487.
- Huxley, Thomas Henry. 1865. "On the Methods and Results of Ethnology." *Fortnightly Review* 1: 257–77. https://babel.hathitrust.org/cgi/pt?id=inu.30000093208951&seq=265.
- Kemp, Kenneth W. 2011. "Science, Theology, and Monogenesis." *American Catholic Philosophical Quarterly* 85 (2): 217–36. https://doi.org/10.5840/acpq201185213.
- Kemp, Kenneth W. 2020. "God, Evolution and the Body of Adam." *Scientia et Fides* 8 (2): 139–72. https://doi.org/10.12775/SetF.2020.017.
- Kemp, Kenneth W. 2025. *The Origins of Catholic Evolutionism, 1831–1950.* Washington, DC: Catholic University of America Press.