

Ancient Biology in the Bible

Distinguishing the ancient vehicle of communication (the biology-of-their-day) from the message of God

Denis O. Lamoureux, *Evolutionary Creation: An Evangelical Approach to Evolution* (Eugene, OR: Wipf & Stock, 2008), 135-146, endnotes removed.

The Bible also features an ancient understanding of biology. Passages referring to the structure and operation of living organisms are fewer than those that deal with the heavens and the earth, but similar to geology and astronomy in Scripture, biology is viewed through ancient phenomenological categories. The Word of God offers an ancient conception of: (1) taxonomy, (2) botany, (3) human reproduction, and (4) suffering, disabilities, and diseases [not included here].

Taxonomy

The human impulse to categorize plants and animals appears throughout history. King Solomon became famous not only for his godly wisdom, but also his taxonomical knowledge. 1 Kings 4:33 states that he “described plant life, from the cedar of Lebanon to the hyssop that grows out of walls. He also taught about animals and birds, reptiles and fish.” The classification of life in Scripture is from an ancient perspective and often overlooks anatomical and physiological differences that are foundational to modern taxonomy.

For example, the bat is categorized as a bird. According to Lev 11:13-19, “These are the birds you are to detest and are not eat because they are detestable: the eagle, the vulture, the black vulture, the red kite, any kind of black kite, any kind of raven, the horned owl, the screech owl, the gull, any kind of hawk, the little owl, the cormorant, the great owl, the white owl, the desert owl, the osprey, the stork, any kind of heron, the hoopoe and *the bat*” (italics added). Of course, such a classification is reasonable because bats fly. However, these creatures are not birds but mammals with distinguishing non-avian features such as body hair, mammary glands and a placental attachment. Similarly, the coney (also known as the rock badger or hyrax) and the rabbit are classified as ruminants. Leviticus 11:5-6 states, “The coney, though it chews the cud, does not have a split hoof; it is unclean for you. The rabbit, though it chews the cud, does not have a split hoof; it is unclean for you.” The repetitive and side-to-side jaw actions of both of these animals give the visual impression of chewing the cud, but neither are ruminants with multiple-chambered stomachs.

The purpose of these passages in the book of Leviticus is not to reveal taxonomy. Rather, the practice of dietary laws was part of God's plan in separating the Hebrews from the pagan cultures around them. That is, the Message of Faith throughout Leviticus is that God was personally creating a holy nation to serve His purposes.

Taxonomical categories based on an ancient phenomenological perspective of living organisms also appear in Gen 1. On the third day of creation, vegetation is classified with regard to the production of seeds, including "seed-bearing plants" and "trees that bear fruit with seeds." The creation of animals on days five and six reflects their ecological niche—air, sea, or land. The taxonomy of land animals is based on both their type of locomotion and level of domestication—livestock, crawlers, or wild. Of particular significance to the origins debate, Gen 1 indicates that living creatures do not change. The phrase "according to its/their kind/s" appears ten times and reflects static or immutable taxonomical categories. Such a classification makes perfect sense thousands of years ago. In the eyes of ancient peoples, hens laid eggs that always produced chicks, ewes only gave birth to lambs, and women were invariably the mothers of infants. Therefore, the divine acts that created living organisms in Gen 1 are shaped by an ancient biology. Stated more precisely, God's creative action in the origin of life is filtered through ancient taxonomical categories. This biblical fact has far-reaching implications and these are explained in subsequent chapters.

But again, the intention of Scripture is not to present categories for biological classification. The purpose of Gen 1 is to reveal that God made plants and animals, including men and women. In order to do so, the Holy Spirit knelt down to the intellectual level of the ancient Hebrews and employed their taxonomy as an incidental vessel in proclaiming the Message of Faith that He is the Creator of each and every living creature.

Botany

The beginning of agriculture in the ancient world played a major role in the advancement of civilization. The importance of harvesting for the Hebrews is seen in their Feast of Weeks (Harvest) and Feast of Ingathering (Tabernacles). The former celebrated the first fruits in late spring (Lev 23:15-21), and the latter crops in autumn (v. 33-43). Knowledge of plants, their seeds, and the land in which they were sown was essential information for the survival of ancient peoples. The Bible presents a number of ancient botanical concepts.

Many Christians are familiar with Jesus' parable of the mustard seed and the problem concerning His assertion about the size of this seed. The Lord asks, "With what can we compare the kingdom of God, or what parable will we use for it? It is like a mustard seed, which, when sown upon the ground, is the smallest of all the seeds on the earth; yet it grows up and becomes the greatest of all shrubs, and puts forth large branches, so that the birds of the air can make nests in its shade" (Mark 4:30-32). However, the mustard seed is not "the smallest of all seeds on the earth." Orchid seeds are much smaller, to cite one

example. But perceived through the eyes of ancient individuals, mustard seeds were the smallest seeds. The Lord's purpose in this parable is not to teach botany. Rather, He uses the science-of-the-day in order to reveal an inerrant prophecy about the kingdom of God.

Similarly, Jesus employed an ancient understanding of seed germination. He asserts, "The hour has come for the Son of Man to be glorified. I tell you the truth, unless a kernel of wheat falls to the ground and *dies*, it remains only a single seed. But if it dies, it produces many seeds" (John 12:24-25). The apostle Paul also uses this botanical concept, "But someone may ask, 'How are the dead raised? With what kind of body will they come?' How foolish! What you sow does not come to life unless it *dies*" (1 Cor 15:35-37). Everyone today knows that if a seed dies, it decomposes and will not germinate. Yet from an ancient phenomenological perspective this idea is reasonable. Just prior to germination, the covering of a seed breaks down, giving the appearance that the seed rots and dies. But Jesus and Paul are not offering the science of how plants sprout. More importantly, a Message of Faith is being revealed. The Lord is prophesying His resurrection and the growth of the Church, and the apostle is affirming that Christians in the future will be raised from the dead to enjoy eternal life.

Ancient individuals also observed a causal connection between crop production and soil quality. The parable of the sower employs this ancient agricultural knowledge (Matt 13:3-9). Accordingly, seeds fail to germinate on hard paths, some are choked by competition, and those in deep soil fully take root. However, ancient botany had no idea about plant genetics and the critical part that DNA played in growth. Consequently, it appeared that seeds were passive and that the soil completely dictated plant development. Jesus uses this ancient scientific notion in the parable of the growing seed. He states, "This is what the Kingdom of God is like. A man scatters seed on the ground. Night and day, whether he sleeps or gets up, the seed sprouts, though he does not know how. *All by itself* the soil produces grain—first the stalk, then the head, then the full kernel in the head. As soon as the grain is ripe, he puts the sickle to it, because the harvest is come" (Mark 4:26-29; italics added). Once more, the Lord descends to the knowledge level of His audience by using first-century botany in order to reveal an infallible truth regarding the growth of God's Kingdom and the end of the age.

Human Reproduction

The birth of children was a central and celebrated aspect in ancient cultures, including the nation of Israel. Large families were esteemed and a mark of God's blessing. As the psalmist states, "Sons are a heritage from the Lord, children a reward from Him. . . . Blessed is the man whose quiver is full of them" (Ps 127:3, 5). Consequently, infertility was deemed a "disgrace" and assumed to be a problem limited to the wombs of women. This idea is expressed by Rachel upon realizing she was pregnant. After an answer to prayer had "opened her womb," she gratefully announced, "God has taken away my disgrace" (Gen 30:22-23).

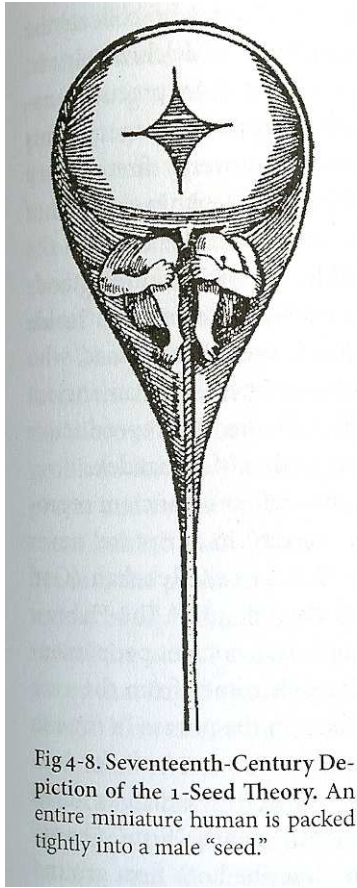


Fig 4-8. Seventeenth-Century Depiction of the 1-Seed Theory. An entire miniature human is packed tightly into a male "seed."

It is not surprising that ancient peoples understood human reproduction through botanical categories since agriculture was a major part of their life. They conceptualized that "seeds" were "planted" by a man during sexual intercourse, and "fruit of the womb" developed within a woman. This "1-seed" model of reproduction, also known as "preformatism" makes sense from an ancient phenomenological perspective. Males ejaculate during sex, giving the impression that they are the only direct contributors in the creation of life, while females appear to be involved indirectly as receptacles. This ancient view of human reproduction is evident in a passage from the Greek poet Aeschylus during the fifth century BC: "The mother is no parent of that which is called her child, but only the nurse of the new-planted seed that grows. The parent is he who mounts. She preserves a stranger's seed, if no god interferes." The ancients believed that an entire miniature human being was tightly packed within a man's "seed." Historically, this notion persisted as late as the seventeenth century even after the invention of the first microscopes (Fig 4-8).

The Bible also features the 1-seed model of human reproduction. Hebrews 11:11 records, "By faith Abraham even though he was past age—and Sarah herself was barren—was enabled to become a father because he considered Him faithful who had made the promise." This English rendition fails to give the full meaning of the original Greek. Literally translated, the clause "was enabled to become a father" is actually "was enabled to throw down seed." The Greek expression "*kataballō* (to throw down) *sperma* (seed)" is a technical term found only in association with males and refers to ejaculation. The agricultural analogy to seeding a field is obvious. Of course, the modern English word "sperm" comes from *sperma*, but originally this Greek word had three meanings: (1) the seed planted in fields, (2) the seed men release during intercourse, and (3) the descendants in a family. In Hebrew, the noun *zera'* also carries these same denotations and the related verb *zāra'* refers to sowing, scattering seed, and being made pregnant. In other words, an expectant woman is understood as one who has been seeded by a man. Nowhere in Scripture is there mention of women contributing seed during sex, or having seed in their reproductive organs. Without the advantage of microscopes, this was a perfectly logical notion from an ancient point of view.

Hebrews 7:9-10 further illustrates the 1-seed model of reproduction. The author writes, "One might even say that Levi, who collects the tenth, paid the tenth through Abraham, because when Melchizedek met Abraham, Levi was still in the body of his ancestor." A more precise translation of the Greek in the final clause is: "in the reproductive organs of his ancestor." Of course, this makes no sense in light of twenty-first century biology. But it is very reasonable if an entire person is within the seed of a man, and within this tiny individual another even smaller being in the reproductive organs, and so on. In other words, the ancient understanding of reproduction is like a set of Russian dolls with one doll inside another. The book of Genesis records that Abraham fathered Isaac, who then was the father of Jacob, who finally fathered Levi. From an ancient phenomenological perspective, Levi was literally "in the reproductive organs" of Abraham at the time the tenth was paid to Melchizedek.

Biblical references to human infertility also reflect an ancient reproductive biology. Only women are stated as "barren" in Scripture, never men. Examples include Sarah (Gen 11:30; Heb 11:11), Rebekah (Gen 25:21), Rachel (Gen 29:31), and Elizabeth (Luke 1:7, 36). The Hebrew word for barren (*āqār*) clearly shows the connection ancient peoples envisioned between reproduction and agriculture. It comes from the verb *āqar* which means "to uproot, pluck up" as seen in the phrase "a time to plant and a time to uproot" (Eccl 3:2). Similarly, Greek words for barren (*steiros, steriphos*) are related to the adjective *stereos*, which as noted previously with the word *stereōma* (firmament), means "firm," "hard," and "solid." In particular, *steriphos* is used to describe both firm ground and infertile women. Why would a female be considered "uprooted" and "hard" should she not be able to bear children? It is because ancient science understood wombs to be like fields. Barrenness was due to seeds being plucked up after they had been "planted" by a man during intercourse. Undoubtedly, seeing miscarriages contributed to this idea. As well, the womb of a barren woman was like hard ground in which seeds do not take root.

It must be emphasized that the Bible's attribution of barrenness to only females is in no way intended to disrespect women. Modern medicine has discovered that infertility is caused 30-40% of the time by males, 30-40% by females, and the remainder by both or is unknown. But from an ancient phenomenological perspective, it makes sense to believe that male seed never fails. Wheat and barley were common crops in the ancient Near East, and it is estimated that the germination rate of their seeds was more than 80%. Thus, in the eyes of ancient farmers sowing a field, it would appear that seeds are always successful and productive. They also saw that scanty crops resulted if the field was poor. This ancient agricultural notion is found in Jesus' parable of the sower. Hard ground, shallow soil filled with rocks, and land infested by competing weeds inhibit the development of seed. Only in a "good" field does seed grow into a full crop. In the same way, only a "fertile" womb "produces" the "fruit" of children.

The purpose of passages in Scripture referring to infertility is not to reveal the facts of reproductive biology. No Christian doctor today studies the Word of God in order to understand the physical processes behind this problem. Rather, these biblical passages are examples of God answering prayer and fulfilling His promises. This is the Message of Faith. The exact cause behind each incident of infertility in Scripture cannot be known because the problem is cast in an incidental ancient science—the 1-seed model of reproduction. Of course, it is within the Holy Spirit’s power to reveal the actual cause of barrenness. When applicable, He could have stated that flagella motility in sperm cells was poor. But would any ancient person have understood this? No. Instead, God reveals at the comprehension level of His people in order not to confuse or distract them. The miraculous birth of children to barren women in Scripture testifies to His Sovereign power over nature and fulfills His promise of creating a holy nation. And most importantly, with the knowledge that male “seed” is absolutely necessary in procreation, ancient peoples in first-century Israel would have completely understood that a dramatic divine event had occurred when a virgin girl became pregnant (Matt 1:18).

It must be noted that ancient reproductive biology is implied in Gen 1. On the sixth day of creation God said, “Let the *land* produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals” (Gen 1:24). Of course, this idea makes no sense to twenty-first century biology. But it is reasonable in light of the 1-seed model of reproduction and the perceived similarities between plant and animal development. The creation of new organisms in both cases involves the sowing and growth of seeds in a fertile field. Moreover, the parallel panels in Gen 1 suggest similar creative mechanisms in the earth on the third and sixth creation days (Fig 6-3 not reproduced here). In the former God commands, “Let the land produce vegetation” (v. 11), and in the latter, “Let the land produce living creatures” (v. 24). Even the Hebrew verb translated “produce” (*yāsā*) in verse 24 is the same one used in verse 12, “And the land produced vegetation.”

Some might argue that the creation of land animals on the sixth day of creation echoes the ancient pagan notion of mother earth. However, the radical divine revelation in Gen 1 is that there is only one Creator God. In the same way that the creation of the sun, moon, and stars on the fourth day of creation strips away any hint of divinity from these heavenly bodies, so too the sixth day rejects completely the belief that the earth is a god or a mother. Though the ancient origins notion of the earth producing animals appears in Gen 1, the inspired writer puts the God of the Hebrews in complete control of the process. The Message of Faith is clear: not only does God command all creatures to come forth from the earth, but He is also Creator of the earth.