GENETICS: ENEMY OF EVOLUTION

by Lane P. Lester, Ph.D.

Creation Research Society Quarterly 31(4)

Genetics and evolution have been enemies from the beginning of those two concepts. Gregor Mendel, the father of genetics, and Charles Darwin, the father of evolution, were contemporaries. At the same time that Darwin was claiming that creatures could change into other creatures, Mendel was showing that even individual characteristics remain constant. While Darwin's ideas were based on erroneous and untested ideas about inheritance, Mendel's conclusions were based on careful experimentation. Why then did Mendel's work lie unappreciated for some 35 years? No one really knows; therefore, anyone is free to speculate. My own speculation is that Darwin's ideas were immediately adopted because they gave fallen men a justification for ignoring their Creator, even for denying His existence. But by the end of the 19th century, other research had so clearly confirmed the principles discovered by Mendel that evolutionists had to incorporate these principles into their theories. They did so, and have continued to do so, on a very selective basis. Only by ignoring the total implications of modern genetics has it been possible to maintain the fiction of evolution.

Having said the above, I do not plan to say much more about evolution. I would prefer to talk about creation and the testimony of genetics to the power and glory of the Creator. Too long have creationists concentrated on pointing out the fallacies of evolution, and spent too little time demonstrating the truth of creation. Indeed with some justification, the evangelists of evolution prefer to call us anti-evolutionists rather than creationists. Dr. William Mayer claims repeatedly that there is no creation model and that anti-evolutionists merely call attention to weaknesses in the evolution model. Of course, if there are only two competing concepts, destroying one is almost as conclusive as proving the other. But it is probably true that creation will never receive anything like its proper acceptance until it is fully developed as a foundation for modern science. Tom Bethell, writing on economics in **National Review** said, "The discrediting of a theory, whether in science or economics, must necessarily await the arrival of an alternative hypothesis. Darwin's theory of natural selection, for example, exposed in recent years as devoid of meaning because of its circular nature, survives in practice for lack of a rival" (Bethell, 1980, p. 1562). I believe that the lack of a creation-based science has helped evolution maintain its total ascendancy, even among those who would be philosophically inclined to reject it.

Fortunately, the wind is shifting. More and more creationist scientists are concentrating on building the creation model rather than just tearing down the evolution model. Research is being done at both secular and Christian colleges and universities that seeks to rebuild science on a foundation of creation. I say "rebuild" because modern science was developed primarily by creationists who knew that a rational God had created a rational universe, and that rational man could, through observation, experimentation, and reason, learn much about the creation.

Now let us sample some of the evidence from genetics as it helps us develop a new biology based on creation rather than evolution. It may be helpful to arrange this evidence under the four sources of variation: environment, recombination, mutation, and creation. A combination of these four sources can explain any and all differences between any one creature and another.

Environment

By environment I mean all of the external factors which influence a creature during its lifetime. For example, one may have darker skin than another simply because he is exposed to more sunshine. Or one may have larger muscles because he exercises more. Or one may have a greater resistance to disease because he eats right. Now these environmentally-caused variations may have great importance for the individuals who possess them. But they have no importance to the history of life, because these variations die with their owners; they are not inherited. In the middle 1800's some of the scientists who had rejected the Creator believed that variations caused by the environment could be inherited. Charles Darwin accepted this fallacy, and it no doubt made it easier for him to believe that one creature could change into another. He thus explained the origin of the giraffe's long neck through "the inherited effects of the increased use of parts" (Darwin, 1958, p. 202). In seasons of limited food supply, giraffes would stretch their necks for the high leaves and these longer necks would be passed along to the offspring. One who is studying the living world on the basis of creation is not tempted to fall into this fallacy because a perfect creation would already contain perfect variations without the necessity for new ones.

Recombination

The second source of variation is recombination. This involves shuffling the genes and is the reason that children resemble very closely their parents but are not exactly like either one. The discovery of the principles of recombination was Gregor Mendel's great contribution to the science of genetics. Mendel studied seven pairs of traits in the garden pea. In each of these he showed that while traits might be hidden for a generation they were never lost, and when new traits appeared it was because their genetic factors had been there all along. Recombination makes it possible for there to be limited variation within the created kinds. But it is limited because virtually all of the variations are produced by a
reshuffling of the genes that are already there. A few examples might help us appreciate the limited nature of variation through recombination.

Many varieties of chickens have been produced from the wild jungle fowl, a lot of variation. But no new varieties are being produced, because all of the genes in the wild jungle fowl have been sorted out into the existing varieties, limited variation. From the science of plant breeding we have the example of the sugar beet. Beginning in 1800, plant breeders sought to increase the sugar content of the sugar beet. And they were very successful. Over some 75 years of selective breeding it was possible to increase the sugar content from 6% to 17%. But there the improvement stopped, and further selection did not increase the sugar content. Why is that? Simply because all of the genes for sugar production had been gathered into a single variety and no further increase was possible.

Finally, let us consider an example of recombination provided for us by Charles Darwin. During his voyage around the world which began in 1831, Darwin observed many fascinating plants and animals. But none were more fascinating that those he saw on the Galapagos Islands. Among these were a group of land birds, the finches. In this single group we can see wide variation in appearance and in life-style. Darwin provided what I believe to be an essentially correct interpretation of how the finches came to be the way they are. A few individuals were probably blown to the islands from the South American mainland, and today's finches are descendants of those pioneers. However, while Darwin saw the finches as an example of evolution, we can now recognize them merely as the result of recombination within a single created kind. The pioneer finches brought with them enough genetic variability to be sorted out into the varieties we see today.

Mutation

Now to consider the third source of variation, mutation. Mutations are mistakes in the genetic copying process. Each living cell has an intricate molecular machinery designed for the copying of DNA, the genetic molecule. But as in other copying processes mistakes do occur, although not very often. Once in every 10,000-100,000 copies a gene will contain a mistake. The cell also has machinery for correcting these mistakes, but some mutations still slip through. What kinds of changes are produced by mutations? Some have no effect at all. The genetic code has a certain amount of redundancy, so that some slight changes in the DNA produce no change in the end result. Other mutations produce so small a change in the end result that they have no appreciable effect on the creature. But many mutations have a significant effect on their owners. Based on the creation model, what kind of effect would we expect from random mutations, from genetic mistakes? We would expect virtually all of them to be harmful, to make the creatures that possess them less successful than before. And this prediction is borne out most convincingly. Some examples help to illustrate this.

A rather interesting mutation is albinism, found in many plants and animals. This particular genetic mistake prevents the production of color. Various harmful side effects are seen in albino animals, such as impaired eyesight. But in plants albinism is lethal. Without chlorophyll photosynthesis is impossible, and as soon as the food from the seed is gone, the seedling dies. For a thorough study of the effects of mutations **Drosophila melanogaster**, the common fruit fly, is unsurpassed as a source of information. Geneticists began breeding the fruit fly soon after the turn of the century, and since 1910 when the first mutation was reported, some 3000 mutations have been identified (Lindsley and Grell, 1967). All of the mutations are harmful or harmless; none of them produce a more successful fruit fly--exactly as predicted by the creation model.

It seems appropriate at this point to take a side trip and consider the control of mutations. Certainly if mutations were free to spread through populations of organisms, life would soon disappear. It is one of the roles of natural selection to prevent the spread of mutations. We must not allow the fact that circular reasoning is present in discussions of natural selection to cause us to deny that it is a real and an important factor in the history of life. The fact that it was Charles Darwin who called our attention to natural selection is more a comment on the sorry state of creation science in the mid-1800's than it is a comment on the validity of the concept.

Natural selection is no more or less than the label we give to what now seems to be the obvious fact that some varieties of creatures are going to be more successful than others, and that they will contribute more offspring to future generations. Everybody's favorite example of natural selection is the peppered moth of England, **Biston betularia**. As far as anyone knows, this moth has always existed in two varieties, speckled and solid black. In pre-industrial England, many of the tree trunks were light in color because of the color of the bark or of lichens growing on the bark. This provided a camouflage for the speckled variety, and the birds tended to prey more heavily on the black variety. Moth collections showed a vast preponderance of speckled over black. When the Industrial Age came to England, coal was one of the primary sources of energy. Since there was then no Environmental Protection Agency, the burning of coal put a layer of soot on everything, including the tree trunks. The trunks were blackened, and the camouflage of the peppered moth was reversed. Then the black variety was hidden, and the speckled variety was conspicuous. Soon there were many more black moths than speckled. This might be considered as the positive role of natural selection. As populations encounter changing environments, such as that described above or as the result of migration into a new area, natural selection increases the combinations of traits which will make the creature most successful in its new environment. The negative role of natural selection is seen in the elimination or minimization of harmful mutations when they occur. The disadvantage of the mutation prevents its spread through the population.

Is there no such thing as a beneficial mutation? I'm afraid that I have to depart from my creationist colleagues that maintain the impossibility of such an occurrence. A beneficial mutation is simply one that makes it possible for its possessors to contribute more offspring to future generations than do those creatures that lack the mutation. For example, there occurred in Florida in 1914 a mutation in the tomato which caused a change in its growth pattern, making the tomatoes much easier to harvest. Because of human selection for this mutation, it has been spread throughout the cultivated tomato. The mutation for antibiotic resistance in bacteria is certainly beneficial for those bacteria whose environment is swamped with antibiotic. Of course, none of these types of mutations are relevant to any ideas about one kind of creature changing into another.

A type of change of a rather more significant nature involves the decrease or loss of some structure or function. Darwin called attention to wingless beetles on the island of Madeira. For a beetle living on a windy island, wings can be a definite disadvantage. Mutations producing the loss of flight could be helpful. Similar would be the case of sightless cave fish. Eyes are quite vulnerable to injury, and a creature that lives in pitch dark would benefit from mutations that would reduce that vulnerability. While these mutations produce a drastic and beneficial change, it is important to notice that they always involve loss and never gain. One never observes wings or eyes being produced on creatures on which they have never existed.

Creation

And now the fourth and final source of variation: creation. Why is it a necessary part of the history of life? Simply because the first three sources of variation are woefully inadequate to account for the diversity of life we see on earth today. An essential feature of the creation model is the placement of considerable genetic variety in each created kind. Only thus can we explain the possible origin of horses, donkeys, and zebras from the same kind; of lions, tigers, and leopards from the same kind; of some 118 varieties of the domestic dog, as well as jackals, wolves, and foxes from the same kind. As each kind obeyed the Creator's command to be fruitful and multiply, the chance processes of recombination and the more purposeful process of natural selection caused each kind to subdivide into the vast array we now see.

References

1. Bethell, Tom. 1980. "The Death of Keynes: Supply-side Economics," National Review, December 31, 1980, p. 1562.
2. Darwin, Charles. 1958. _On the Origin of Species By Means of Natural Selection_, The New American Library.
3. Lindsley, Dan L., and E. H. Grell. 1967. _Genetic Variations of Drosophila Melanogaster_, Carnegie Institution of Washington Pub. No. 627.

More information can be obtained by writing to:

Creation Research Society
P.O. Box 969
Ashland, OH 44805-0969
USA
(email: CRSnetwork@AOL.com)