

De-Evolution

By Craig A. Smith

I have been continually surprised by the Christian response to the idea contained in this brief article. On the one hand, some Christians seem to find the idea threatening, though I confess I do not understand why: I am a strict¹ Creationist and find the theory of macro-evolution to be both theologically impermissible and scientifically incoherent.

On the other hand, many Christians are genuinely surprised by these ideas, having never heard anything quite like them. The very idea that this hypothesis is indeed novel is very perplexing to me. What I will outline in the following few paragraphs seems quite basic and non-controversial to me. I continue to be surprised when people with whom I have shared these thoughts tell me that they have never heard anything quite like it before. I find this disturbing for two reasons. First, the hypothesis presented here is generally both well-known and well-accepted by Christian apologists. Why it has not become more generally familiar to the Christian community at large is a mystery to me. Second, the hypothesis presented here provides an explanation for certain undeniable facts that Christians have tended to ignore because they are felt to be difficult to account for in a creationist model.

I do not have any desire here to address the more esoteric questions of cosmology which so often occupy center-stage in the creation/evolution debate; that is, I will not address here the issue of the age of the universe or the issue of how to interpret the 'days' of Genesis 1. These are significant questions, but they are not my concern at the moment. I am far more interested in a question related to the present state of the world in which we live: *bio-diversity*.

There can be no doubt that Earth is home to a stunning array of life-forms. Certainly on this point both creationists and evolutionists must agree. It is the question of how such diversity came to be, however, which engenders the debate. Evolutionists argue that the various species which inhabit our world developed over a long period of time from common, simpler organisms. Creationists generally insist that this diversity is directly attributable to special acts of creation by God; that is, that each and every "species" is the result of God's direct creative involvement.

To be sure, there have been mediating positions. Theistic evolutionists in particular suggest that God created the basic organisms and the physical laws which have worked upon them to stimulate their evolution into the myriad of organisms we see today. This position has never been a popular one since both staunch evolutionists and staunch creationists tend to perceive it as a capitulation. However, it is a position which has been held by individuals who are quite faithful, both to their Lord and to science.

¹ Strict in the sense that I believe Genesis to contain an historically accurate account of the Creation, rather than a mythical or symbolic account. However, on the basis of strictly biblical considerations, I am not convinced that the "days" of Genesis 1 represent 24 hour solar days. My interpretive agnosticism has nothing to do with capitulation to science or contemporary opinion. I simply do not find that the textual considerations make this the only, or even the most likely, option. It is certainly possible that 24 hour days are in view here, but I feel that excessive attention to this relatively minor detail has obscured some of the more important theological significance of Genesis 1.

This fact has always given me pause. While I do not consider myself a theistic-evolutionist, at least in the normal sense, the struggle which has led such individuals to their mediating position has made me leery of dismissing their ideas out-of-hand. I believe it is quite arrogant to assume categorically that all theistic evolutionists are either following men instead of God (as creationists often assert) or holding to superstitious tradition in spite of scientific advancement (as scientists often assume).

It seems far more intellectually credible to examine the specific issues which give theistic evolutionists difficulty. In my experience, the two most significant such issues are as follows: the question of bio-origins and the question of bio-diversity. Theistic evolutionists simply cannot accept that life has purely naturalistic origins. The notion that life began accidentally is ludicrous to them in the face of the complexity of life and the consequent improbability/impossibility that such organized complexity is the result of random processes. On the other hand, their familiarity with the vast number of species living in the world today, and their observation of the undeniable similarity which exists between many of those species, has made it difficult for them to accept that each and every species is the result of a special act of creation.

I have some sympathy with this last concern, although such sentiment arises from what may well be a very different place. I am a staunch believer in the Bible as the inspired and inerrant Word of God. Among other things, this means that I hold to the literal historicity of events which it describes, and therefore to the literal historicity of the Noah's ark account. But therein lies my difficulty.

I have great trouble accepting the idea that representatives of every species currently extant on earth could have been housed on that vessel. Current lists place the number of known living species in the world today somewhere between 1.5 and 1.8 million. Now, granted, many of these are oceanic and thus need not have been housed on Noah's vessel. Let us suppose that a conservative half of the species represented by the above figure may be discounted for this reason. Moreover, many of the 750,000 remaining species are insects which do not take up much room. However, there are an estimated 4,500 species of mammals alone and these will have taken up much more space than insects, even if we assume that Noah obtained very young specimens.

Now, if we use an absurdly low estimate of the average space each animal would need (say, 1728 cubic inches, 1 cubic foot), then representative pairs of each known species currently living on earth would need 2.6 billion cubic inches of space. Using typical conversions of the cubit² measurements given to us in Genesis, we see that this would be twice what the ark could hold and we still haven't left any room for food stores or for Noah and his family.

The point is this: it is difficult for me to accept that a representative pair of each and every species *currently living on earth* was on the ark.

"But wait!" some will say. "Noah didn't take 'species' on the ark, he took 'kinds.'" Perhaps the equation of these two terms is erroneous. I think this may well be the case, but the suggestion simply raises another question: if not 'species' then what does 'kinds' mean? The answer usually goes something like this: a 'kind' is a sort of proto-animal, a common ancestor possessing a great deal of genetic diversity that manifests itself in different 'breeds.' For instance, Noah would not have had to take pairs of

² A cubit, of course, was a unit of measurement equivalent to the distance from the tip of a man's fingers to his elbow. Obviously, the size of the man would affect the size of this unit considerably.

Dachshunds, Golden Retrievers, Collies, etc. on the ark. He only had to take a sort of proto-dog, which later diversified into the breeds with which we are more familiar.

Now, it is always interesting to note that even on this relatively uncontroversial point, some creationists begin to grow uncomfortable. 'Diversification' and 'common ancestor' sound suspiciously like evolutionary terms, after all. But of course, the point that breeds are a diversification from a common ancestor is incontrovertible. And besides, creation apologists are quick to point out, a Golden Retriever and a Collie can still interbreed; thus they are not a new species, so we're really not borrowing capital from the evolutionary framework to speak of 'kinds' in this way.

Of course, some evolutionists will disagree. True, they concede, a Golden Retriever and a Collie can still interbreed and so are not solid examples of speciation. Or at least not yet, because evolutionary theory argues that, given enough time, Golden Retrievers and Collies will grow further apart from one another even as they grow more distant from their common ancestors. Eventually, the argument goes, Golden Retrievers and Collies will not be able to interbreed anymore and so speciation will have occurred.

Creationists often disagree with this, of course, but the argument is not terribly convincing. Consider, for instance, the Chihuahua and the Great Dane. Genetically, these two breeds are still capable of producing fertile offspring (although one shudders to think what such a mutt might look like). Practically, interbreeding will never occur outside of a geneticist's test-tube; the size differential alone makes natural reproduction impossible. Thus, the Chihuahua and the Great Dane are living examples of animals which clearly originated from a common ancestor but which are now forever segregated.

Evolutionists point to such examples as proof of a process they claim has always been operating on living organisms: a common ancestor produces various 'breeds' which gradually become reproductively isolated, at which point they are designated as different 'species.'

Is this really so different from what creationists claim? Well, yes, it is, but the surface similarity is sufficient to make us realize that creation apologetics are often carried out on the wrong front. It is common among creation apologists to flatly deny that new species can come into existence, but this is a counterproductive approach for two reasons.

First, there is no clearly accepted definition of 'species' in the scientific community. Some define it as *genetic* reproductive isolation (i.e. genetically incapable of producing fertile offspring with another group of organisms), others as *practical* reproductive isolation (i.e. will not mate with another group of organisms under natural conditions). More esoteric definitions exist as well, but they need not be considered here as they are not widely accepted. Application of the various definitions appears to be haphazard at best. There are a number of animals that are officially classified as being a distinct species but which are perfectly capable of interbreeding with other 'species.' For instance, gray wolves and red wolves are classified as distinct species, though they can, and sometimes do, interbreed even in nature. It is somewhat perplexing that gray and red wolves, which can interbreed and which are so physically similar should be classified as distinct species when Chihuahuas and Great Danes are classified only as different breeds within the same species. Clearly, the definition of a species is a matter of great confusion. When creation apologists insist on maintaining that no new species are coming into existence, they are drawing lines in the sand and wasting their time. In practice, the terms

‘breed’ and ‘species’ overlap considerably. We simply ought to point this out and move on.

Second, even if one accepted the somewhat stricter genetic definition of a species (i.e. genetically incapable of producing fertile offspring), then there is no particular reason why the appearance of a new species ought to be unexpected. In fact, given what we know about selective breeding, quite the opposite should be true: we ought to be surprised if no new species appear from among the various breeds. What I mean is this: as breeds diversify from their common ancestor, their initial, God-given genetic variety is significantly reduced. Getting a Chihuahua to look like it does requires removing from the Chihuahua gene pool a large number of dominant and recessive traits that might manifest themselves in undesired morphology (shape/appearance). Consequently, you get Chihuahuas, or Great Danes or any other breed, largely by paring away the undesired genetic material; that is, by *removing* the unwanted traits from a given population's gene pool. The process is more akin to sculpting than to building. What makes one breed distinct from another is that one possesses genetic material that has been bred out of another. This material was present, though perhaps unexpressed, in the common ancestor and has now been teased out and made to express in one line of its descendents.

While this process can be useful in breeding certain animals that are useful in specialized situations, it has some unfortunate side effects. The reduction of genetic variety means that specific breeds are often less able to adapt to changing environmental conditions. Genetic traits that would have made it possible for some of their offspring, who manifested the particular variety, to survive the changing environment, have been eliminated from the gene pool. Thus, no offspring will be produced with the trait that will allow them to survive the new conditions. It is a truism in the biological sciences that the more specialized a population is (e.g. the more its genetic variety has been trimmed either naturally or artificially) the more unlikely it is to survive changing environmental condition. Moreover, specialized breeds often suffer from other debilitations. This is why so many purebred animals have difficult health issues: hip dysplasia, dermatological woes, generally weak constitutions, etc. The process which has produced their unique forms has reduced, and, in some cases, eliminated, other genetic material which governs less visible, but nonetheless crucial, phenotypic and morphological development.

Given these facts, it should not be surprising that sometimes one breed becomes unable to reproduce with another breed, even though descended from the same common ancestor: some crucial genetic material, which makes the production of fertile offspring between the branches possible, has been lost. This appears to be what has happened with the horse and the donkey. A horse and a donkey can produce offspring, a mule, but the mule is always sterile. Why? Given the material regarding breeds as discussed above, we would hypothesize that it was because some necessary common genetic material between the horse and the donkey has been lost over time. And this is precisely what genetic analysis has found. Specifically, donkeys are missing³ two entire chromosomes which the other breeds of horse still possesses. Consequently, there are sections of the DNA chains

³ Actually, the chromosomes are not really missing. It would be better to describe them as “broken” because the genetic material which once comprised them is still identifiable as genetic “rubble” in the expected locations. At some point in history, a breed of horse suffered some genetic damage which somehow became normative for the whole population of that breed; i.e. the donkey.

which cannot match correctly during fertilization and the blank areas are apparently related in significant ways to the mule's inability to reproduce.

In such cases, are we giving away the farm if we concede that horses and donkeys may legitimately be classified as different species? I do not think so. On the contrary, I believe creation apologists may be able to use such a case quite profitably. This brings me to the heart of my hypothesis.

You may have noted that I spoke above about new species 'appearing.' I deliberately avoided use of the classic evolutionary term 'arise.' Typically, evolutionists speak of a new species 'arising' because the metaphor is in keeping with the central claim of the theory; namely, that life as we see it has evolved upwards from a simple organism to gradually more and more complex ones.

For a naturalistic evolutionist, speciation is more than the reproductive isolation of a breed from the other breeds which derive from a common ancestor. Rather, it is the gradual *accumulation of new traits*. Many of these traits must be due to the addition of new genetic material to the population. If this were not the case, then there would be no basis for claiming that the original common ancestor of all living things was, in any way, simpler than its descendents. However, no-one has ever shown how such new genetic material could be added. On the contrary, genetic experiments seem to show that the addition of material to a DNA sequence is virtually impossible under natural conditions.

Now, if the 'new' traits are simply phenotypic expressions of genetic traits already present, but unexpressed, in the parent organism, then nothing has really been gained. Likewise, if one breed-line becomes distinct from others because the genetic material necessary for successful cross-breed reproduction has been lost, we cannot properly say that a new species has 'arisen' or even 'evolved' (as the term is typically used). It would be far more proper to say that a new species has 'de-evolved,' for it is actually *less* complex and *less* suited to long-term survival than its predecessors.

So, my hypothesis is this: the current state of bio-diversity is a result of de-evolution. God created proto-animals in a variety of 'kinds.' These kinds each possessed all of the genetic variety that has come to manifest itself in the different 'species' that populate the earth today. Many animals which give surface appearance of having had a common ancestor probably did; that is, they are different breeds descended from the same proto-animal. In many, if not most cases, these breeds are still capable, at least on the genetic level, of reproducing fertile offspring, thus re-combining their genetic material to create offspring which are somewhat closer genotypically, to their original created ancestor. In other cases, the breeds have de-evolved into what may be called new species because they have lost the genetic material that would have made the production of fertile offspring between them possible.

This appears to me to be an acceptable middle ground between the current poles of the creation/evolution debate. This hypothesis of de-evolution seems to account for many of the observations most cherished by evolutionists while giving away nothing that is crucial (or even tangential) to the biblical belief in special creation. In fact, this hypothesis seems to square quite well with the biblical account of the Fall, in which Adam's sin threw all of creation into a downward spiral. We should not be in the least surprised to find that the tremors of our rebellion can be felt even at the genetic level.

We do not live in a world of greater *complexity*, as the evolutionists claim, but in a world of greater *complication*. The two are not quite the same thing, though it is

understandable why scientists working from a strictly materialistic foundation might confuse them.

What I've said here is not entirely new, of course. In important ways, what I have outlined above is merely a refinement of the hypothesis regarding the 'proto-animals' on Noah's ark that I have heard appeal to on numerous occasions. However, I believe what I am suggesting is both a refinement and a significant expansion of that idea. I welcome readers' feedback on this proposal. I can be reached at craig@shepherdproject.com.

God bless!