UNSOLVED PROBLEMS OF EVOLUTION - 1

Recent Developments. The scientific background to what I have to say about evolution is influenced by the fact that the latest discoveries in biology have not been good news for evolution, since they have revealed that the presence of design in nature is much greater than was suspected before. Vital processes in the cells of living bodies can now be seen to be conducted by systems and structures which are apparently not capable of evolution. For this reason, I shall be more free to undertake a critical treatment of this subject without appearing to be anti-scientific, and at the same time I shall suggest a different way of interpreting the evidence which is favourable to evolution.

Those who are familiar with the literature around this subject will know that the time is long past when it was simply a clash between Darwinians and Christian creationists. During the last twenty-five years, some of the most powerful attacks on Darwinian evolution have come from authors who were not creationists, but who had some more esoteric evolutionary ideas of their own. Notable among these are Fred Hoyle and Chandra Wickramasinghe, with their *Evolution from Space,* and Gordon Rattray-Taylor, with his *The Great Evolution Mystery.* But regardless of their views on creation, these individuals have built up a formidable case against the belief that living things could have resulted solely from a history of random mutations and natural selection.

When I was at school, one never heard any hint that there were scientific objections to evolution, and it may be still the same in schools today. As a result of this, people get the idea

that the only critics of evolution are religious fundamentalists, and so evolution is treated as though it were a law of nature like the Law of Gravity. It is in connection with this question of law that the subject of unsolved problems takes on its true significance. Real natural laws solve all the problems to which they apply. A supposed law which was challenged by problems may thus not be a law at all, or at least there would have to be a lowering of scientific standards if it were retained. Among the criteria for a natural law as understood by science, I would emphasize just three, which are: 1) That it should be experimentally verifiable; 2) That it should be predictive; and 3) That it should not be subject to exceptions or unsolved problems.

It can be shown that Darwinian evolution does not meet any of these criteria. Firstly, all its decisive events must have happened too far back into the past for us to be able to detect them, let alone study them. Secondly, it hardly needs to be argued that evolution does not predict anything. There is no way in which our derivation from the apes can indicate what we in turn will evolve into. Similarly, it can give no idea as to what should be the next new species to evolve from the apes, or from any of the other species from whence evolution is believed to have advanced before the apes existed. Thirdly, the fact of its being laden with unsolved problems is increasingly becoming common knowledge, and that will be the subject of what follows.

It has been observed by some of its modern critics that evolution is a hard theory to test because it is short of precise statements, and for this reason I shall start by indicating a way by which we can dispel some of the protective fog with which this theory is surrounded.

Two Meanings of Evolution. Evolution must be the most debated theory in modern times, and yet the issue involved seems to be as undecided as ever, despite all the effort applied to it. Part of the reason for this is that the word "evolution" is nearly always used as though everyone were agreed as to what it meant. This means that in discussions, the assumed definitions of it can switch from one thing to another without anyone realizing that this is happening. When this happens, it is to the advantage of evolutionists, since it means that they can shift their ground without appearing to do so. To remove this source of confusion, I intend to divide the idea of evolution into two main subcategories which I shall frequently call "permutative" and "generative" evolution respectively. These two terms are equivalent to the terms "micro" and "macro" evolution which are already in use, but which I think do not create a sufficiently clear idea of the distinction, since both alternatives are equally a matter of physical events on a macroscopic scale.

The terms "permutative" and "generative" in this context arise from a specially important distinction. "Generative" evolution, as its name implies, is a process which advances across all the barriers of species and genera, and is committed to a starting point which is strictly one of atoms and molecules, that is,

basic components which are neither alive nor conscious. The emergence of life and consciousness on this basis would be owing only to the different degrees of complexity with which the molecular components are arranged. This rising complexity is believed to be what gave rise to molluscs, fish, amphibians, reptiles, birds and mammals, with each one of these orders arising out of the one before it, and being transformed into the one next after it. This is why this kind of evolution must be *generative* through and through, each higher level of complexity developing out of the one before. Its conclusion is that this process has finally produced ourselves here and now, although this last step has special problems of its own which I will look into later.

In contrast to this, "permutative" or micro evolution is not committed to any particular kind of origin of life because it does not imply a production of species and genera as such. Instead, it refers to modifications confined within the limits of species, owing to rearrangements among their genes, whence the permuatative idea. Another important difference from "generative" evolution is that this kind is not irreversible and not tied to any particular direction of change. While the factor of transformation is common to both kinds of evolution, its meanings are quite different in the two cases. In the one case, it means the production of new order where there was none before, and in the other it means new manifestations of pre-existing properties latent in species, which drastic changes in their living conditions may bring about.

Examples of this include changes in the colouring of moths, following changes in the colouring of their environment. In any moth population, a small minority will be lighter or darker than the norm. When the lichens on which they rested were darkened by industrial pollution, birds were able to prey on the lighter ones, and so the dark ones gradually became the norm. Since clean air was enforced, this evolution has been reversed. Another such example is the evolution of a new kind of grass on poisoned soil. One grass seed in every nine thousand is not affected by the copper salts in question, and so a new growth of grass has been observed, deriving from this small sector of the original gene pool. Here again, there is no new species, but rather the emergence of a possibility latent in an existing one.

Parallel remarks could be made in connection with strains of bacteria which have become resistant to antibiotics, and with the so-called "super-rat" which a few years ago had become resistant to Warfarin. The numerous varieties of dogs which have been bred can be called cases of humanly-induced permutative evolution. Last, but not least, the fourteen varieties of finches which Darwin found in the Galapagos islands, on which he founded his theory, no more have to mean generative or macro evolution than do breeds of dog like the Alsation, the terrier, and the dachsund.

It can be seen from these examples that nearly all the direct evidence for the actual occurrence of evolution falls in the category of permutative evolution. This is the reason for the confusions which arise when the permutative and generative kinds

are not distinguished, that is, when undeniable evidence for permutative evolution is unthinkingly equated with evidence for generative evolution. All the evidence for evolution presented by Darwin the scientist was of the permutative kind, but it was the Darwin the science fiction writer who stated without proof that that phenomenon was also what gave rise to the species themselves.

Here is the reason for attaching importance to this distinction. If it is asked why generative evolution may not come about through gradual accumulations of permuative evolutionary changes, the answer is that no number of changes which remain in principle reversible (like the varieties produced by dog-breeding) will bring us any closer to irreversible change. Besides this, permutative evolution depends on the suppression or even the elimination of genes (as with the new kind of grass), to allow others to come into prominence. This means new combinations, but not the production of any new genes, and such changes cannot give rise to anything truly new. For this reason, the belief that macro or generative evolution is produced by the permutative kind is on a level with a belief that re-shuffling a pack of cards will finally produce another pack of cards.

Since all the direct evidence for evolution lies on the "permutative" or micro side, therefore, generative evolution lies almost wholly in the realm of speculation, which is something evolutionists do not want the public to know about.

As long as the single word "evolution" is used to cover all cases, conclusive argument will thus be impossible, and alternatives to the Darwinian orthodoxy are apparently excluded. This situation is defended by a standard argument, which has been expressed as follows:

"The neo-Darwinian process, for all its flaws and abuses, remains the only viable framework within which to view life." (B.Leith, *The Descent of Darwin*, p.107).

It would follow from this that a denial of neo-Darwinism would amount to a ban on the attempt to achieve a scientific explanation of living things. Since this is a typical point of view, we must briefly consider what is meant here by scientific explanation. In practice it means "any explanation which derives life and consciousness from matter alone." This can only amount to question-begging where it is assumed before any explanation that nothing more than matter can be involved. This is to assume that only material categories are absolute, and therefore not in need of explanation. In this case the proposed idea of a scientific "explanation" of life could only be a question-begging restatement of the same position in different words.

Here we are faced with the question whether the essential reality is material, with life and consciousness floating on it like a kind of mirage, or whether life and mind are the essential reality to which matter is peripheral and subordinate. It is doubtful whether there are any purely physical data which could compel us to decide either way; the real decision must be metaphysical. The assumption in favour of the greater reality of matter results from the tendency of all common sense thinking,

which is always focused on material objects and not on what does the focusing. The reasons for this reduce to two: it is less intellectually demanding, and is better adapted to the activities required for meeting life's material needs. Its merits as theory, however, are nil.

Generative evolution is sometimes defended on the grounds that it can be combined with belief in God and in Providential design. In this case, the improbable changes it requires would become probable if they were God's way of inclining the process of evolution towards higher forms of consciousness. In support of this Professor Keith Ward has argued that a purely natural evolution could give rise to nothing but ever more powerful predators, with no consciousness beyond what they needed to hunt their prey. If, however, we include God with evolution, the changes which gave rise to reason and the moral sense would not be improbable, and man's central place in the universe could be restored on a new basis.

But however attractive this may seem, the scientists are bound to reject it for their purposes, as they must reject anything which requires Divine intervention to make it work. Besides, there is something contradictory in the idea that God, who is a pure spirit, should create a world which consisted wholly in arrangements of matter. A spiritual world order would be impossible in such a world, and the creature would have no means or basis of relating to the Creator, at least, if they had to have anything in common. Even if that were surmounted,

the fact would remain that any divinely-guided generative evolution would in reality have to mean *creation,* albeit in slow motion and with an amount of waste which would be enough to argue against the intelligence and power of such a creator. It is taken as an axiom that God does not make rubbish, but if this idea of evolution were true, He would in fact do so, and on a vast scale.

Another common reflection on evolution is that astronomers are in no doubt that the universe has evolved, and so why should the living world not have evolved as well? The idea of cosmic evolution preceded Darwin by two or three generations. In the second half of the Eighteenth Century, Kant and Laplace established the nebular theory of the world's origin both philosophically and scientifically. Kant said of the primal nebula that "This condition seems to me the simplest that can succeed the Void." The astronomers then accepted the idea that the nebula would condense into small cores of mass as a result of molecular collisions, and that these would build up into stars and planets.

There is, however, a deep difference between cosmic and biological evolution, such that neither can require the other. On the cosmic scale, evolution consists in a redistribution of matter and energy which remain more or less constant in quantity.

Only motion and geometry are involved in this, and it begins and ends on the material level. No barriers are crossed between non-living and living, unconscious and conscious. For this reason, cosmic evolution is much more like permutative evolution than the generative kind. Even if the biosphere is a microcosm in relation to the universe as a whole, this correspondence need not therefore involve more than micro or permutative evolution.

Early Arguments Against Evolution. Since the main direct evidence for evolution is of the permutative variety, and is not controversial, the objections I shall outline here will apply only to the generative kind, and will not conflict with genuine science. Serious problems with the idea that one species could give birth to another were admitted by Charles Lyell the geologist and Edward Blyth, both older contemporaries of Darwin. Either of them could have brought out a theory of evolution before Darwin did so, but they refrained because they thought the problems were insoluble. For Lyell, the transition from one species to another by gradual change must mean a series of intermediate forms of that species, none of which could be adapted to its environment. The original species and its supposed successor are both by definition adapted, of course, but none of the intermediaries between them could be so, or else the process of change would have to stop at the first of them which *was* adapted.

This implies that none of the intermediaries between the first and second species would be able to survive during the period of transition which they were supposed to be bridging. If, as Fred Hoyle has expressed it, each adapted species is related to the unadapted as a mountain peak to the lowlands around it, its survival depends on its retaining this position, and not falling to the lower ground. On this basis, the change to intermediate species would be like a descent to the plain between the mountains before another could be ascended. If these unadapted mutants could survive, therefore, it would make nonsense of the idea that survival depends on adaptation. The adapted species resulting from evolutionary changes would thus not be preferable to their unadapted predecessors, whence all such changes would, in evolutionary terms, be causeless.

Edward Blyth (1) concentrated on a different problem. He observed that species always retained their identities, even in situations where it would be in their interests to change. Typically, each species inhabits an area where conditions are most favourable for it. At the boundaries of this area, where conditions get too cold, too hot, and so on,

(1) A contemporary of Darwin's, who was the first to publish the idea of natural selection. But Blyth was religiously orthodox and thought that natural selection was to *conserve* the natural order, not change it, which was why Darwin would never acknowledge Blyth's priority.

their numbers soon thin out and no more of them are to be found. However, if evolution were a universal reality, this would not happen. Those members of a species in disadvantageous territory would evolve until they were adapted to its hostile conditions. As a result, every species would diversify until it covered the whole world. Needless to say, we do not encounter an Arctic palm tree, a tropical penguin, or even a grass-eating panda. Species are flexible, but only within narrow limits.

In confirmation of the above, according to Douglas Dewar, biologists have found that where a species occurs on every continent, such as the wingless insect, the spring-tail, their members remain so much the same that one cannot tell which continent a specimen of any one of them was taken from. Likewise for species which exist only in a few places, but which are extremely remote from one another.

For such reasons as these, Blyth decided against evolution. Darwin had read the papers of Lyell and Blyth, but nevertheless went ahead with his theory of evolution, even though he had no solution to these crucial problems. The evidence for evolution he presented in *The Origin of Species* was regarded as inadequate by the experts of the time, who according to Michael Denton (see his *Evolution: A Theory in Crisis*) included Richard Owen, Louis Agassiz, Georges Cuvier, and H.G.Bronn, the greatest naturalists of the time; their

opposition was on a basis of facts, not of religous beliefs. All Darwin had shown were changes in the modes of adaptation of various species, but not the rise of adaptation itself. His observations could not, they thought, suffice for the great edifice of theory he wished to build on them.

However, Darwin was rescued from the experts by the public, which was excited by the idea that there was any evidence at all for evolution, and which was willing to believe that the facts advanced by Darwin were a promise of much more. To this day, evolutionists draw a veil over the original scientific opposition to Darwin. All the opposition is made out to have been religious, and for this purpose the debate between Bishop Wilberforce and T.H.Huxley is always brought out to show how unscientific objections were demolished by science, as though there were no others, and when in reality it was Wilberforce’s arguments which won the debate.

The Fossil Record. Besides those just referred to, there are numerous arguments against generative evolution which are in principle decisive, and require only the *caveat* that they could be affected by discoveries as yet not made. Against that limitation, however, only one of them need be effective without qualification in order to rule out generative evolution. The fossil record has a special importance in this regard. From the start, it was clear that the

fossil record could only support the idea of evolution in a general way, with its vista of different kinds of life arising in succession. It offered no evidence for the transformation of one species into another by gradual change, and Darwin had to dispose of this by claiming that the fossil record was extremely incomplete, and that no doubt much of it was still undiscovered in any case. With this alleged incompleteness, it could still support evolution with its successions of extinct species, while we could assume that its silences meant nothing.

If in fact the fossil record was complete, or even 90 per cent complete, the result would be fatal from a Darwinian point of view. The questions are then, on the one hand, what grounds can we have for thinking it to be complete, and if, on the other hand, it was true that many more fossil species were yet to be found, what difference would it make if they *were* found? If the neo-Darwinian theory was true, and if the fossils known to us really covered all the life-forms which had existed, we should find the differences between species, genera, families, and so on, growing steadily smaller the further back in time they occurred. In reality, there is no such progression, nor any "pre-specific" or "pre-generic" life among the fossils. The earliest species are as clearly differentiated from one another as those of today, and the general range of complexity in living things changes very little over hundreds of millions of years. Each fossilized species

appears without showing the means whereby it was produced. If this difficulty of showing how any fossilized life-form could be produced by or descended from another were not great enough, it is compounded when one is required to show how the higher groupings of genera, families, and orders could also be descended from one another.

One reason why we have no right to assume that this must mean that all the vital evidence has been lost, *is* that there are good reasons for thinking that the fossil record known to us is in fact largely complete. Conditions for this can be specified. We need only suppose that one member of every species in a million is ever fossilized, and that of these fossils, only one in a million is ever found. On this basis, each species would have to produce at least one million million individuals for us to be sure of finding a fossil of it.

This number can be reached surprisingly easily. Suppose a species with an average population of only three million, existing for a period of seven million years (a short life-span for a species). Even if we put the length of one generation as long as twenty years, the total of generations would be seven million divided by twenty, or 350,000, which multiplied by three million gives more than the target figure, ie. one million and fifty thousand million specimens. If we reduced the length of a generation from twenty to two years, the billion could be realized in a mere 700,000 years, which

would be nothing by geological standards. In reality, fossils normally occur in great abundance for each type represented, and not in ones and twos, partly because of the great lengths of time for which species exist. For these reasons, the incompleteness of the record as demanded by evolutionists, though it may sound reasonable, is in reality no more than a question-begging dogma, not a rational argument.

What if, in spite of everything, this argument was wrong for some reason, and there *were* large numbers of hitherto unknown fossilized species still to be found? Such discoveries need not alter the present picture of the past, except in detail. If the fossils still awaiting discovery turned out not to be intermediates between those already known, but were also just as fully differentiated as the latter, this would confirm only the fossil testimony *against* evolution. By the law of Induction we should expect this to happen in any case, that is, we should expect the newly-discovered fossils to exhibit the same discontinuous structure of species, genera and families analogously to those of the known ones, or else natural continuity would break down for no reason.

In view of the fact that evolution must stand or fall on the incompleteness - or not - of the fossil record, it will be worth looking a little further into the claim that it is very incomplete. The assumption that its fragmentation by random

forces or random failures to fossilize, must always conceal the continuities among the extinct species is mistaken. It ignores the real effects of random damage. If half the numerals in a sequence from one to twenty were randomly struck out, we should *not* be left with a series which went 1, 3, 5, 7, 9, and so on. Random deletions would result in gaps of various sizes, with not just one at a time, but two or even more together

We can apply this to the fossil history of evolving species, which supposedly formed *continua* like those of the natural numbers. Random breaks in such continua would necessarily leave plenty of short sequences of this continuous development remaining, like the groups of numerals in threes or fours. Such things are not found.

Therefore, to produce the fossil structure we actually have, the deletions would have had to be made strategically, such that the species and higher groupings all stood out in sharp relief. This would be like making deletions from our series of numerals in such a way that the remaining ones occurred only singly and without discernable regularity, like 1, 3, 7, 12, 17, 20. . . This kind of deletion could only come about by design, if such a thing ever happened at all. If the record is more or less complete, however, the discontinuities among the fossilized species would exist in the same way and for the same reasons as those among species living today. The discontinuities among existing life-forms of our time

would then be simply the latest manifestation of a set of discontinuities running through the history of creation like the letters through a stick of rock. This picture harmonizes with basic facts, like the fact that very nearly a full classificatory structure of life-forms, ranging from species to phyla, was present back in the Cambrian period. Even an evolutionist like Francis Hitching remarks on "the almost total absence of major transitional fossils", that is, of species which were half-way through an evolutionary change. There are no intermediates between reptiles and mammals, or between reptiles and birds - *Archeopteryx* is now irrelevant, even if it were not a forgery, because a true bird-fossil was found in Colorado in 1977, dating from same era as *Archeopteryx,* and so not descended from it.

The fossils not only do not present intermediates, but neither do they include any monsters or unviable forms of life which could not have lasted for more than a generation or two. Although such creatures must be individually rare, probably unique, they would as a class have to be extremely numerous if evolution advanced by random changes. For every way of hitting a target, there are countless ways of missing it, and so for every viable transitional type to evolve, there must be a host of unviable ones. Therefore even the most incomplete fossil record would have to contain a high proportion of such freaks, but here again, no such thing is known.

The localized increases in complexity of species since the

earliest times are balanced by the fact that their overall complexity, or range of types, has changed little and, since the Cretaceous period, has even declined. Brian Leith, an evolutionist who has written on the problems of evolution, says that

“. . .for most groups studied, there does not appear to have been any increase in species diversity throughout their geologic histories. Combined with the fact that nine-tenths of all animal phyla are to be found right back in the Cambrian period, this must make the evolutionists uneasy." *(The Descent of Darwin,* Ch.6) This picture is compatible with the evidence for permutative evolution, however, while it clearly gives no support for the macro or generative kind.

Advantages in Evolution*. It is* essential to the idea of evolution that the new properties it brings about should confer decisive advantages on the individuals in whom they occur. They are then able to compete with more and more success against those which have not so evolved. At every stage in evolution, therefore, capacity for survival must increase, both relatively and absolutely, since each new species succeeds against earlier ones which had once succeeded similarly. This principle collides with many significant of facts. The child's question as to why there are still apes if we are descended from apes reflects a crux which can be shown to run through the whole structure of living things, down to bacteria.

Some of the least-evolved species, which have not changed in five hundred million years, such as limpets, sponges, starfish, and jellyfish still exist to today. (Dewar p.120) These should be among the least adapted of species, while the immense length of time for which they have existed belies this. There are also abundant species of shellfish which have remained unchanged since the Carboniferous period, 250 million years ago. The species which have appeared later, which are theoretically more adapted, have had far less time to prove that they are even as well adapted as the earlier ones. Similar remarks apply to the development of vertebrate fish species from the invertebrate ones, and the development, if it happened, of fish with jaws. Invertebrates and jawless fish like lampreys have survived as well as ever.

The lungfish is sometimes cited as an evolutionary advance which led to the development of amphibians. As in other such cases, the fish which failed to evolve in this way continued without any apparent disadvantage, and even the lung fish has continued to survive after it has served its supposed evolutionary purpose. Similarly, the amphibians continue to exist despite their supposedly having been surpassed by the reptiles. Now if generative evolution was driven by the need to achieve new competitive advantages, these facts would be inexplicable.

The most striking example in this category is that of bacteria. These life-forms have existed from the very

earliest times, and they are able to reproduce every twenty minutes, which means an astronomical number of generations in 500 million years. Thus no other life-form can have had more opportunity for evolving, whereas they have never changed, and with good reason, because there is no reason to suppose that the more evolved forms of life are any better adapted than are bacteria; possibly rather the reverse. Bacteria are in fact closer to physical immortality than any other living things, since they clone themselves over and over again. The basic criterion of physical survival is therefore not served by generative evolution, since the lowest form of life can kill the highest, as our susceptibility to diseases shows. What could the "survival of the fittest" mean, therefore, if the "fittest" must include those which do not evolve at all, along with those who do?

This conclusion contradicts one of Darwin's main arguments in *The Origin of Species*, (Ch.VI, p.206) because Darwin affirms repeatedly that when species evolve so as to acquire a new advantage, they “exterminate” (his word) those which do not. He argues that rapid exterminations by the newly-evolved forms can explain the lack of traces of intermediate varieties. Besides being wrong for the above reasons, this thinking ignores the fact that in the real world, the differently-evolved superior individual would be the one which was killed or rejected by the species. No species tolerates any deviation from its species-norm, not even if the alternative is extinction.

> If that were not enough, evolved differences, if they happened and were preserved, would *reduce* competition, not increase it, since the grounds for competition are necessarily at a maximum between animals which are the same according to species, age, sex and habitat, and which have exactly the same needs and the same powers. In reality, some of the earliest forms of life are still living, and the real causes of extinctions are owing to something much more obscure than competition.

A Theory of Everything? The doubts arising from the continual confusion between the harmless permutative evolution and the supposed generative kind have their parallels elsewhere in science, at least one of which can shed further light on the subject. Darwin's insertion of macro or generative evolution into biology conferred an unlimited explanatory power on evolution for all who were willing to accept it. This was what Darwin achieved by crowning his genuine science with science fiction in such a way as to imply that his wild speculation was a truth which followed logically from his genuine science. Once this supposed discovery was believed in by the lay public, all future generations of biologists were drawn from a culture where this belief was in the ascendant.

This kind of imaginary breakthrough is paralleled by Stephen Hawking in his *Brief History of Time,* first published in 1988, where he launched the idea of a "theory of everything." By this means, his scientific work on finding a way of proving the Big Bang theory was crowned with the idea that this latest achievement of theoretical physics was rapidly advancing towards a physical theory that would

explain absolutely everything. If this were valid, all religion and culture would thenceforth be physical science, and God would be eminent scientists. But even when first published, this was known to be impossible, and Hawking himself made a belated admission of this fact in 2004.

But here again, the blend of real science with exciting sci-fi was enough to win a huge following, by a public stirred as ever by a will to believe in anything except God as known by tradition. These two cases are connected by more than just the addition of speculation to fact, however. In both cases, the proposed result was one which involved a universal explanation. When explanations have unlimited scope, they do not put an end to problems, but create new ones. In particular, these are the problems of irrefutability, and that of the notorious “Goedel flaw.”

Firstly, such explanations are irrefutable inasmuch as they cannot be tested by any external means, because there could be nothing outside their range of applicability. For example, if there should be a species such as bacteria which has apparently never evolved, such evidence could not be admissible as the non-evolving is excluded by definition. This must also take away all meaning from supportive evidence as well, but one usually manages to ignore that.

When the theory is taken specifically to be a theory of everything, this theory and the “everything” it purports to explain remain two different things. Is the theory part of the world it explains or is it not? If it is not, something vital will be missing from the reality explained. If it is integrated with the world it explains, it becomes part of the problem, and a new theory of everything would be needed, even

though it must meet with the same fate as the last one. In the present case, we have to ask whether Darwinian evolutionary theory stands outside the natural order so as to explain it, or whether Darwin's theory is part of the natural flow of evolving life-forms: the former option would mean that generative evolution was based on a reality outside evolution and transcending it, which would rule out its universality. The latter option means that, even if it were in some sense true, evolution could only be relevant or meaningful during a more or less limited period of evolving life. In this case it would be neither true nor false, but be simply one more part of natural order whose origin was to be explained.

However, the difference between this and Hawking's theory of everything is that the latter was based on mathematics, and was thereby open to mathematical disproof by Goedel's Theorem. In its Darwinian form, no such rigorous proof was offered, so that no one can be obliged to retract it on the basis of any form of knowledge outside that of first principles, which is recognized by too few minds to be an immediate threat to it. The Darwinian conclusion is not believed with any less conviction because it is incapable of rigorous proof; on the contrary, that simply leaves so much the more room for a quasi-religious faith.

A False Compromise. The last reference to evolution as being a religious phenomenon as well as a theory of everything (two criteria which also apply to Marxism), has consequences for those who attempt to reconcile evolution with orthodox religious beliefs. If such a reconciliation could be valid, the above criticisms would be too severe, except where a strictly materialist agenda was being pursued,

so it would be best to answer it now, before going any further.

This idea of reconciliation has been presented recently in an article “God and Evolution” by Avery Cardinal Dulles.(2)It is supposed that we could be willed, loved and necessary in the mind of God, regardless of what accidents on the physical level may have brought about our existence in this world. What is random in nature from a scientific point of view could thus be included in God’s plan of creation. All the products of evolution must be eternally foreseen by God who is able to fit them together in a design which would realize His will. In this way, perhaps, we could accept Darwinism and go on believing in revealed religion, and if so, faith and science would be finally united, if evolution really was science.

Such a compromise could be reasonable if it were possible to escape the reductionist tendency inherent in evolution, but the first problem it creates is the unavoidable conclusion that everything under the heading of “the survival of the fittest” must be included in God’s plan for His evolving creation. In that case, there could be no act of self-seeking cruelty or bad faith which could not form part of God’s plan. In this case, God could not credibly make any moral demands on mankind, and religion would be confined to an imaginary realm unconnected with the realities of life. Thus the surrender of physical reality to Darwin would mean the surrender of everything else as well.

A similar result follows from the supposition that evolution need not commit us to materialism, just as the laws of mechanics do not. But mechanics are not concerned with our

(2) see *First Things,* Ignatius Press

origin, whereas evolution is. The assumption that evolution could function in a humble and limited realm ignores the fact that there is no known limit to the number of things which could have resulted from it, were it a reality. Thus the idea of an all-powerful and loving Creator would also be a product of evolution, along with the logical principles of argument which are based on it. So likewise with the idea that the natural order and its laws in which evolution occurs must have a Creator. In this case, theological beliefs could not be true in any absolute sense, and they would rather be simply psychologically necessary for some people during a certain period of evolution. That would reduce them, theologically speaking, to nothing.

Such ideas of reconciliation may well be prompted by a determination to follow teachings such as “love thine enemy,” regardless of context. That can result in a blindness to the natural logic of things, which Schuon has likened to a belief that we have a right to set fire to each other’s houses as long as the houses do not burn. Goodwill does not give us a right to ignore the fact that the evolutionist idea of reality has a range of implications large enough to give it the scope of a religion, and one which will not tolerate any others.