

## The Pope on Big Bang and Evolution

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The Catholic Church has been generally supportive of science. In spite of the popular idea that the Church is opposed to science the fact is that the Church has been cultivating science right from the beginning. In the background of the Pope's statement on Big Bang and evolution, this article wants to show that the Church's position has remained consistent.

Scientific theories including the "Big Bang" believed to have brought the universe into being 13.7 billion years ago and the idea that life developed through a process of evolution do not conflict with Catholic teaching, Pope Francis said on October 27, 2014.

Addressing a meeting of the Pontifical Academy of Sciences, an independent body housed in the Vatican and financed largely by the Holy See, Francis said scientific explanations for the world did not exclude the role of God in creation.

"The beginning of the world is not the work of chaos that owes its origin to something else, but it derives directly from a supreme principle that creates out of love," he said. He added: "The 'Big Bang', that today is considered to be the origin of the world, does not contradict the creative intervention of God, on the contrary it requires it."

"Evolution in nature is not in contrast with the notion of (divine) creation because evolution requires the creation of the beings that evolve," the pope said during an unveiling of a bust of Pope-emeritus Benedict XVI at the Pontifical Academy of Sciences.

"The scientist," he continued, "must [nevertheless] be moved by a trust in the idea that nature hides, within her evolutionary mechanisms, potentialities that it is the task of intellect and freedom to discover and actuate, in order to achieve the [kind of] development that is in the design of the Creator."

In related reflections Francis also said that the big bang theory of the origins of the universe does not contradict God. He explained that "when we read about Creation in Genesis, we run the risk of imagining God was a magician, with a magic wand able to do everything. But that is not so ... God is not a divine being or a magician, but the Creator who brought everything to life. ... Evolution in nature is not inconsistent with the notion of creation, because evolution requires the creation of beings that evolve."

It may be noted that Pope Francis has reiterated that the Catholic Church sees no conflict between science and religion, accepting the universe was created in the Big Bang, rather than insisting on a literal interpretation of the book of Genesis.

This position is not really new. The present pope's comments largely echoed statements from his predecessors. More conservative Popes have, in recent decades, endorsed scientific ideas that are anathema to some fundamentalist Christians, particularly that humans descended from other species. However, it may be noted that the first acknowledgment of this possibility the Church's position has evolved.

When Pope Pius XII first acknowledged the possibility of evolution in 1950 his position was extremely guarded. His encyclical Humani Generis holds: "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... 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 pre-existent and living matter – for the Catholic faith obliges us to hold that souls are immediately created by God".

Pope John Paul reiterated this open position in 1996. By the time Pope John Paul II addressed the topic, there had been a shift. In 1996, the then Pope said, "This theory [evolution] has been progressively accepted by researchers, following a series of discoveries in various fields of knowledge. The convergence, neither sought nor fabricated, of the results of work that was conducted independently is in itself a significant argument in favour of this theory."

In 2011, the former Pope Benedict said scientific theories on the origin and development of the universe and humans, while not in conflict with faith, left many questions unanswered. Earlier as Cardinal Ratzinger he had written: "We cannot say: creation or evolution,

inasmuch as these two things respond to two different realities. The story of the dust of the earth and the breath of God, which we just heard, does not in fact explain how human persons come to be but rather what they are. It explains their inmost origin and casts light on the project that they are. And, vice versa, the theory of evolution seeks to understand and describe biological developments. But in so doing it cannot explain where the 'project' of human persons comes from, nor their inner origin, nor their particular nature. To that extent we are faced here with two complementary—rather than mutually exclusive—realities."1

Now, as part of a wider move to pull the Church into the 21st Century while also restoring its prouder traditions, Pope Francis has used language that carries the message more clearly still.

The Pontifical Academy of Sciences is a Vatican body designed to promote the mathematical and physical sciences. Among the nearly 50 Nobel Prize winners who have been members are such scientific giants as Ernest Rutherford, Max Plank and Niels Bohr.

This indicates that in spite of some frictions, by and large, the Church has always been supportive of scientific development, including the theories on the origin of the world and of life. The absence of any protest from the Catholics also indicate strongly that the Pope's statements are consistent with the Church's commitments to scientific progress.

Cardinal

Ratzinger, In the Beginning: A Understanding of the Story of Creation and the Fall (Eerdmans, 1995), 50.