

Reproduction and Speciation

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REPRODUCTION – GOD’S MECHANISM TO SUSTAIN LIFE

Many Creationists often disregard one of the most important processes initiated during the Creation Week. For at least 3.5 billion years, life of some form has existed on planet Earth. It has survived the passage of time, natural disasters, competition from other species, and the never-ending quest for sources of energy. To assure the survival of life, God introduced a mechanism that allows species to continue even after the death of one of its members. That mechanism is called reproduction.

There are many ways that animals can reproduce. Some, such as single-celled creatures, merely divide into two cells. Other organisms possess both pairs of sex organs. Human beings require one member from each sex to procreate. Reproduction not only allows life to continue, it also defines the type of life that is produced.

God’s method of dealing with reproduction consists of two major concepts:

1. A member of one species can only reproduce with members of that same species (although there are a few exceptions).
2. Species propagate members of the same species.

The genes of any organism define its physical characteristics. Reproduction is essentially the successful continuation of those genes. After successful reproduction, the newly created organism will possess the genes of its predecessor(s). In this way, life will produce only similar life, assuring that the species that successfully procreates continues.

Today, we think of reproduction as a natural process. Everywhere that we look in nature, every species of life has found a way to continue to survive. Scientists believe that reproduction was something that simple life on ancient Earth had to achieve to continue to exist. It was nature’s way of solving the problem of death and extinction. They theorize that many simple life-forms must have went extinct before, somehow, one of them finally possessed the ability to successfully reproduce (or replicate).

A clear understanding of the origin of life on planet Earth still eludes science – as does that early life’s ability to successfully

duplicate itself. Whatever scientific theories are proposed attempting to explain that first successful reproduction, the Bible states that reproduction of life was both a blessing and a command from God. This is an assertion that every Creationist embraces.

SPECIATION AND EXTINCTION

The phrase, "descent (of life) with modification," best describes the current scientific theory of how life has progressed on planet Earth. Beginning with the first recognizable forms of life that existed billions of years ago, life has continued to exist without cessation through today.

Variation among similar organisms, which is produced by differences in their genes, is the driving force behind "descent with modification." When any organism reproduces it passes its genes on to its offspring. However, the newly created life is seldom an exact duplicate of its parent or parents. The differing characteristics of the offspring may not be significant after only one generation. But after many generations the differences between the original parent and its descendants tend to increase. Current scientific theory believes that as these differences magnify over time, there is a point when an entirely new species may develop. This process whereby new species arise is called "speciation."

Many people who do not understand this process tend to exaggerate the claims made by science. No competent scientist today claims that after only a few generations, the descendants of some amphibian (such as a frog) will become reptiles. On the contrary, science believes that millions of years and millions of generations may pass before such a transformation is achieved.

Generally, two animals are considered to be different species if the dissimilarity in their genes is great enough to render them incapable of procreating. Human beings, horses, cats, and dogs are all separate species, and as such, the male sperm of one of them cannot fertilize the female eggs of any of the others. Through speciation, science theorizes that a descendant of an amphibian over time will be an amphibian-like creature that can only reproduce with other amphibian-like creatures. Eventually, the process of "descent with modification" renders the amphibian-like progeny incapable of reproducing with that original amphibian. Consequently, it is considered a new species.

Species may arise from a variety of scenarios. Some occur because of mutations. Others arise because some members of a species may have become geographically separated or isolated from other members of their species. Over time these separated creatures develop their own unique gene-pool and develop into different species. Environmental

factors are believed to play a prominent role in speciation. Some members of the offspring may simply be better equipped to survive a change in the environment (such as a prolonged drought or an ice age). In this scenario, only the genes of the successful survivors are passed on, and the gene pool changes to produce creatures that best adapt to the new environment.

An example of this is the Arctic hare. During the winter months, their white fur blends in with the snow and ice, thereby providing them with a natural camouflage. Gray or brown-furred rabbits would be easily seen in the white Arctic terrain, and would be quickly eaten by predators. Consequently, their genes would not be successfully passed on while the genes of the camouflaged, white, Arctic hares would continue.

Creationists do not question the ability of species to adapt to their environment. It is indisputable that white-furred rabbits would succeed in the Arctic terrain, while darker-furred rabbits would eventually become extinct. In fact, the variation that exists within species that allows such adaptability is often recognized by Creationists as one of God's remarkable designs that yields successful propagation of life even under the most challenging environments.

Most Creationists would not even challenge the concept of speciation. It is difficult to find fault with the Bible if speciation produces two similar animals over time that technically belong to different species. The Bible tells us that life reproduces "according to their kinds," but it is not necessarily clear that "kinds" is equivalent to the modern scientific concept of "species." Ten distinct species of mice that live in some remote region of the Amazon jungle may be significant to scientists, but from a Biblical perspective, all ten species may simply be recognized as "mice."

Creationists will argue most vehemently against the scientific belief that "descent (of life) with modification" can begin with one animal, and over time result in an animal that is very different. Virtually all Creationists firmly maintain that human beings cannot be descendants of the apelike Australopithecus. And they are nearly unanimous in their conviction that all variations of plants and animals in the world today are not descendants of some primitive, single-celled, primordial life.

The Cambrian Explosion might best illustrate how Day-Age Creationists believe that life has progressed on planet Earth over time. The Cambrian Explosion was a sudden and virtually miraculous explosion of diverse life in the seas, which occurred during the Cambrian Period of the Paleozoic Era, around 540 million years ago. In a period of just

ten million years (which is the passing of but a few minutes on the time-clock of planet Earth), virtually every animal phyla that exists today abruptly appeared in the Earth's oceans.¹ That so many new species of animals could suddenly appear on our planet in such a short time may suggest that throughout the Earth's history, God introduced new species of life at predetermined times. When one species went extinct, God merely introduced a new species to replace it.

The recognized gaps in the fossil record may also provide evidence for this belief. Science will acknowledge that it does not possess a definitive, linear, fossil record whereby one species of animal is witnessed over time becoming an entirely new species. Instead, many species suddenly disappeared in the fossil record (due to extinction), and fossils of an entirely new species abruptly appeared. While science is convinced that many of these new species are descendants of the extinct species, what is often missing is the intermediate species' fossils that can prove the line of descent. Scientists attribute these gaps to a paucity of fossils from that time-period (in some cases this is probably true), and are convinced that many of these intermediate species' fossils will be found in the future.

While the Bible is not very specific about the time of creation for every species of life, it does reveal that for six days, God created. We already know that the days of Creation span long periods of time. And the Bible tells us that on the Third, Fifth, and Sixth Creation Days God created life. Therefore, it is reasonable to assume that God created life continuously throughout those Creation Days. In the case of the Fifth Day, which spanned nearly 500 million years, God may have continuously produced new life in the sea, air, and even the land. Once God introduced a new form of life it would continue to exist by reproduction, which God bestowed upon all living creatures.

A question must be asked at this time. Why did God continuously create new life? The answer is because virtually all life becomes extinct over time. But that only raises the issue of competence. Since God continuously introduced new creatures because His old creatures kept going extinct, what does this suggest about His competency?

That question will only be asked by someone who understands life from a humanistic perspective.

A Scientist-Creationist might explain that God may have been introducing particular forms of life at just the right moment in time to produce a particular result. Without the Cyanobacteria that lived during the Earth's early history, the abundance of oxygen in the atmosphere that we take for granted today might not exist. The coal and oil deposits that modern society requires for fuel are the product

of millions of years of preexisting plant and animal life.

An Artist-Creationist may view the history of life on planet Earth as God's way of displaying and enjoying His creativity and artistry. God continuously introduced new forms of life because He liked to create, and He enjoyed the beauty of the nature that He made. That God declared His creations to be "good" in several places in the Creation Story reveals a God that enjoyed and appreciated the aesthetic beauty of that which He created. Dedicated human artists will continue to express their artistic abilities throughout their lifetimes. God may be understood here as an artist creating one life-form after another, and enjoying the very process.

But perhaps the most compelling explanation would come from the Theologian-Creationist. For God to have created life that would not eventually become extinct would run contrary to the very teachings of the Bible. All the fish in the sea, the birds in the air, and the animals that traverse the land are but temporary creations of God. No mountain range shall tower majestically forever; no forest shall remain thick and green and capable of sustaining an abundance of life. The waters that provide habitation for a multitude of marine life will inevitably evaporate; the barren dunes of an arid desert will some day host a myriad of plush life. Great empires rise upon the ashes of fallen empires, only to add another layer of ash in time. Stars radiate brilliantly for billions of years, yet their ultimate demise is assured the moment of their birth. No man can rise above his own mortality; to be born is to die, and to persist through life is to succumb to death. Even the universe had a beginning, and it too shall have an end. Throughout the teachings of the Holy Bible this theme is often repeated. Nothing shall survive eternity, for all that God creates is ephemeral, as only He has attained immortality.

NOTE:

1. Stephen Jay Gould, "Of it, not above it," *Nature*, Oct 26, 1995, p.681