SELECTION: ARTIFICIAL AND NATURAL

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Conditions in nature are such that some animals and plants thrive while others do not, indeed, some even die. A common expression is that nature selects some to live and discards others. Something of the sort does take place; but the result is far from that which evolutionists have alleged; indeed, it is diametrically opposite. Instead of producing new and improved types, leading for instance to the gradual development of man from a single cell like the amoeba, natural selection brings about the discarding of accidental cripples and abnormal individuals, thus maintaining a standard.

Claims of Both Sides

According to R. L. Wysong, "The assumption is made that mutations and natural selection have caused the evolution of life from the cell to man."¹ It was this assumption which enabled Charles Darwin to convince many persons that living things, including man, originated from mundane occurrences rather than from divine planning and acts. During the previous 150 years some philosophers had favored such limitation of divine power, but faith in God was so widespread that they influenced only a few. Darwin's idea was faulty, as will be shown below.

Ever since ancient times, persons who worked with plants and animals have chosen the individuals which pleased them for "seed", to become the parents of the next generation. By this process, called *artificial selection*, small changes in plants and animals have been made to the extent that they please man better. The word "artificial" as used here does not mean delusive or unreal, but performed by human art.

Darwin observed artificial selection as practiced by his countrymen and made the extrapolation that *natural selection* is a similar process; and many persons have accepted evolution because of this claim. Darwin assumed also that the rate of change is the same in one year as in the next; so that in a million years there was a million times as much change as in one year.

It has been widely mentioned that there is prodigality in reproduction; thousands of seeds, eggs, and sperms are produced for every one which grows into an organism. Creationists see that this abundance is a hedge against extinction. The death of the last individual of a species is a calamity indeed. It would seem that if evolution were true a lost species might be restored by variation from another species, but this has not occurred and is not expected to occur.

Coming now to the true reason for and effect of natural selection, Henry Morris has stated, "That is, the genetically damaged members of the population would be eliminated, hopefully, before the damage could permeate the entire population."² Natural selection is a process which gives conservative rather than creative results. Both natural and artificial selection, especially the latter, may raise the average of the group and may even produce an individual plant or animal which excels in some particular, but these processes do not produce a new and improved gene. This limitation will be explained below. The interpretation of natural selection which is given here is not the discovery of the author nor of any modern geneticists. Edward Blyth wrote in 1835, 1836 and 1837, using natural selection to explain why species remain constant. Darwin knew Blyth's idea, for he corresponded with him; but instead of accepting his explanation, "... the famous evolutionist turned Blyth's idea on natural selection around no less than 180 degrees. Instead of natural selection serving to keep the species constant, Darwin made it into *the* way that change or evolution took place."³

Types of Change

Evolutionists of the nineteenth century had very dim ideas about the gene, the structure which influences a trait from parent to offspring. The clearest ideas were held by Gregor Mendel, but his work was unknown to most of the others until 1900. The gene is now known to be a code, a structure much like a word; and any one gene seldom changes when it is reproduced.

Actual variations in living things are of three kinds. The first of these is due to environment, including food, weather, competition and accidents. Such variations are often called acquired characteristics. Changes caused by environment may be large, especially in plants, but scientists now agree that such changes are not passed on to the next generation. Their presence is only for one generation unless the same environment prevails in the future.

The next type of change arises from the presence or absence of certain genes. These structures, located in the cord-like chromosomes in cells, are not all active in a given plant or animal. One person, for instance, may have brown eyes but also latent genes for blue eyes; another has blue eyes because he has genes for that variation only.

Traits such as size or production are governed by groups of genes, some for large and others for small size or production. With a constant environment it is assumed that the largest individual has the most genes for large size; therefore it is selected for seed. In such cases selection continued for many generations may bring about considerable change; but breeders find that there is a definite limit. When all the genes for the most desired expression of a given trait are assembled in one group of plants or animals, that group cannot be improved any further by selection. Examples are found in sugar beets, beans and corn (maize).⁴

The third type of change is different in that it affects the genes directly. Such a change is called a mutation; and is heritable unless it causes death, as it often does. There is general agreement that a large percent of mutations are harmful to the plants or animals; al-

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though some mutants, such as stringless beans and seedless oranges, are valued by man.

A. H. Sturtevant evaluated such facts as follows:

The studies just discussed [on *Drosophila* flies] lead to the conclusion that there is a long-time stability in the genetic basis of particular characters, but such a stability has often been questioned. ... The more recent bio-chemical data also favor the idea of the great stability of genetic systems.⁵

Darwin's Explanation

In view of the above facts it is plain how inadequate were the ideas of Charles Darwin on the effects of selection! He lumped all changes together, having no understanding of the differences of the three types. He seemed to have no mental image of the gene, yet felt certain that variation occurred continually in every possible direction. He believed in the inheritance of acquired characters, and accepted as valid data reports which now would be discarded as being inadequate.

For example: "We hear from an excellent horticulturist, Downing, that in the United States, smoothskinned fruits suffer far more from a beetle, a Curculio, than those with down."⁶ Darwin secured most of his data on selection from his uncritical neighbors as they worked in *artificial* selection; then he concluded that *natural* selection produces similar results. He reasoned:

Can the principles of selection, which we have seen is so potent in the hands of man, apply under nature? I think we shall see that it can act most efficiently. ... Can it, then, be thought improbable, seeing that variations useful in some way to man have undoubtedly occurred, that other variations useful in some way to each being in the great and complex battle of life, should occur in the course of many successive generations?⁷

Darwin's logic is faulty. Man has kept the mutant seedless orange, propagating it by grafting, whereas it would not have survived naturally, showing that one cannot infer events in the natural environment from the methods of man. Stringless green beans are preferred for eating; but this type has nothing to favor its success in "the complex battle of life." Man's selection has produced the Jersey cow, which gives much more butterfat than needed by calves, and which would not survive alone in a jungle. The famous Darwin equated two processes, the purposes of which are distinctly different: the welfare of the predator, man, (the term is not too strong here), is distinctly the opposite of that of the organism.

Artificial selection started with plants and animals which had the cripples and weaklings eliminated by natural selection. Then man selected from among them individuals which best served his needs and whims. Keeping in mind the same ideal for a number of generations he secured plants and animals which produced an increased amount of food or fiber or conformed to a fashion. In doing so he produces creatures which are less fit for survival in the wild state. Garden plants are produced by seedsmen who have selected during many years. Yet a highly selected pure line of either plants or animals is more likely to be wiped out by disease or parasites than an unselected group. Artificial selection gives no proof for the exaggerated claims for natural selection.

Verdict of Modern Genetics

Every student of the subject recognizes that selection effects some change, but there has been much disagreement as to the degree. Of course the shifting of the average may involve only the relative abundance of types in a population and this is no real change at all. This is the truth about the much-touted light and dark moths in England.

Personal opinion and fashion of thought have affected discussions. Sturtevant maintained, "De Vries was inclined to minimize the effects of selection and argued that it could produce nothing new. Johannsen had a similar view; but this was so contrary to the point of view of Darwin, Weismann and the whole generation that followed Darwin that it was not generally accepted. There followed a series of selection experiments by numerous workers."⁸ The present author agrees with De Vries and Johannsen and has written of these experiments in another place.⁹

The most potent help for deciding the possible extent of change is information on the nature of the gene, of which Darwin had no knowledge. L. H. Snyder and P. R. David state,

... there grew a belief that selection could improve a race indefinitely. The method by which selection operated was not understood until after Mendelian inheritance was understood, but was thought of as a more or less mysterious process which could be effectively continued as long as desired. With the advent of scientific knowledge of genetics, however, came the understanding that selection is actually a sorting and preserving of certain combinations of genes to the exclusion of others.¹⁰

It is not denied that Darwin made some good observations, but his ideas most at variance with the creation model came from his groundless assumptions. He wrote about the survival of the fittest, but it often has been remarked that he did not account for the *arrival* of the fit except by a bland assumption that it is simply natural for variation to occur in every direction.

Actually genes are stable at least 99 times out of 100. Instead of changing they alternate with each other: genes for large size may be numerous at one reproduction while, due to a different mating, genes for smaller size may have the plurality at another time. Such alternation of the hereditary factors, Darwin mistook for change. An actual change in a gene is a mutation and such a change is nearly always a loss.

For the degree of change of amoeba to man to occur it would be necessary to assume that greater complexity affords greater fitness. Yet daisies, very complex plants, are shaded out by pines, which are considered more simple and lower in the scale of evolution. The opossum is not specialized in structure, having a small brain and legs which are not specialized for anything in particular. Yet the range of the opossum has extended from Maryland into New England and when it was introduced into California the opossum increased in numbers.

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In another respect genetics poses a problem for the doctrine of evolution of living things by natural selection. A gene has been found to consist of groups of molecules: respectively adenine, thymine, cytosine and guanine. These four serve as a kind of alphabet and the genetic message is formed by the order of the groups. Just as t-o-n is distinctly different from n-o-t, so a change in a gene, a mutation, is disruptive of the usual message. Darwin's fantasy of formation of more complex classes by selection of chance changes is the denial of sound genetics. The logical conclusion is that the types of living things, along with the genes, were planned and formed by the Creator.

No one has observed the formation of an improved type by selection; improved in organization and in the struggle for existence. Until this is observed, evolution by selection will continue in the limbo of wishful thinking.

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THE ANCIENTS AND THEIR USE OF METAL

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The author maintains that the division of history and prehistory into such divisions as the stone. bronze, and iron ages, with subdivisions, is at best an over-simplification, and at worst is quite erroneous. For different materials were in use in different places at the same time; and even at the same place different materials were in contemporaneous use for different purposes. Also, the facts that iron rusts away, while bronze and stone do not, and that the ancients. not being as wasteful as we, did not leave so much scrap about, mean that archaeological samples may give a distorted picture of the kinds of metal and other materials in use.

The re-interpretation of history, proposed here, fits very well into the Scriptural chronology.

In the course of the investigation, many curious facts are discovered about the ancient use of metals.

A. Introduction

In 1819 a Danish archaeologist, Christian Thomsen, proposed an idea so devastatingly logical that no respectable author of a book on ancient history, anthropology, or archaeology would dream of not using it. Man first passed through a Stone Age, then a Bronze Age, and finally an Iron Age. The Iron Age closed about 333 B. C. at the time of Alexander the Great, after which the world entered into more modern times.

Each of the three ages was divided up rather neatly into Early, Middle, and Late periods. With a bit of a flair for sophistication, the Old Stone Age was called the Paleolithic (Old Stone), the Middle Stone Age became the Mesolithic, and the New Stone Age became the Neolithic. Some critics attempted to flaw the beautiful symmetry of the pattern by inserting a Copper Age or Chalcolithic Age between the Stone Age and the Bronze Age. Others inserted an Eolithic Age before the Paleolithic Age.

The original nine periods proved to be inadequate in many ways, and so a marvelous assortment of Roman numerals, capital and small letters of the alphabet, and Arabic numerals was used to subdivide the periods further and further. This method has infinite possibilities for expansion. No speck of dust, no pottery sherd, no stone flake or chip need be unassigned. For the archaeologist there is a place for everything in the neat scheme, and everything is put into its proper place.

The whole scheme is a triumph for man's penchant for classifying. Only one little ripple mars the placid surface of the plan. It does not work.

Based on an elaborate set of assumptions and many decades of the most painstaking archaeological study, the Bronze Age in Palestine is said to have run from 3150 B. C. to 1200 B. C. The Early Bronze Age (EB) is given as 3150-2150 B. C. The Middle Bronze Age (MB) lasted from 2150-1550 B. C., and the Late Bronze Age (LB) was from 1550-1200 B. C.

Similarly the Iron Age was divided into Early (1200-1000 B. C.), Middle (1000-587 B. C.), and Late (587-333 B. C.). In other parts of the world and with different authorities dates for the stone and metal ages differ widely.

Sometimes the dates given for the various ages are said to be approximate, especially for the stone ages. In much of the literature, however, this qualification is not mentioned. To the uninitiated the impression is unwittingly given that at a certain point in time, the bugles sounded around the world with the message: As of 0600 hours tomorrow morning the Middle Bronze Age will begin.

In this paper I shall look more closely at the origin of the concept of the stone and metal ages, their validity, and at a number of curious things reported around the world having to do in some way with metals.

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