

Evolution in the light of contemporary Church teaching

The statements of the ecclesiastical Magisterium over the recent years dealing with the question of the origin of the world, and of the human species in particular, do not contain any elements not previously set forth as the teaching of the Church. It is often objected that the earlier teaching has no normative value, because it reflects a primitive and immature level of scientific culture, and that the Church can only form an assessment of these points in the light of a resolution of the scientific questions. That is precisely the point which the teaching of Vatican I denies. The Church claims to know something about God as Creator and about the world as creation, quite independently both of philosophy and of science. Even if the cultivation of philosophy and science can contribute in some way to the clarification of our understanding of the Creator and His work, the faith of the Church does not depend or wait upon the development, or upon the authority which philosophy or science can give to the results of their respective research.

Vatican I

In this regard, the First Vatican Council's teachings on creation, Revelation and faith and their relations to philosophy and science, provide an excellent recapitulation of the mind of the Church in respect to two key issues (Pantheism and Rationalism). Any scientific explanation of origins which entails the one or the other is directly opposed to Catholic belief, indeed is false religion and not only opposes faith, but undermines the health of the intellect. Examples are the affirmation of the eternity of the world, the infinity of the universe and the exclusive right of science to evaluate explanations of the origin of the species.

Inextricably linked to these claims, as Pope Pius XII would point out in his encyclical *Humani Generis*, are theories of doctrinal development utterly relativistic (historicism) and subversive of the genuine teaching coming from Christ and the apostles.

Theistic Evolution Disfavored

It is little wonder, then, that attempts by Catholics (G. Mivart, M.D. Leroy, J.A. Zahn) in the closing years of the 19th century to reconcile evolution, especially of the human body from the beast, with Catholic faith, met with disfavor, and that some of those author's works were proscribed by Church authorities. From the circumstances it is clear enough that the evolutionary theory envisioned was Darwinian, judged to be inseparable from pantheistic and rationalistic modes of thought.

These decisions by themselves provide no general answer to the query: whether it is possible to construct and defend on scientific grounds an evolutionary theory of origins. A later response of the Biblical Commission (1909) as to whether a Catholic is permitted to doubt the literal-historical sense of the facts narrated in the first three chapters of Genesis is

of great relevance. The decree of the Commission summarizing the tradition attested by the Fathers, makes the following list of affirmations:

- * the creation of the entire world at the beginning of time;
- * the special creation of man and the formation of the first woman from the first man;
- * the unity of the human race;
- * the initial happiness of our first parents in the state of justice, integrity and immortality;
- * the testing of Adam and Eve through a positive precept;
- * the temptation and transgression under the influence of the devil;
- * expulsion from the initial paradise; and
- * promise of a Redeemer. ¹

Such an answer is perfectly coherent with the solemn definition of the first article of the Creed. Nor is it any less coherent that such a listing should be made on authority, for the only adequate proof of these facts is the historical witness of a competent observer - in this case only the Creator. The sense of the narrative must be taken historically at these points; not to do so would be the equivalent of denying the traditional notion of creation as expounded by the Church from her beginning. ²

The alleged reversal of stance toward evolution effected by Pius XII in his 1943 encyclical *Divino Afflante Spiritu* (from antipathy to sympathy for it) does not in fact exist. The study of the literary forms of any part of Scripture of itself does not threaten the dogmas of the Church. Thus Pius XII in this encyclical, and Fr. Voste in his letter to Cardinal Suhard of Paris in 1948, do encourage such a study; it is not only not forbidden to Catholics, but one that can contribute to the further illustration of the revealed meaning, and to the correction of faulty interpretations of the literal sense. But this constitutes no revocation express or tacit, of the decree of 1909, that Genesis literally conveys facts of an historical character directly bearing on the resolution of the problem of origins. The encyclical hardly implies that the earlier teaching of the Church on origins was "fundamentalistic" and in need of correction.

Pope Pius XII

That this is a fair reading of the mind of Pope Pius XII in regard to the question of origins as set forth in the teaching of the Church is quite evident in the address given by this

Pope to the Pontifical Academy of Sciences two years before the encyclical *Divino Afflante Spiritu*.³ In this address the Pope makes the following points:

1) The starting point for any discussion of the question of origins is not the similarity, but the difference between the Creator and the creature, between human nature (including the human body) and the rest of creation.

2) What principally and primarily accounts for the difference is the distinctive productive action of the Creator (creative and/or miraculous) and not a natural process.

3) In the case of the initial existence of the world (at the beginning of time) only that creative action of God accounts for the difference and therefore the partial resemblance of creation to the Creator, and the possibility of knowing God from a study of the visible world.

4) In the case of the bodies of the first man, and especially that of the it is the direct divine intervention which accounts for the specific difference between human beings and the rest of creation.

5) Science as well as philosophy may be able to contribute to the further understanding of what is principally the work of God as a whole (the Hexameron) but only by respecting these truths. To date, he concludes none of the sciences have contributed anything certain and definitive to the knowledge of origins already possessed from Revelation and set forth by the Church.

Humani Generis (1950)

Pope Pius XII returned to the subject of origins in *Humani Generis* in 1950. Because theories of evolution touch not only the particular question of origins but raise issues of theological method, the encyclical devotes considerable attention to this theme.

* Evolution as a basic mode of thought is condemned as directly opposed to those modes of reflection implied by the Catholic faith. In this sense it is a form of Rationalism underlying three contemporary errors: pantheistic Totalitarianism, existential Skepticism (denying the objectivity of philosophic knowledge of essences) and Historicism, challenging the unchanging character of eternal truths and dogmas of the Church. Any specific scientific hypothesis constructed on the basis of evolutionary thought is not only false but not scientific; it is a form of false religion parading as science.

* Evolution merely as a scientific hypothesis, on the assumption that one can be constructed apart from evolution as a theory of knowledge (the Pope does not say that this is impossible in every instance, only that so far it has not successfully been done) may be investigated by properly trained Catholic scholars, provided certain conditions are verified:

- that such hypotheses are not proposed to explain the origin of the human soul, a question already decided on the basis of a strict creative act of God;

- that such hypotheses are not made to suggest that any member of the human family has any other origin except by way of carnal generation from a single couple formed immediately by God (condemnation of Polygenism);

- that such hypotheses are not disseminated indiscriminately among those unprepared to grasp the complexities involved; and

- that the reasons against, as well as the reasons for, a possible theory of evolution be presented, in such a way as not to imply that scientific analysis by itself provides an adequate basis for resolving a point of Revelation, or that any other authority but the Church has the right to decide such questions definitely. ⁴

* The encyclical permits Catholics to propose, *hypothetically*, evolutionary explanations for the origin of the first human body (Adam's) from pre-existent living matter. ⁵

The encyclical does not deal with the question whether evolution, used to describe tenable and untenable hypotheses, is a term used in the same sense (univocal) in each case. The requirement that such theories account not only for the Creator as primary, but as principal Cause in such a process, would indicate that such hypotheses differ significantly from those normally proposed today, because the latter do not make allowance for a miraculous element in the formation of the first man's body. From the point of view of this encyclical the permission to study human origins scientifically might just as well, or even more so, point to those hypotheses often known as "creation science" in the event evolutionary hypotheses fail to justify their scientific character. Catholic proponents of evolution as a "scientific" hypothesis cannot therefore appeal to *Humani Generis* for support. Indeed, a fair reading of the encyclical would entail abandonment of such hypotheses, as a kind of *falsi nominis scientia* [falsely called science] proscribed by a Vatican I. Hence *Humani Generis* is not, as so often claimed, a charter for Evolutionism among Catholics: the passage often cited to support this claim is only approval to examine the question of origins from a scientific (i.e. non-scriptural) standpoint, in so far as this is feasible.

In any case those theories known as "theistic evolution," which attempt to explain the origin of the human body of Adam and Eve in terms of a purely natural process, and which are more often than not, when extended in fully logical fashion, have defended the possibility of Polygenism and of a notion of God involving Himself in the process of creation as a subject of change, have met with the consistent disfavor of the Church; in the best known case that of Pierre Teilhard de Chardin, public reprimand ⁶ preceded numerous prohibitions to pursue such lines of thought or publish these.

Pope Paul VI

Pope Paul VI, in an address to theologians gathered in Rome to study the theme of original sin made the following points: ⁷

1) The traditional »dogma of original sin, unchanged, figures in the teaching of Vatican II at many points, and is to be taken seriously as a basic criterion for assessing the meaning of the documents of Vatican II.

2) Polygenism, as repeatedly stated in the past, is incompatible with the teaching of the Church on the state of original justice of our first parents and the origin of original sin.

3) If hypotheses of evolution touching the origin of the first human body (never the soul) proposed in accord with the still binding directive of Pius XII in *Humani Generis*, cannot be constructed plausibly without holding Polygenism, then the hypothesis of evolution must be modified or abandoned as false, not the dogma changed to accommodate the hypothesis.

In his introduction to his *Credo of the People of God* ⁸ this same Pope makes a very interesting observation germane to the discussion of origins. In addition to that knowledge of the real world available to men through observation and the cultivation of science, it is also possible for the human intellect to attain to an understanding of the essences, the *quid est* [what is] of those agents whose activities are observed. The Pope states that the Catholic believer will always affirm the possibility of objective understanding on both counts. The reason is clearly stated in Vatican I: belief in God the Creator is the most realistic basis for strengthening the native powers of reason to know with certitude those aspects of reality within its grasp. Denial of the first article of the Creed is the best way to undermine that native confidence native to the human mind as a participation in the perfection of the divine intellect and its natural orientation to the truth.

The notion of species, of nature, employed at the level of observation is that of a generalization. There is nothing objectionable *per se* to the use of generalizations. But when such a notion of species is used in construction of evolutionary theory, the modifications to which that "species" can be subjected appear unlimited. Indeed, evolutionary theory would seem impossible without ceaseless progression. The Catholic use of the term, on the contrary, implies that such modifications are not infinite, actually or possibly, but rather circumscribed within the limits of the species understood as a universal concept not admitting of exceptions, remaining basically the same whatever the conditions to which it is subject; and scientific experiment tends to confirm this.

Contrary to theory fashionable today, actual positive science tends to confirm the importance of the universal. Change is not unlimited, but finite, and when observable within the world of living beings occurs within the well-defined limits of the species in the traditional Catholic sense of this term. Apparent exceptions at the level of observation on the part of the observer, are rather the result of imperfect understanding on the part of the observer,

rather than the absence of anything objectively denoted by the term species or essence in the sense of "universal." Proponents of evolution have yet to demonstrate:

1) that their theories correspond to anything that is happening or in fact has happened, and

2) that the traditional notion of species is so integral to the dogma of creation and "literal" interpretation of Genesis, as in the thought of St. Bonaventure, is irrelevant to sound science.

Whatever the personal belief and philosophy of scientists, scientific practice tends to confirm the wisdom of the *Credo of Paul VI*.

Appraisal

It is not difficult to appreciate the pertinence of this observation to the question of the origin of the species and of human nature in particular. Evolutionary theories stress the continuity of development between the species from the lower to the higher, as well as a sufficient duration to permit the operation of natural or artificial causes according to the laws governing these. Catholic teaching stresses an essential discontinuity in the case of those essences, whose limits were fixed by the Creator and which cannot be modified by the intervention of natural or artificial agents of a finite power.

It has never pretended in any instance of observable species, on the basis of Revelation, to know what those limits are. But that there are such limits, even at the level of inanimate existence, sound science as well as philosophy has tended to confirm. The non-living agent does not naturally become a living being by itself; nor the plant an animal, nor even the humble fruit fly a horse fly. Plant and animal breeding does not change the essential species with which the breeding begins.

In the case of human nature, and in particular of the human body, the limits are even more precise. Any attempt to hold as certain, that the unborn child is less human than the one born, that the unformed and uneducated, the senile, the retarded, etc. are less human essentially than the socially productive specimen, has always been termed by the Church as a pernicious error. Thus, she regards the belief of modern genetic experimentation aimed at modifying human nature as an immoral assumption of the divine prerogative.

Nor is it very difficult, with all due allowance for the stylistic characteristics of the Genesis narrative, to discover there unmistakable indications not only of the initial creative act of God at the beginning of time, but of that relative fixity and discontinuity of the species, most of all in the case of mankind, whose origin is the distinctive intervention of the Creator as principal Cause.

This is another way of saying that the more perfect cannot come from the less

perfect naturally, but only through the intervention of a wise and free agent, in certain cases, can only be the Creator-God. What might have seemed to be only a point of scholastic philosophy provides a key to the mysteries met by science at its frontiers.

Pope John Paul II (1981)

The present Pope, John Paul II, in an address to the Pontifical Academy of Sciences,⁹ briefly touched on the question of the origin of the cosmos.

The address is not a doctrinal constitution in the strict sense, but simply a series on themes bearing on belief and science reiterating the tradition of the Church on the points touched. Since it is widely quoted as supportive of "theistic evolution", an examination of the Pope's remarks follows.

1) the Pope noted that Revelation, especially the Genesis narrative, is not to be conceived as providing direct answers to questions of a formally scientific nature. Revelation is no substitute for the work of scientific research. It rather is a body of religious doctrine which, when it touches points concerning the cosmos, does so with the intention of teaching the correct relations between man and God, and between man and the universe. Which and how many points of this religious doctrine are facts bearing on the subject of scientific teaching is not the Pope's purpose to discuss here. But that at certain points Revelation and science do meet and in part overlap is at the heart of these observations by the Pope.

Further, remarked the Pope, this knowledge of the cosmos conveyed by Revelation is not couched in the language of modern science but rather in the terms commonly used by contemporaries of the sacred authors, still employed today, and often described as "popular" or "pre-scientific."

It would, however, be a gratuitous interference contrary to Catholic tradition that "popular" here means merely symbolic, and does not convey any factual knowledge about the world and how it was made. Quite the contrary, on at least the origin of the cosmos, only a language other than science can communicate a true and factual answer. The aphorism used by the Pope on this occasion: Revelation teaches not how the world was made, but how to go to heaven, refers to the general intention of the Sacred Author, not to the specific content of each message, which in this case surely does teach us that the world was made "in the beginning" by creation. This discussion of the "limits of revealed knowledge" was not undertaken by the Pope for its own sake, but rather in view of the limits of science.

2) If Revelation is limited in what it can say about the world, science is also limited in its efforts to explore the intelligibility of its subject matter. These limits are nowhere more evident than in the inability of science, universally acknowledged, to provide any ultimate explanation of the origin of its subject matter, and therefore^o of its own rationale. For this answer the help of metaphysics and Revelation is necessary. In support and illustration of his

point the Pope cites a passage from an address of Pope Pius XII on the proofs of the existence of God in the light of modern science ¹⁰. In this address Pius XII, after noting the insolvable enigma constituted for the scientific mind by the question of origins, insolvable either in terms of an uncreated (infinite) world, or self-creating (evolutionary) world, stated that the scientific mind versed in the wisdom of metaphysics and Revelation will indeed discover evidences in the world studied scientifically pointing to the true answer given by Revelation: the *Fiat* of an omnipotent Creator. Pius XII discusses two of these pointers: the mutability and variability of the world and its finite character, reflected clearly in the law of entropy.

On at least two points these remarks of Pius XII cited so recently by the present Pope, constitute as it were a basic charter for creation science:

1) Science is not absolutely autonomous in the pursuit of its goals. It cannot be absolutely independent and self-sufficient in unravelling the intelligibility of its subject matter.

2) On at least one point, the origin of the cosmos, fundamental to all the rest, the doctrine of creation (and not Evolutionism) provides the clue, the Key, the "paradigm" or context for discerning the sense of all the rest.

NOTE: In the above address Pius XII mentions the age of the world in terms of billions of years. The question of the age of the world was, however, merely incidental to the theme he was discussing, and in no way constitutes magisterial resolution of the question bearing on the age of the world or of the meaning of "day" in the Genesis account of the work of God, anymore than St. Augustine's views on this point have represented more than a merely personal opinion.

Clearly, two questions must be distinguished:

1) How much does Revelation tell us about the subjects investigated by science?

2) How much can scientific investigation tell us about the subjects and facts contained in Revelation, in particular about the origin of the cosmos and of the species? To each the Pope's answer is quite traditional. To the first question he states relatively little, but that seeming little is more important than all the rest. To the second he replies perhaps something on some points, but on certain matters like the origin of the cosmos, nothing at all, except in dependence on Revelation.

Despite the multiple claims to the contrary, the Church in the last half century no more approves or even permits "Evolutionism" as the matrix for the thought of Catholics than in times past.

Objections Answered

It is often alleged that the Church has no interest in creation science; in fact, it is quite opposed to it as a form of biblical "fundamentalism."

Some of the evidences adduced to support such an objection may be dismissed as selective reading, out of context, from the teaching of Pope Pius XII. That in permitting Catholics to study the problem of literary forms, this Pope also permitted them to depart from the literal sense of Scripture, as attested by the Fathers in the case of Genesis, is simply not true. In permitting, and not necessarily approving, the possibility of Catholics holding limited forms of evolution in reference to the first human body, this Pope made it very clear that giving *carte blanche* to science to decide the meaning of Scripture was not his intention; in the event of conflict the theory, not the truth, is to be modified or abandoned.

Liberalism

While a Catholic is not then required to subscribe to Biblical Literalism or Fundamentalism, an arrogant "scientific Literalism" which assumes that scientific speculation alone provides an exact and realistic understanding of the world, is also rejected.

Where "Literalism" has reference to that factual content touching the work of the Creator, in the case of Adam and specially of Eve, there a Catholic is required on the basis of his faith to subscribe to a strictly literal, or historical interpretation of the passage in question.

The oft alleged opposition between the assertion of "Biblical Literalism" in the early decrees of the Pontifical Biblical Commission and its later repudiation by Pius XII in his encyclical *Divino Afflante Spiritu* does not exist.

Evolution as a Paradigm

Good arguments can actually be adduced to show that evolution is simply not a scientific hypothesis. It is a dogma providing the context for all scientific endeavors. And it is just this assumption of "Evolutionism" as the universal "paradigm" that directly conflicts with the teaching of the Church and constitutes an abuse of the limited permission of Pius XII to propose tentatively hypotheses of evolution within the limits of certain scientific questions and without questioning the decisions of the Church in matters touching Revelation. Nor does the Church concede this kind of total autonomy to politics, economics, etc. Within the well-defined limits of each science, art or profession, the trained practitioner is free from the authority of the Church. But that freedom does not mean license to define the limits of one's science independently of the Truth that is God, and the Revelation He has entrusted to His Church.

Theistic Evolution

It is claimed that the position generally called "theistic evolution" permits the believer

to retain belief in God, which the agnostic or atheist evolutionist rejects. In such a synthesis religion is said to explain "Who" made the world and "why," while science explains "how" He made it (by evolution). Religion deals with final causes, while science deals with efficient causes, processes and facts.

The Catholic believer cannot, however, drop from his belief facts bearing on the origin of the physical world as expounded in the revealed account of these origins without in fact changing the nature of that belief, something not in his power. Hence, "theistic evolution" as a viable Catholic position is *a priori* inconsistent with its alleged relegation of the "how" of creation to study by science alone.

The Catholic in fact in subscribing to the first article of the Creed affirms not only that God is and that He made the world, but how He made the world, and especially how He made the angelic and human species. It is precisely in affirming the difference between the uniquely divine activity, and that the difference between infinite and finite natures is demonstrated. The operation of a created agent presupposes the prior existence of the world and the species, while the operation of the Creator does not. Any refusal to recognize the radical inadequacy of natural processes as an explanation for the origin of the world and the distinction of species must logically lead to the failure to perceive the distinction between God and His creation (Pantheism).

Conclusion

The teaching of the Church on origins from her beginning embraces a body of doctrine consistent and unvarying, not only as regards its general content and tenor, but the explicit formulation of details as well.

The doctrine of creation, in general and in all its detail, is intimately bound up with the mystery of salvation. That is why no Catholic may call into question any aspect of the doctrine of creation which in fact the Church believes related to the mystery of salvation without also doubting that latter mystery.

While the Church does not hold that God has revealed all that can be known about His creation, or of that which has been revealed, that the precise sense has in every instance been definitively explained by the Church in the most explicit manner possible, yet it holds that the following points concerning the origin of the world and of the species within it have been so revealed and definitively explained by the Church, either solemnly or in her ordinary Magisterium, in such ways that they may not be questioned or subjected to modification to accommodate human theorizing:

- 1) the whole world was created by God *ex nihilo* in the beginning of time.
- 2) The essential structure or order of the world presupposed for any subsequent activity of development was established by God and admits of no exceptions, except those

directly produced by divine intervention, such as that which the Church claims will come to pass in the final resurrection of the human body from an inorganic to an organic state at the end of time.

3) The first man and first woman were made directly by God, by forming the male body out of pre-existing matter, the female body out of the first man, by creating out of nothing a soul for each and then uniting soul to body as its form. At each of these three steps, formation of a body, creation of a soul, and infusion of soul into body, the principal Agent is the Creator, not a creature; hence the process is not a natural development from one species to another, but a divine or miraculous action discontinuous with any possible, merely natural process. This discontinuity accounts for the distinctness and greatness of the human, and of each single human person in the whole of creation, and special value of man before God.

God made only one man and one woman in this fashion. All others find their origin in descent from these two, human procreation through conception accounting for the origin of the body, divine creation of each soul *ex nihilo* for the origin of the soul. Thus there is but one historical family, with but a single couple at its beginning, this couple owing existence directly and principally to God as Creator.

References

- 1 Response no. 6, question 3.
- 2 Council of Trent, Session 4; Vatican I, *Dei Filius*, Chapter 2.
- 3 Nov. 1941 - AAS 33 (1941) pp.504-512.
- 4 Council of Trent, Session 4.
- 5 Eve should be regarded as excluded if not mentioned explicitly, according to the antecedent tradition. In any case, the Church cannot permit the same explanation for the body of Eve in view of the response of the Biblical Commission already quoted, which requires the formation of the wife from the body of the first man (from "the rib, which the Lord had taken from man, He made a woman...And Adam said, This is now bone of my bones...and she shall be called Woman, because she was taken out of Man" - *Gen. 2:22-23*). We may ask: if a miracle is required for the body of Eve, why not admit an equally literal interpretation of the Biblical account of the origin of Adam's body too: "The Lord God formed man of the dust of the ground..." (*Gen. 2:7*)
- 6 The Monitum of 1962, declaring his works to contain heresy and errors dangerous to the faith, was reaffirmed in July, 1981.
- 7 AAS 58 (1966) pp.649-655.
- 8 AAS 60 (1968) pp.433-435, n. 5.
- 9 October 3, 1981 AAS 73 (1981) pp.668-672.
- 10 Pontifical Academy of Sciences, November 1951, AAS 44 (1952) pp.;231-43.
