In some ways the Genesis account is fairly neutral on the question of whether or not the appearance of ascending orders of life was by evolution. If by evolution, it was by a modified form; one modification would be that the processes were not by chance or without purpose but under the initiation of God's words. On the other hand evolutionary aspects can be seen in such expressions that "The waters are to bring forth swarms of living creatures", and "The land is to bring forth living creatures according to their phylum". Even man was "formed (a process) from the ground" showing a common chemical origin with the land fauna. For Dr. D.C. Spanner that "incomparable fragment", the Genesis epic gives an evolutionary picture, but others would deny this, as the whole progress was by God's direction.

Many scientists are having a re-think, and in any case the old Darwinian model has been greatly modified by two factors. Firstly, our knowledge of Mendel's genetics and Crick's DNA demonstrates that nothing can happen in a species which does not happen in DNA. Environment can only select. Secondly, it has become plain that new and higher orders appear in groups comparatively suddenly. Consequently some have called it "explosive evolution", a seeming contradiction in terms. It would be better to associate these appearances with the ten times that God spoke. In other words such complicated creatures were the result of re-coding of DNA, the language of life, when the dramatically advanced orders appear e.g. vertebrates, amphibians, reptiles, birds, mammals, man.
General Review of Genesis/Science

The newer scientific approach is giving us a more Genesis-like picture. The old conception of evolutionary trees arranging fossils to develop smoothly from one branch into another, is being questioned. It is seen that this is not the palaeontological picture. The overall picture is that of a series of jumps to major new types, so that some are postulating a theory of "explosive evolution". It is not now sufficient to excuse ourselves by saying that we merely need to look for more fossils. That has been done, yet the picture is the same.

Professor Sir Fred Hoyle and Professor C. Wickramasinghe, eminent Cambridge scientists reflect the change, "Contrary to Darwin's theory . . . evolution on earth was a series of leaps".¹

Our object is to demonstrate the remarkable correlation between Science and Genesis, irrespective of whether the process of existence was by evolution or other means. I have, however, observed that the fossil picture gives a pattern of the major groups of new advanced animals appearing together. Between them and their assumed ancestors, millions of years earlier in each case, there is a lack of linking fossils to show evolutionary progress. This is a consistent story throughout the fossil record.

First appear all the non-backboned animals in the Cambrian. Then after 150 million years there appear, simultaneously, five kinds of backboned fishes. Then another 100 million years later five kinds of amphibians appear. 70 million years later appear four kinds of reptiles; 200 million years later still appear the mammals, then 40 million years on appear the apes, and finally man appears after a further 10 million years.

Between these appearances we seem to have no fossil links or intermediary types. The position is well presented by Anderson and Coffin, who are professional palaeontologists, in "Fossils in Focus".² They maintain that the main groups have been created separately and
independently. Gordon Barnes opposes this theory in a lucid review in *FAITH AND THOUGHT*, "Theistic Evolution v Creation". Barnes is a biologist of London University whose writings show that it is possible to be a Christian and an Evolutionist. Those who have felt the pressure of evolutionary propaganda have been grateful for this. Barnes acknowledges "the dearth of pre-Cambrian fossils, the paucity of intermediate types between major taxonomic groups", and laments "The speculative construction called phylogenetic trees often presented as fact in elementary textbooks". But he claims there are some intermediate fossils, and refers to the following examples:

**Asheaia** is a fossil from the Cambrian and although it is a member of the Phylum "Arthropoda" and class Onychophora, it resembles both the annelids and the arthropods. It seems to me that it would have significance if it were in the pre-Cambrian rocks where the links should appear, but actually it does not.

Another fossil Barnes mentions is **Seymouria** which from its appearance seems halfway between the amphibians and reptiles. If its fossil actually occurred halfway between the groups this evidence could be convincing, but it actually occurs after the reptiles have appeared; yet it is to the reptiles that the fossil type is assumed to be ancestral. This fossil is only quoted therefore, on the assumption that because its morphology is suitable as a link it probably has ancestors some forty million years earlier. When, however, other examples are given, and one finds that their fossils do not occur in the rocks in intermediary position the objectiveness of the argument diminishes into philosophic presuppositions.

A similar case is the well known duck-billed platypus, alive today, which is claimed as an excellent example of a "living fossil" because it shows what an intermediary fossil should be like which would link reptiles, mammals, and birds. Few realise, however, that no fossils of the duckbilled platypus are found earlier than two million years ago, whereas it should be found in strata 230 million years old, between the groups which it should link. When this is
repeated with other examples, one begins to wonder whether the pattern asks for some other explanation, an explanation which could equally apply to comparative anatomy, embryology, etc. But to assume that because a particular morphology must have been present in the right position merely because it was a good intermediary example (though out of sequence) seems to indicate that a wrong methodology is being followed. Unfortunately few students have time to check the juggling of biological examples with the actual place of occurrence in the fossil record to see how weak the argument is for the existence of intermediary fossils.

Barnes is understandably unhappy that Anderson and Coffin's creation model provides no theory of mechanism by which the creatures came into being. This is a relevant observation. The theory of natural selection by the environment of mutation, gene drift, etc., provided a working hypothesis which appealed to naturalists; unfortunately no genetic experiment so far is able to indicate how a major new creature (e.g. flying insects and birds) can be produced. Experiments demonstrate that selection can only give a limited range of adjustment for survival in a changing environment, neither has evolution an adequate mechanism to suggest for the origin of the basics of matter, life and spirit. The first two at least are beyond empirical observation even for evolutionists, - even Crick has had to resort to space fiction for the origin of the cell and Levi-Setti for the origin of marine animals. And as for the origin of matter, Fred Hoyle, the renowned scientist who believed matter created itself now believes in a Creator and his recent book in co-authorship with C. Wickramasinghe says that his student generation "was brain-washed into accounting for origins without God". Hoyle also resorted to space fiction for origins "by the arrival of new spores from space", but then reached the conclusion that whatever it was in space "could only have been worked out by a superior intelligence... in fact, the higher intelligent Creator". "The only logical answer to life is creation - and not accidental random shuffling". As Lovell says, we go beyond these points into philosophy or theology. Anderson and Coffin are merely extending those untestable origins to include the appearance of the major taxonomic groups. But I
have suggested that the scriptures do indeed reveal a mechanism, namely the provision and periodic adjustment of the DNA code, for it was between each major taxonomic group that God spoke. If we cannot accept that, then it must be difficult to explain the Virgin birth (which was not by parthenogenesis - see *Who Was Adam?* page 139), or the Christian's resurrection when a change will come to the natural body in a fraction of time.

**Extra-Cosmic Recoding**

The recoding theory postulates that there were periods when a Superior Intelligence external to this cosmos or world order, recoded the DNA in order to supply to the next higher stage of life all the intricate mechanism which was required to make that advance a viable one. This explains the sudden appearance of groups of new forms of life in the fossil record.

This has sometimes been misrepresented by those who have not understood the argument. The theory is not based upon gaps in knowledge, waiting to be filled with further finds. The rocks are not empty before the "explosion" of higher groups. It is the intermediate "links" which do not appear. The fact that fossils of established types still continue in the rocks up to the sudden appearance of new higher orders is a recorded absence of intermediary fossils, not a gap in knowledge. That this fact is misunderstood is betrayed in the remark "A God who is only a hypothesis to explain what we do not understand is recognisable as the God in the Bible". But then Boyd states the very reason for atheism today "Science has no need of God as a hypothesis". It would seem to be the admission that it renders God as unnecessary, but for the fact that Prof. Boyd believes the Bible. Nevertheless for me this paradox removes the effectiveness of the scriptures as evidence of the Creator. It has been the effect of demonstrating the correlation between Genesis and science that (in my experience) has brought many atheists to become convinced Christians. It has been the failure to use this evidence which has removed the cutting edge of Bible evidence.
To postulate a creation which once set going, denies to God any operative role, is that outlook of which St. Peter warned that, in the last days, scepticism would deny that God had recorded by his word at various points in earth's history. Sceptics prefer a theory that "all things continue as they were from the beginning of creation" (2 Peter 3:4) without the "interference" (so called) of God's word. If God's role as Creator is confined to the initial fiat at the beginning in the sense that all the mechanism required for evolution was implanted then, it seems to imply that God rested all seven days, and not after the sixth day/age.

REFERENCES

1) Hoyle and Wickramasinghe, "Why neo-Darwinism does not work", University College, Cardiff, 1982.


5) Pearce "Who was Adam?", Paternoster, 1973.