

THE CATHOLIC CHURCH ON EVOLUTION AND THE RELATIONSHIP OF SCIENCE AND RELIGION: A SHORT HISTORY

What follows is a sampling of Catholic thought from theologians and popes. There are only two statements (Pope Alexander III, 1163 and Pope Pius IX, in 1877) that indicate any hostility between the Catholic Church and science in general or evolution in particular. In fact, the case has been often made that history shows a great deal of support by the Church for scientific efforts. In popular thought the Galileo case is seen as the classic example of the Church's general hostility to science. However, as indicated in Lecture I, this case stands as an exception (unexcusable, but understandable given the circumstances) to the general rule of Church support for the sciences. (a Dictionary of Terms has been provided on page 7 to help define some of the jargon in the quotes)

354-430 - St. Augustine

“One does not read in the gospel that the Lord said: ‘I will send you the Paraclete who will teach you about the course of the sun and moon.’, for he willed to make them Christians, not mathematicians.”

“Even a non-Christian knows something about the earth, the heavens, and the other elements of this world, about the motion and orbit of the stars and even their size and relative positions, about the predictable eclipses of the sun and moon, the cycles of the years and the seasons, about the kinds of animals, shrubs, stones, and so forth, and this knowledge he holds to as being certain from reason and experience. Now it is a disgraceful and dangerous thing for an infidel to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn. The shame is not so much that an ignorant individual is derided, but that people outside the household of the faith think our sacred writers held such opinions, and, to the great loss of those for whose salvation we toil, the writers of Scripture are criticized and rejected as unlearned men (On the Literal Meaning of Genesis, Book 1, Ch. 19)

“If it happens that the authority of Sacred Scripture is set in opposition to clear and certain reasoning, this must mean that the person who interprets Scripture does not understand it correctly. It is not the meaning of Scripture which is opposed to the truth but the meaning which he (the interpreter) has wanted to give to it. That which is opposed to Scripture is not what is in Scripture but what he has placed there himself, believing that this is what Scripture meant.” (Epistula 143, n. 7)

1163 - **Pope Alexander III**

Clerics were forbidden to study physics “or the laws of the world”.

Penalty: excommunication.

1257 - **St. Thomas Aquinas**

“No opinion or belief...is implanted in man by God which is contrary to man’s natural knowledge.” (Contra Gentiles, lib.i,ch.7 (4))

1869-70 - **First Vatican Council: Dogmatic Constitution on the Catholic Faith, 4.**

“Although faith is above reason, there can never be any real discrepancy between faith and reason, since the same God who reveals mysteries and infuses faith has bestowed the light of reason on the human mind, and God cannot deny himself, nor can truth ever contradict truth.”

1877 - **Pius IX, Letter**

“A system (Darwinism) which is repugnant at once to history, to the tradition of all peoples, to exact science, to observed facts, and even to Reason herself, would seem to need no refutation...But the corruption of this age, the machinations of the perverse, the danger to the simple, demand that such fancies, altogether absurd though they are, should -- since they borrow the mask of science -- be refuted by true science.”

1893 - **Pope Leo XIII. Encyclical Providentissimus Deus**

“Truth cannot contradict truth and we may be sure that some mistake has been made either in the interpretation of the sacred words, or in the polemical discussion itself ...There can never, indeed, be any real discrepancy between the theologian and the physicist, as long as each confines himself within his own lines, and both are careful, as St. Augustine warns us ‘not to make rash assertions’.”

“It could not have been the intention of the sacred writers, or rather...of the Spirit of God, who spoke through them, to instruct us about things that cannot be of service for the salvation of man, namely, the internal constitution of the visible world.”

1943 - **Pope Pius XII, Encyclical Divino Afflante Spiritu**

“Holy Scripture instructs us only regarding divine things, but it makes use of the ordinary language of men for that purpose.”

1950 - **Pope Pius XII, Encyclical Humani Generis**

“Some imprudently and indiscreetly hold that evolution, which has not been fully proved, even in the domain of natural sciences, explains the origin of all this, and audaciously support the monistic and pantheistic opinion that the world is in continual evolution.”

But: “The Teaching Authority of the church does not forbid that, in conformity with the present state of human sciences and sacred theology, research and discussions, on the part of men experienced in both fields, take place with regard to the doctrine of evolution, in as far as it inquires into the origin of the human body as coming from preexistent and living matter - for the Catholic faith obliges us to hold that souls are immediately created by God.”

“The first eleven chapters of Genesis...do nevertheless pertain to history in a true sense; the same chapters...both state the principal truths which are fundamental for our salvation, and also give a *popular description* (italics mine) of the origin of the human race and the chosen people. If however, the ancient sacred writers have taken anything from popular narrations (and this may be conceded), it must never be forgotten that they did so with the help of divine inspiration, through which they were rendered immune from any error in selecting and evaluating those documents.”

1963 - **Encyclical Pacem in Terris, Pope John XXIII**

“Our age rejoices, and justly so, in the remarkable progress that has been made in scientific and philosophical knowledge.”

1979 - **Address to the Pontifical Academy of Sciences, John Paul II**

“I wish that theologians, scholars and historians, animated by a spirit of sincere collaboration, might examine more deeply the Galileo case and in an honest recognition of wrongs on whatever side they occur, might make disappear the obstacles that this affair sets up, in many minds, to a fruitful concord between science and faith, between church and world...Galileo had much to suffer -- we could not hide it -- from the men and agencies of the Church.”

1981 - **Scripture and Science: The Path of Scientific Discovery. An Address to the Pontifical Academy of Science, by Pope John Paul II**

“On the occasion of a previous solemn session (Address to the Pontifical Academy of Sciences, 11/10/79) I have already had the opportunity to tell you how highly the Church esteems pure science: It is ‘a good worthy of being loved, for it is knowledge and therefore perfection of man in his intelligence...It must be honored for its own sake, as an integral part of culture’”.

“The Bible itself speaks to us of the origin of the universe and its makeup, not in order to provide us with a scientific treatise but in order to state the correct relationships of man

with God and with the universe. Sacred Scripture wishes simply to declare that the world was created by God, and in order to reach this truth it expresses itself in the terms of the cosmology in use at the time of the writer. The Sacred Book likewise wishes to tell men that the world was not created as the seat of the gods, as was taught by other cosmogonies and cosmologies, but was rather created for the service of man and the glory of God. Any other teaching about the origin and make-up of the universe is alien to the intentions of the Bible, which does not wish to teach how the heavens were made but how one goes to heaven.”

“Any scientific hypothesis on the origin of the world, such as the hypothesis of a primitive atom from which derived the whole of the physical universe, leaves open the problem concerning the universe’s beginning. Science itself cannot solve this question: There is needed that human knowledge that arises above physics and astrophysics and which is called metaphysics; there is needed above all the knowledge that comes from God’s revelation.

1987 - John Paul II on Science and Religion: Reflections on the New View from Rome (Vatican City:Vatican Observatory) Reprinted in Robert Russell et al., ed.

“The scientific disciplines are endowing us with an understanding and appreciation of our universe as a whole and of the incredibly rich variety of intricately related process and structures which constitute its animate and inanimate components...The vitality and significance of theology for humanity will in a profound way be reflected in its ability incorporate these findings.”

1988 - John Paul II: Message to the Director of the Vatican Observatory (source: *Physics, Philosophy and Theology: A quest for Common Understanding* ed. Robert J. Russell, William R. Stoeger, S.J., and George V. Coyne S.J. - Vatican City State: Liberia Editrice Vaticana, 1988, M13.)

“Science can purify religion from error and superstition...religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish”

“If the cosmologies of the ancient Near Eastern world could be purified and assimilated into the first chapters of Genesis, might contemporary cosmology have something to offer to our reflections upon creation? Does an evolutionary perspective bring any light to bear upon theological anthropology, the meaning of the human person as the *imago Dei*, the problem of Christology-- and even upon the development of doctrine itself? What, if any, are the eschatological implications of contemporary cosmology, especially in light of the vast future of our universe? Can theological method fruitfully appropriate insights from scientific methodology and the philosophy of science?

1992 - From the L’Osservatore Romano: John Paul II: Faith Can Never Conflict with Reason. An Address to the Pontifical Academy of Sciences

“It is a duty for theologians to keep themselves regularly informed of scientific advances in order to examine, if such be necessary, whether or not there are reasons for taking them into account in their reflection or for introducing changes in their teaching.”

“From the Galileo affair we can learn a lesson which remains valid in relation to similar situations which occur today and which may occur in the future....The error of the theologians of the time, when they maintained the centrality of the earth, was to think that our understanding of the physical world’s structure was, in some way, imposed by the literal sense of Sacred Scripture...In fact, the Bible does not concern itself with the details of the physical world, the understanding of which is the competence of human experience and reasoning. There exist two realms of knowledge, one which has its source in Revelation and one which reason can discover by its own power. To the latter belong especially the experimental sciences and philosophy. The distinction between the two realms of knowledge ought not to be understood as opposition. The two realms are not altogether foreign to each other, they have points of contact.”

1996 - Magisterium and Evolution: Truth Cannot Contradict Truth, Message to the Pontifical Academy of Sciences, by Pope John Paul II

“I had the opportunity with regard to Galileo to draw attention to the need of a rigorous hermeneutic for the correct interpretation of the inspired word. It is necessary to determine the proper sense of Scripture, while avoiding any unwarranted interpretations that make it say what it does not intend to say. In order to delineate the field of their own study, the exegete and the theologian must keep informed about the results achieved by the natural sciences.

New knowledge leads to recognition of the theory of evolution as more than a hypothesis. It is indeed remarkable that this theory has been progressively accepted by researchers, following a series of discoveries in various fields of knowledge. The convergence, neither sought nor provoked, of the results of work that was conducted independently is in itself a significant argument in favor of this theory.”

“And, to tell the truth, rather than the theory of evolution, we should speak of several theories of evolution. On the one hand, this plurality has to do with the different explanations advanced for the mechanism of evolution, and on the other, with the various philosophies on which it is based. Hence the existence of materialistic, reductionist and spiritualist interpretations. What is to be decided here is the true role of philosophy and, beyond it, of theology”.

“Theories of evolution which, in accordance with the philosophies inspiring them, consider the spirit as emerging from the forces of living matter or as a mere *epiphenomenon* of this matter are incompatible with the truth about man. Nor are they able to ground the dignity of the person”.

The Harper Collins Encyclopedia of Catholicism - 1995

Creation -- “The doctrine of creation is part of a cosmic vision that sees the world as ultimately reliant on the transcendent God, who fashions it in the freedom of divine love and dwells within it, energizing all existence. God is the ultimate source, ground, and goal of the world and humanity...As Israel drew on the cosmology of the ancient Near East to express its creation faith, and as patristic and medieval theology used the cosmology of the Greeks, the challenge today is to express this truth in ways coherent with the cosmology of contemporary science”.

Creationism -- “Based on a fundamentalist reading of Genesis, the doctrine, in opposition to the biological theory of evolution, (teaches) that living organisms are the products of ‘special’ divine creation. The most radical form asserts a ‘young earth’ (less than ten thousand years old), six twenty-four-hour days of creation, and a worldwide flood responsible for the fossil record. Less radical forms accept evidence for an ‘ancient’ earth: the ‘gap’ theory proposes that millions of years separate the creation ‘in the beginning’ from a second creation that occurred over a six-day period; the ‘day-age’ theory (or ‘progressive creation’) identifies the days of creation with geological eras. All forms assert the special creation of an original human pair.

Creationism as a political-religious movement ...has gone through two stages. Key figures in the first stage...were William Jennings Bryant...who spearheaded the fight to halt the teaching of evolution in public schools, and George McCready Price... denying the antiquity of the fossil record...The second stage, or ‘scientific creationism’, is associated with Henry M. Morris...Morris established the Institute for Creation Research, which since 1981 has offered graduate degrees in science, indicative of recent efforts to cast creationism as a scientific alternative to evolutionary theory.”

Evolution -- “Catholic theology is comfortable with the view that God ‘creates’ through evolution. It has distanced itself, therefore, from ‘creationism’, which, on the basis of a literalist reading of Genesis, insists that evolution is completely incompatible with the doctrine of divine creation. Likewise it dismisses the version of creationism known as ‘creation science’ or ‘scientific creationism’, which considers the Bible a more reliable source of scientific information concerning the origins of life than modern evolutionary biology.”

“Biblical revelation is debased whenever it is considered another source of information that science is capable of discovering on its own. Following the principle that truth is one, Catholic teaching has consistently maintained that there can be no contradiction between authentic science and an integral faith in revelation. Respect for this principle places the expressions of theology not in a competitive but a complementary relation to evolutionary thinking...Catholic theology generously allows for the possibility that evolution is a medium of divine creativity.”

Scientism -- “The belief that empirical science provides sole access to truth. In opposing scientism, the Church teaches that although empirical science legitimately studies connections of cause and effect in the natural world, there are truths to which empirical science has no direct access, including, especially, moral and religious truths.”

DICTIONARY OF TERMS

Anthropology - The study of human beings.

Cosmology - A coherent religious, philosophical or scientific interpretation of the universe describing its ultimate nature, origin, order and destiny.

Eschatology - A study of beliefs about the ultimate fate of the world, including the “last things”, i.e., judgment, heaven, hell, purgatory, the resurrection of the body, the Second Coming and the Kingdom of God in its fullness.

Epiphenomenon - Something which can be explained as totally caused by physical agents. For example, if the human soul or spirit is explained as evolving simply from the physical world.

Exegete - A scholar who through a knowledge of ancient culture, language and literary forms works to make the message of the biblical text, as intended by the writer, understandable to modern readers.

Hermeneutics - The broad theory and practice of interpreting the biblical texts to understand their meaning within their original cultural and literary context. It includes exegesis and literary criticism.

Hypothesis - A tentative theory adopted to explain certain factual data and used as a guide for further investigation and testing.

Metaphysics - The study of the ultimate make up, first principles and causes of all of reality, physical and non-physical.

Monism - This philosophical position takes several forms (idealism, neutral monism and materialism), but in general it asserts that all reality, including God, is of one kind. In its materialistic form it holds that everything is material or physical, thus denying the spiritual.

Pantheism - It has several forms, but is generally understood to hold that God is identical with everything. This is distinguished from **panentheism** which holds that God is in all things, without being identified with all things.

Theological Anthropology - An interpretation of human existence in light of faith.

Theory (scientific) - A principle or set of principles obtained through scientific observation and testing that coherently explain certain observed phenomena or set(s) of data. By definition, theories are open to revision or rejection based on new scientific information.