Speciation Conference Brings Good News for Creationists

Poorly-informed anti-creationist scoffers occasionally think they will 'floor' creation apologists with examples of 'new species forming' in nature. They are often surprised at the reaction they get from the better-informed creationists, namely that the creation model depends heavily on speciation.

It seems clear that some of the groupings above species (for example, genera, and sometimes higher up the hierarchy) are almost certainly linked by common ancestry, that is, are the descendants of one created ancestral population (the created kind, or *baramin).* Virtually all creation theorists assume that Noah did not have with him pairs of dingoes, wolves and coyotes, for example, but a pair of creatures which were ancestral to all these species, and probably to a number of other present-day species representative of the 'dog kind'.

Demonstrating that speciation can happen in nature, especially where it can be shown to have happened rapidly, is thus a positive for creation theorists. A commonly heard objection is that, surely, speciation is evolution, and that the creationists are postulating even more rapid post-Flood evolution than evolutionists do! In reply, it should be pointed out that the difference is all about genetic **information.** The 'big picture' of evolution is that protozoa have become pelicans, palm trees and people. Thus it must have involved processes which, via natural causes, increased the genetic information in the biosphere.

The creationist assumes that real, substantive increases in information (that is, specifying for an increase in what might be called 'functional complexity') will never arise without intelligent cause. Speciation within the creationist model will therefore be expected to occur in the absence of any increases in the information within the biosphere, and thus can properly be classified as non-evolutionary.

Of course, such changes (for example, speciation as a result of horizontal changes in information, or as a result of a mutational defect with a loss of information) do not in themselves offer evidence **against** 'big picture' evolution, since they can easily be assigned a place within the overall model. However, one needs to emphatically point out that they do not suffice to demonstrate the validity of such evolutionary belief, since they can be just as easily assigned a place within a creationist model.

Note also that some anti-creationists have mockingly claimed that for a number of species to descend from one pair would require that pair to have huge super-chromosomes to carry all the information needed. While one cannot say dogmatically that existing knowledge of genetic mechanisms is **definitely** sufficient to provide for all the post-Flood variation needed (and in fact, some creationist thinkers have postulated that there might have been as-yet-undiscovered mechanisms as well), I suggest that the converse has not yet been demonstrated. Maximum heterozygosity would surely give a massive variation potential. Normal selectionist/adaptionist pressures, via Mendelian reshuffling and sorting of that information could presumably see substantial diversity arise within subsets of that information, just as artificial selection has shown itself capable of generating many different dog varieties, for example, in a few generations.

However, the reality is that, in the case of postulated post-Flood variation in the creation model, the subgroups have the status of separate species. That is, even though they may in some instances interbreed in captivity, they generally do not do so in the wild. Thus mechanisms of speciation, particularly rapid speciation, far from causing creationists to shudder, are actually of great interest. In this light, it was fascinating to read special reports on a major scientific conference on speciation held in Asilomar, California in May.[1,2]

Taking the most straightforward modern understanding of a species (though not the only one, and not without its own problems), as a group of organisms which can interbreed in nature and does not naturally and freely interbreed with another, it is not hard to see how this sort of variation (from selection of information subsets) could easily lead to reproductive incompatibilities (as could mutational defects and information losses, of course). It may be, for instance, that sheer size differences would allow a population of chihuahuas and Great Danes to be classified as separate species, if found in the wild.

Since the cutting off of populations via physical barriers (for example, mountain ranges) can easily be seen to isolate subsets of genes, with the so-called founder effect, subsequent loss of some genes through drift, etc., understanding how such physical barriers could give rise to rapid speciation has always been fairly straightforward (allopatric speciation). Nevertheless, the amount of post-Flood

speciation must have been staggering, particularly among the insects, and it is hard to see how there could have been that many physical barriers, cut-off founder or relict populations and the like in this time. Therefore, it is both encouraging and fascinating for creationist biology to note that there is now an increasing acceptance that sympatric speciation is actually quite common. That means that a population may split into two species even while living in the same area, with no separation or physical barriers.

At the conference in question, evidence was presented of this sort of thing having happened with ease in populations of certain types of fruit-eating insects which used the fruits of their host plant for courtship displays and mating. If one group of insects, used to eating a certain type of fruit, starts to try a new host plant, then food choice becomes linked with mate choice, and so reproductive isolation can begin. It is interesting that no-one put forward any evidence that any new genes arose by mutation — no new information seems to be required for any of these mechanisms. Fish living in the same lake can also, it seems, become reproductively isolated by way of genetically determined variation in food choices, which leads to different sizes, and thus to differing mate choices.

In another instance, several species of wasps appear to have been thrust apart from a single ancestral wasp population by way of nothing more than differing species of bacteria in their gut. Somehow, the bacteria in the females destroy the DNA from males of the other species. Other mechanisms of speciation mentioned were as simple as variations in the song of a bird, or in a single pigment gene.

Hybridisation — the mixing of genes from two distinct species — has been observed to form a third, reproductively distinct grouping. Creationists would hold that the two species which hybridised were likely to have previously formed from a single ancestral population by way of non-evolutionary (that is, non-information-gaining) speciation. (The hybrid species is not necessarily an exact reversion to the ancestral form, of course, since this may have given rise to several other species since the original creation.) Once again, no information appears *de novo* which was not already in the biosphere; all that has happened is that two sets of existing information have commingled.

This clearly has no apologetic value for macroevolution, therefore, but is yet one more mechanism by which the creationist can account for the enormous increase in post-Flood variation.

REFERENCES

1. Gibbons, A., 1996. On the many origins of species. **Science,** 273:1496-1499.
2. Morell, V, 1996. Starting species with third parties and sex wars. **Science,** 273:1499-1502.

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QUOTABLE QUOTE: Darwin versus Paley

The speculations of ***The Origin*** *of Species turned out to be wrong . . . It is ironic that the scientific facts throw Darwin out, but leave William Paley, a figure of fun to the scientific world for more than a century, still in the tournament with a chance of being the ultimate winner*

Hoyle, Fred and Wickramasinghe, N. Chandra, 1981. **Evolution from Space: A Theory of Cosmic Creationism,** Simon and Schuster, New York, pp. 96-97.