FIXITY AMONG LIVING THINGS

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Because of efforts to synthesize Greek thought with early Christianity, the Christian church from the beginning of the fifth century to the seventeenth century taught a doctrine of theistic evolution. After a brief return to a belief that Genesis is simple history, Christians from the seventeenth to the nineteenth centuries again waivered from the doctrine of special creation by teaching extreme fixity in created kinds. Close study of the Old Testament today brings out the point that Genesis does teach a fixity of living things. However, the fixity is not at the level of the individual, but at the level of the kind. Thus new individuals are always of the same kind as their parents.

History tells us that from the time of Christ to St. Augustine (354-430 A.D.), even men who were particularly interested in natural science were only slightly concerned about the beginning of plants and animals. They busied themselves with obtaining a knowledge of organisms as a whole, and then with their structure and physiology before questions of their origin came seriously to mind. In the Christian world it sufficed that God had created living things.

St. Augustine, Bishop of Hippo in northern Africa, seems to have been the first Christian definitely to become concerned about the manner of origin of plants and animals. Characteristic of the habit of the fourth and fifth centuries after Christ, and in fact of the whole Middle Ages period, Augustine searched authority in the form of the writings of the ancients for light on origins. In this search he came upon the natural philosophy of Aristotle who had lived in the fourth century B.C.

Because of Aristotle's belief in an Intelligent Designer, a Prime Mover in nature who had created plants first, then animals, and finally man, an Efficient Cause who was responsible for lawbound existence, a God who left nothing to chance, Augustine thought he recognized a similarity between Aristotle's philosophy and the account of origins in Genesis, and thus received an explanation of the cause of the world which was actually very much in disharmony with the simple history related in Genesis.

Aristotle Not Special Creationist

Aristotle was a theist but he definitely was not a believer in special creation; nor was he an evolutionist. According to his philosophy God had, because of the resistance of matter to form, an innate quality which made it possible only to shape by degrees from lower to higher types, gradually over great stretches of time developed most of the complex forms from the first primordial soft mass. Those larger animals which had not been derived from the simpler forms had come into being by an abiogenesis in which

frogs, snakes, and eels were produced spontaneously from the mud.

Nevertheless, according to Aristotle's philosophy nothing happened by accident but was the result of the activity of the Prime Mover. There is room for a difference of opinion as to whether he considered God as constantly working in nature, or as having set up a pre-ordained harmony, but beyond question Aristotle was a theist and, according to Augustine's opinion, his philosophy was acceptable to the point of view of the Catholic Church.

Because of Augustine's high authority in the Church his opinion was accepted and, in the fifth century, Aristotle's explanations of natural science became the orthodox view of the Catholic Church on these matters. This view of a creation gradually derived out of chaotic material continued on in the Church after Augustine's death, promoted by such scholastics as Joannes Scotus Erigena, Roscellinus, Albertus Magnus, and William of Occum, and most effectively in the thirteenth century by Thomas Aquinas, one of the highest authorities in the Church. The impetus given this doctrine of theistic evolution by Aquinas continued strongly in the Church until the seventeenth century.

Theistic Evolution Taught

Thus it was that the Christian church from the beginning of the fifth century to the seventeenth century taught the doctrine of theistic evolution. Henry Fairfield Osborn, a devout evolutionist, in commenting on this said:

We know that Greek philosophy tinctured early Christian theology; it is not so generally realized that the Aristotelian notion of the development of life led to the true interpretation of the Mosaic account of the Creation.

There was, in fact, a long Greek period in the history of the Evolution idea, extending among the Fathers of the Church, and later, among some of the Schoolmen, in their commentaries upon Creation which accord very closely with the modern theistic conceptions of Evolution. If the orthodoxy of Augustine had remained the teaching of the Church, the final establishment of Evolution would have come

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far earlier than it did, certainly during the eighteenth instead of the nineteenth century, and the bitter controversy over this truth of Nature would never have arisen.

But the Aristotelian philosophy of derivative origins did not go unchallenged in the Church beyond the beginning of the seventeenth century. Several influential men in the Church began to speak out against a developmental creation and in favor of an acceptance of the account of Genesis as simple history.

Chief among these was the Spanish Jesuit Francisco Suarez (1548-1617), who prepared a treatise entitled *Tractatus de opere sex Dierum* in which he discussed the problems which arise out of the Mosaic account of Creation. In this work he reviewed the opinions of Philo and Augustine and pointedly rejected them. In the words of Thomas Huxley *(Critiques and Addresses, 1873)*, "As regards the creation of animals and plants, therefore, it is clear that Suarez, so far from distinctly asserting derivative creation, denies it as distinctly and positively as he can; so that he is at much pains to refute St. Augustine's opinion."

Genesis Taught as History

The success of this intra-church movement, and also a movement among the protestants, to restore belief in a literal Genesis is portrayed in the following statement by evolutionist Osborn:

As late as the seventeenth century, the Jesuit Suarez and others contended that the Book of Genesis contained a literal account of the mode of Creation, and thereby Special Creation acquired a firm status as a theory in the contemporary philosophy. Singularly enough, Milton's epics appeared shortly afterwards, exerting an equally profound influence upon English Protestant thought, so that Huxley has aptly termed Special Creation, "the Miltonic hypothesis." Thus the opportunity of a free, unchecked development out of natural science was lost.²

The truth is that all classes of theologians departed from the original philosophical and scientific standards of some of the Fathers of the Church, and that Special Creation became the universal teaching from the middle of the sixteenth to the middle of the nineteenth centuries. It is the recent establishment of Evolution which had led to the revival of Augustine's broad and true interpretation.³

The lover of truth rejoices that there was a return to a belief that Genesis is simple history, but the same god of deceit who had made such good progress in foisting his substitute doctrine for special creation upon Christians from the fifth to the seventeenth centuries, achieved success from the seventeenth to the nineteenth centuries in another area of the battleground over origins by causing the schoolmen in the church universities to teach that there was an *extreme fixity* implicit in the assertions of Genesis with regard to reproduction in the created kinds.

Suarez himself did not hold the view of extreme fixity in the production of new individuals within the kinds, but as was done later by the creationist Linnaeus, he pointed out that a commingling of groups within the kinds could generate new "species." He gave as illustrations of this change within original units the production of the mule within the horse kind, and of the leopard within the cat kind.

Extreme Fixity Promulgated

However, in the interpretations of the schoolmen the fixity of form and structure implied in Genesis became interpreted more and more narrowly, and at the same time more widely promulgated. Finally, as late as the 1820's it was taught by the theologians of Cambridge University that, according to Genesis, offspring were as identical to their parents as coins are identical to the die that stamps them. Furthermore unbelievably at Cambridge it was taught that God had leaned over the parapet of heaven and set each species in the earth in the very place where it was found in the 1820's.

It was this extremely narrow interpretation of Genesis which Darwin understood to be the actual teaching of Genesis when he set out in 1831 on his five-year voyage around the world. During this voyage Darwin saw empirical evidence of the development of new varieties and of migration of animals and plants over the earth. No wonder he decided that the account of Genesis was completely unreliable. Thus assumedly liberated from all Scriptural restrictions on beginnings, he began to build an hypothesis of developmental origins which recognized no law-bound force in nature, an hypothesis which eventually led him to the conclusion that the heredity of man was common with that of the lower animals.

Today as we study the Old Testament in an effort to discover what it really teaches on the matter of origins, we find that on Days Three, Five, and Six plants and animals were created instantaneously from the substances of the earth after their kinds. On Day Three all kinds of plants appeared, varying in form and structure from the giants of the forest to the lichens adorning their bark and to violets blooming at their feet, from minute ocean plankton and lowly carpeting land types and herbaceous forms to fruitbearing trees. At the close of Day Six all kinds of animals swam in the water, creeped, walked, and skipped lightly upon the land, climbed the

trees, and flew through the air. The Genesis text apparently indicates that every basic type of organism was in existence by the close of the sixth day.

Genesis Kinds Were Created

A study of the lists of clean and unclean animals in Leviticus 11 reveals that the Hebrew word *miyn*, kind, in some cases may be so restricted in scope as even to suggest the creation of smaller groups inside larger groups—as for instance the distinguishing of the falcon kind (v. 14) from the hawk kind (v. 16) within the larger basic group of diurnal birds of prey, and in delimiting the bald locust kind from the locust kind (v. 22).

Thus when Genesis says that kinds were created it may not necessarily mean that only the very large basic types were represented on the earth at the close of Friday, but the word translated "kind" may also refer to the creation of at least some of the constituent subordinate groups within the larger kinds.

At any rate, Genesis 2:1 tells us that by the close of the sixth day God had *finished* His work of creating. Because of the physiological constitution of the created groups, the quota of basic types of living things was filled before the setting of the sun on Friday evening so that from that time onward, except by the interposition of the Creator Himself, no new basic kinds could appear upon the earth.

When the scientist, or anyone else for that matter, reads Genesis, we recognize that he should use care lest he add words which are not actually spelled out there. This adding of words was done by many theologians during the century which preceded the publication of Darwin's Origin of Species. These churchmen represented Genesis as asserting that both plants and animals brought forth (reproduced) after their kinds. Occasionally modern scientists apparently read Genesis in the same way, as is illustrated in the following assertion recently published by a scientist in his discussion in the area where science and religion meet: "The only biological unit identified therein is called a kind, and at least ten times in the first chapter of Genesis it is mentioned that the various types of living creatures were to bring forth 'after their kind'.'

Reproductive Behavior Analyzed

Actually a careful reading of Genesis reveals that no assertion in just so many words is made regarding the reproductive behavior of the created kinds of animals. However, with regard to the plants we read in Genesis 1:11, 12, RSV, "The earth brought forth vegetation, plants yielding seed according to their own kinds."

In a survey of thirty-five Bible commentaries in order to get the opinions of Bible commentators on whether Genesis 1:11,12 does or does not refer to reproductive behavior, it was found that eleven made no comment on these verses, two were evolutionist, and one thought the verses meant only that the plants were made "according to their various species."

However, nineteen of these thirty-three commentaries, that is, nineteen out of the twenty-two who commented on these verses, stated definitely that Genesis 1:12 affirmed that plants were made in such a way as to bring forth after their kinds. It follows quite naturally and reasonably that if such were the case with plants, then so might it be true with the animals.

Some who have studied this problem of the probable reproductive behavior of the animals in the beginning, appear to feel that because Genesis does not state in just so many words that animals brought forth after their kinds, and because it may be argued that nothing is said about how plants reproduced, then we are free to come to the conclusion that Genesis gives us no clue on reproductive behavior. The impression this point of view leaves is that because of this lack in the record we are free to surmise that God may have created organisms in such a way as to make it possible for one basic kind, through hybridization or mutation, to give rise to a new basic kind.

If this opinion were correct we would not be able to show from Genesis that development of new basic types since Creation is not scripturally possible. If new basic types could be produced since Creation then evolution would be a natural result. This point of view would therefore appear to encourage acceptance of organic evolution.

"After Their Kinds"

However, God in His wisdom did not leave the problem as open and indefinite as that. A very important point in the Genesis account that is too often overlooked is the clear statement repeated at least ten times in the first chapter to the effect that plants and animals were created after their kinds. This oft-repeated assertion gives us a very important key to what was created, and to the reproductive characteristics of these groups of organisms.

If the Record had merely said "God created plants and animals," the topic would have been left open so that man could surmise just about anything he wished as to the way in which the kinds of organisms now on the earth came into being, so long as he remembered that God made them. But as we have noted above, we are told quite in detail that *all kinds* of plants appeared on Day Three, and that *all kinds* of animals appeared on Days Five and Six.

Possibly only he who has studied the laws of reproduction of kinds of organisms can comprehend the specific and satisfactory nature of the Genesis account when it records that the *kinds* were created before the close of Day Six, and that God then *ended* His work, a work which had included the creation of all the kinds.

We might profitably ask ourselves, How do we identify the different kinds of plants and animals? To be more specific, How do we tell a pumpkin from an oak, a mole from an elephant? I believe not one of us is so self-depreciating as to feel that he could not distinguish these kinds.

But how *do* we distinguish them? By observing their differences in size, in form, in structure, and in growth habit. These distinguishing characters become manifest in each kind as it develops from the fertilized egg. The pumpkin becomes a pumpkin and an oak an oak because of the chemical differences in the hereditary determiners (the genes, the DNA of the cells). The pumpkin is limited in its reproduction to the production of individuals of the pumpkin kind only because of the specific and peculiar chemical quality of its hereditary substances.

This is true of all the kinds, oaks, moles, elephants and all. Every man who has studied reproduction at all and even those who have been normally observant, know that if kinds are present then there is a reproductive behavior in each kind which makes it capable of producing only individuals of the same basic kind, a reproductive behavior which sets it apart both in the present and for all the future from all other kinds. Thus the man kind has from Creation produced and will continue to produce to the end of time only human beings, beings which cannot be crossed or confused with any other kind of animal.

Genesis Teaches Kind Fixity

Thus it is that we recognize that Genesis does *teach a fixity* in the world of living things which has continued since Creation Week. But the fixity is not at the level of the individual so as to make offspring as like their parents as dies and the coins they stamp, but rather at the level of the *kind* so that new individuals are never anything other than of the same kind as their parents. For example the fixity is at the level of the dog kind and not at the level of the kinds of dogs.

The variation that can occur within some kinds is amazing, and we are delighted as we study the many varieties (call them "species" if you will) of sorts such as men, dogs, cats, pigeons, finches, tortoises, roses, gladioli, iris, bluegrass, and hawthorn trees. But the farther we push our investigation the clearer the natural principle becomes that kinds can reproduce only after their kinds. This biological research illuminates the statements of Genesis, and demonstrates that at Crea-

tion the Creator did create a fixity into the world of living things by creating *all kinds* of plants and animals.

There is nothing in the creation account to deny the possibility that in some instances several subordinate groups may have been created in certain of the kinds. We may speculate rather harmlessly that the horse, the ass, and the zebra could illustrate one such case, and that within the rose kind (not the *Rosaceae* or rose family of the botanist with its pears, apples, juneberries, hawthorns, strawberries, raspberries, blackberries, dewberries, cinquefoils, agrimony, plums, cherries, etc.), but the cultivated rose of the rose breeder, the Creator may have beautified the earth with many cross-fertile strains of roses, or even with breeds of roses which were not interfertile.

Because the respective kinds of plants and animals continue through all generations due to the peculiar, specific, and isolating chemical qualities within each kind, it would be expected very commonly to find that the varying members of a kind would all have very nearly the same chemical constitution, a constitution which commonly would make them compatible and crossable with other breeds, races, or varieties of the same kind. In many instances, even after these thousands of years of mutational change and deterioration, the Genesis kind and the modern "biological species" would be identical. Identity here would not exist where mutational change has accomplished the development of reproductive isolation between the members of two groups within the same Genesis kind.

The Bible-believing biologist rejoices that God has made it very clear in Genesis that a fixity was built into the world of living things by a creation of organisms in all their kinds. It would appear indeed to be a strange divine activity which would go to all the meticulous care of production of hundreds of thousands of kinds of plants and animals and make no provision to prevent an immediate welter of hybridization which, in a few generations, would quite obliterate the lovely pattern of creation.

This clear record of Genesis leaves the student of origins facing no dilemma in the matter of how much evolution has occurred among plants and animals. He knows that no blood-relationship exists between the basic types of our day, and that any similarity between kinds is significantly the result of the fact of one Creator with a master plan which may have included many archetypes.

References

¹Osborn, H. F. 1894. From the Greeks to Darwin. New York and London, Macmillan, p. 7. ²Ibid., pp. 7,8. ³Ibid., p. 85. ⁴Ibid., p. 84.