

THE NATURE OF MAN

by PAUL R. HYLAND

Introductory Note

Man is the subject of study by many scientists including anthropologists, sociologists, psychologists and physiologists. It is as a biologist and a Christian that I consider him. The subject of this paper is therefore the view of man as a product of the evolutionary process, and as a being created by and for God. I have not discussed the first chapters of Genesis because these are the subject of another article here.

Most of the points I have made could be expanded at great length; particularly various aspects of Teilhard de Chardin's Work. I leave it to the reader to make many of the inferences that, given space, I should have liked to have developed.

A Drop in the Cosmic Ocean

It is estimated that there are five billion Milky Ways. Ours has dimensions of one hundred thousand light years. On one edge of this vast complex of one hundred billion stars, lies one star, the sun. The earth is one of seven planets circling it. For the last million years man is believed to have inhabited this earth. The cosmos has probably existed for six or ten billion years.

'What is man that You even consider him?'

The Mistaken Conflict

Christendom has well digested the fact that, temporally and spatially, the earth is an insignificant speck; this fact is a commonplace and is not questioned. But it was not always so. For in 1543 the Polish churchman Copernicus tentatively put forward the thesis, in *De Revolutionibus Orbium Coelestium*, that the earth was not the centre of the cosmos.

In the early seventeenth century Galileo, with support from Tycho Brahe's astronomical observations, preached Copernicus's findings, and was pronounced an heretic. Not only did he upset the traditional Aristotelian view; he had also transgressed the bounds of revelation, for 'the world stands firm, never to be moved' (1 Chron. 16:30. RSV) and 'the world is established; it shall never be moved;' (Ps. 93:1; Ps.96:10. RSV). No further authority was required to reassure all good churchmen that it could not possibly be the case that the world swirled, with six other planets, around the sun.

The story of Galileo and the Inquisition should be enough to assure us of the dangers of rash 'religious' dogmatism. The black reputation the

Church deserves and gets by such unguarded assurance of its own infallibility, is clearly very pernicious; it is detrimental to the Church's witness for it can no longer demand even the respect of men of integrity. However, Christians do not seem to have learnt their lesson as the story of Darwin's theory shows.

Man - Ape or Angel?

History certainly repeated itself, and Charles Darwin, a theological student, must have felt like a latter day Galileo after the reception of his ideas by the Church.

He was by no means the first to put forward a theory of evolution. The Greek thinker Anaximander (born c. 600 B.C.) believed in a form of animal evolution and Empedocles (c. 440 B.C.) believed in the survival of the fittest in plants and animals; these theories were fantastic for the most part and almost wholly non-empirical. But in 1747 the French biologist Buffon put the earth's age at seventy five thousand years (in contrast to Ussher's estimate 'based' on biblical genealogy), and fossils began to be recognized as early plants and animals. It was suggested that these had been put there either by the Devil, to trick man, or by God, to test man's faith.

From a study of fossils and living creatures Lamarck derived his theory of evolution which was published in 1809; he maintained that living creatures developed their structure to suit their environment, and passed these acquired characteristics on to the next generation. This is now known to be false, but the mechanism of change could not begin to be understood until the importance of mutations was realised.

In 1844 Robert Chambers, a devout theist, had published anonymously a work entitled *The Vestiges of Creation* in which he expounded his idea of the evolution of man. Darwin was the first to provide real solid empirical evidence for the theory, resulting from his voyage around the world in the Beagle, on which he gathered much information concerning adaptation to the environment of endemic species of plants and animals, and colonisation of new habitats resulting from, and producing further, adaptations. These facts he and Alfred Russell Wallace presented to the Linnean Society in July of 1858 and Darwin's *Origin of Species* was published in 1859.

His theory was based on the observation of the phenotype (the external manifestation of genetic material in terms of easily assessable characteristics [roughly]); unknown to him work was already being done by Gregor Mendel, an Austrian monk, on the genotype (contained as 'genes' in what we now know as the chromosomes) and its resultant phenotype. This brilliant work was published in 1899 but was not discovered until

early this century when its importance was understood. It formed the basis for the science of genetics.

The work subsequently done on the palaeontological, morphological, physiological, ecological and genetical aspects of evolution fills many books and papers. This is not the place to attempt even to outline it. Suffice it to say that characters, represented in each cell of the body, can now be mapped on the chromosomes and their position in relation to other genes ascertained. Because one can see when genes (and intra-genic elements) cross over from one chromosome to another, usually preceding the sexual process, we understand how mutations can occur, in terms of new combinations of genetics material, giving rise to small changes in character which may be beneficial or harmful to the individual, and hence species. If beneficial the individual survives and produces progeny. Over periods of millions of years entirely new species and genera arise, colonising almost all the niches available in the world. The 'missing links' are necessarily relatively small in numbers, and it is remarkable how many have been found. (For an answer to popular ridicule on this topic, see *The Phenomenon of Man* by Pierre Teilhard de Chardin, chapter 2, part 2, section C, particularly 'Suppression of the peduncles' page 133 in the Fontana edition, 1965).

Evolutionary theory has been tested so successfully as to seem irrefutable, though of course it is not as crude as the 'survival of the fittest', 'struggle for existence' picture given above.

However, let us return to the reaction to Darwin's work. Bishop Samuel Wilberforce led the Christian offensive at an infamous meeting of the British Association in 1860. I cannot do better than quote Joseph V. Kopp: 'He (Wilberforce) conducted the attack against Darwin with a brilliance of rhetoric quite unhampered by any knowledge of the facts. Neither could this prince of the Church resist the temptation of making fun of the matter and enquiring after his opponent's simian ancestors'. Thus Christians were led into an unconsidered antagonism, while in 1859 Friedrich Engels wrote to Karl Marx 'Darwin . . . is absolutely splendid. One bastion of theology was still unbreached. Now it has fallen'. This claim for the implications of the theory was as extravagant and unfounded as the Christians' antagonism to them, but Marx replied 'this is the book that will provide the natural history basis for our work'. Again quoting Kopp—'Such was the unfortunate début of one of the greatest and most vital discoveries in the history of mankind'.

This rejection by the Church and acceptance by the Materialists created an unnecessary dichotomy of opinion that has done enormous damage during the last century in discrediting the gospel of Christ in the eyes of the world.

Is man an ape or an angel? Does he derive from the animals or is he a special creation? Perhaps these are the wrong questions to ask anyway.

Will evolutionary theory be assimilated into Christian thought as Galileo's heliocentric theory was? For some it already has been, but for others there is a conflict.

Scientific and Religious

Some will reject all human wisdom because it is foolishness. To the outsider the religious category is foolishness 'but to us who are being saved it is the power of God'. (1 Cor. 1:18. RSV). I suggest that Paul, in the following verses, was thinking of the influential philosophies of his time that clashed with Christian doctrine. The empirical scientist as we know him did not exist. I also suggest that where knowledge about the world can be reconciled with Christian thought there is no reason to reject it: we accept innumerable facts about the world in our everyday life, why then should we reject them for 'religious' reasons when the scientist presents them to us.

It is of course never possible to verify a theory in a logically rigorous fashion, only to falsify it. Karl Popper holds that the strength of a theory is proportional to its potential falsifiability (i.e. the number of propositions deducible from the theory which may be observed, directly or indirectly, to be true or false) providing that it is not falsified. The greater the number of deduced propositions that are found to be true, the less the likelihood of such falsification, and the greater the strength of the theory. Evolutionary theory is potentially highly falsifiable, but because the weight of confirmation is so great and so diverse it is strongly upheld. However it cannot, by its nature, be regarded as truth in the same way as revealed truth, *epistēmē*, for it is human opinion, *doxa*.

Is this scientific *doxa* contradictory to, or compatible with, *epistēmē*? In Galileo's case the Inquisition were sure it was contradictory. Wilberforce *et al* were sure that Darwin was wrong. A matter of integrity was involved and it was the churchmen's integrity that was prejudiced. God has not given us powers of observation and reasoning to deceive ourselves, and as Christians we must accept scientific honesty.

Good cases have often been put forward for the compatibility of the Christian and scientific views, and hence the biblical and scientific views of man. They are not merely compatible, they present two different but *complementary* aspects of him. Briefly, it has been suggested that science can explain the 'how' of things, and Christianity the 'why'. This is unsatisfactory in some respects, but broadly it gives the kind of picture we want. Science gives us a phenomenology but not a teleology. We must not think in terms of a 'God of the gaps': we do not look for breaks in natural processes (including evolution) because all 'natural' processes are supernatural. In Christ all things cohere; God upholds the universe continually. This is a very real expression of God's immanence. Miracles are natural in this sense, but to us they appear 'supernatural'.

Our traditional natural/supernatural outlook is more an outcome of the Christian Platonist and Thomist views, deriving from the essence/appearance dichotomy developed in Plato's theory of Forms. There is a dichotomy, but not such a simple one. The biblical view of man is a tripartite one—body, soul and spirit—but our ideas have been conditioned to thinking in simple spirit/matter terms.

Paul Tillich writes 'Life as spirit transcends the duality of mind and body. It also transcends the triplicity of body, soul and mind, in which the soul is actual life power and mind and body are its functions. Life as spirit is the life of the soul . . . Spirit is not a part, nor is it a special function. It is the all-embracing function in which all the elements of the structure of being participate. Life as spirit can be found by man only in man, for only in him is the structure of being completely realised'.

When we think of God as immanent in creation, the whole aspect of evolutionary theory changes. The hand of God is at work in creation. Spirit spells the unity of the ontological elements of life and its *telos*. This *telos* expresses the aim of life fulfilling itself in spirit. Teilhard de Chardin sees this clearly, and gives his account of evolution towards *homo sapiens* in his remarkable book, *The Phenomenon of Man*. He believes that science has never, up till now, troubled to look at the world except from *without*. He firmly believes, and his book is the justification of the belief, that the scientific and Christian interpretations can be united in an account 'in which the internal aspect of things as well as the external aspect of the world will be taken into account'. Alongside the process of orthogenesis, the directional tendency to complication, we follow also the evolution of the *within* as consciousness. 'Refracted rearwards along the course of evolution, consciousness displays itself qualitatively as a spectrum of shifting shades whose lower terms are lost in the night'. The *within* of things is the sufficient logical explanation of the cosmic phenomenon. There is a centripetal evolution of things in terms of cosmogenesis, biogenesis, noogenesis and finally Christogenesis. The attraction causing this centripetal movement is Love, and point Omega is not only the cause, but the goal of it. (He admitted that this view seemed too positive. He maintained that when the positive aspect was understood, the negative aspect [the Fall, sin etc.] would fall into place. The incarnation and the cross are central in his thought, but there are apparent defects on some doctrinal points; he himself was aware of inevitable shortcomings in such a vast synthesis coming from the mind of one man. Nevertheless the total vision remains).

In man, consciousness finds a fuller expression than ever before, in powers of reflection and purposiveness. These qualities of man's soul involve the possibility of its life or death in terms of the fulfilment or destruction of God-consciousness, the spirit of man.

Revelation makes sense in the context of the *within*, which can be seen, on this view, to correspond to the foolishness of the gospel. (Talking in teleological terms was described denigratingly by one zoologist, as

exemplifying the 'Teilhard de Chardin syndrome'.) Faith is required for the absurd leap that a man must make who accepts this foolishness. Belief is the active expression of the absurdity of Christianity, and Christ is its vindication.

Finally let us consider Romans 8:19 - 24. (RSV). 'For the creation waits with eager longing for the revealing of the sons of God; for the creation was subject to futility, not of its own will but by the will of him who subjected it in hope; because the creation itself will be set free from its bondage to decay and obtain the glorious liberty of the children of God. We know that the whole creation has been groaning in travail together until now; and not only the creation, but we ourselves, who have the first fruits of the Spirit, groan inwardly as we wait for adoption as sons, the redemption of our bodies. For in this hope were we saved'.

ARTICLE REVIEW

PATTERNS OF SECTARIANISM

ed. by BRYAN R. WILSON (Heinemann 63/- 416 pp.)

This excellently produced volume which is sub-titled *Organisation and Ideology in Social and Religious Movements*, reflects the current sociological mania but in a somewhat unexpected field. It consists of a series of papers, four of which are by the editor, relating to a variety of small religious movements ranging from the Salvation Army to British Israelism. Most of the authors have participated in the All Souls seminar in the Sociology of Religion, but the sociological content in the essays is very variable. Some are really excursions into social history with few sociological deductions or generalisations as such, others are more theoretical and attempt to discover general types and categories into which the various sectarian phenomena can be put. Some of this can prove tedious reading for the uninitiated layman, and from time to time one wonders whether jargon like 'behavioural correlates', 'ideological commitment', and 'endogamous injunctions' is absolutely necessary. After a while however, the effect wears off, and one realizes that the phrases are in fact, space savers.

Wilson's introductory analysis is useful and stimulating. He traces four broad categories of sect, *conversionist* (e.g. Salvation Army, Pentecostal etc.) *adventist* or *revolutionist* (e.g. Jehovah's Witnesses, Christadelphians) *introversionist* or *pietist* (e.g. certain Holiness movements,