

# Two Modes of Thought: Science and Religion

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## Author Biography

*Fr. Merrifield, SJ is Chancellor: Loyola Marymount University. Although a member of the University administration, Fr. Merrifield has not lost interest in faith/science. Biology, anthropology and evolutionary psychology have always attracted him more than physics in which he did his graduate studies. In the following article, deliberately provocative, he attempts to explore how Stephen Gould's "non-overlapping magisteria" model might be valuable to Christian believers. He welcomes critical response. His e-mail address is dmerrifi@lmumail.lmu.edu.*



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Being at once a believing Christian and also trained as a scientist, I am forever exploring new ways to express the relationship between science and religion. One way of dealing with the apparent clashes between the scientific worldview and that of religion is to simply put them in two totally separate areas of discourse. This has recently been most interestingly presented by Stephen Jay Gould in the chapter entitled “Non-overlapping Magisteria” in his book, *Leonardo’s Mountain of Clams and the Diet of Worms: Essays in Natural History*. Essentially, in his view, presented in response to a new statement on evolution from Pope John Paul II, science deals with “the empirical constitution of the universe” and religion searches for “proper ethical values and the spiritual meaning of our lives.” In this context, Gould sees the Bible not as “literal truth,” but as “illuminating literature, based partly on metaphor and allegory.” Is this so different from the frequently quoted remark of a cardinal in the time of Galileo: “The Bible does not teach how the heavens go, but how to go to heaven?”

Since, in Gould’s terms the “net of science covers the empirical universe: what it is made of (fact) and why does it work this way (theory),” there is no possibility of conflict with the “questions of moral meaning and value” which are religion’s responsibility. Of course, there are a number of evolutionary psychologists who may well differ with this and attempt to put value and meaning over in the realm of science. There are as well, even outside of the fundamentalists in all religious camps, other believers who are not at all ready to give up all “facts” to science! In fact, I have received a criticism of Gould’s approach by a Catholic theologian who asserts theology involves both “facts,” presumably empirical, and “theories” which explain them. I, not a theologian, wonder if it is “facts” or “faith” which the theologian seeks to explain, following the Anselmian definition of theology as “*fides quaerens intellectum*” or “faith seeking understanding.”

Another easy separation of science and religion, favored by Anne Foerst, who is at MIT working in the study of computers and God, is to identify scientific explanation with “logos” and religious with “mythos.” This is, as I see it, not too different from Gould’s division. Again, not all religious people are willing, it seems to me, to use “mythos,” and much less the English term “myth,” to cover religion even if religion is seen as “values and meaning rooted in metaphor and allegory.” I greatly doubt that most believers, including theologians, would feel inclined to restate religion’s claims in the language of Gould on values and meaning, conceding all empirical observations about the universe to science.

When I have tested the “nonoverlapping magisteria model” on some very well educated Catholics, for example, I found some asserting that “the Resurrection of Jesus” was an empirical fact and even the creation of the world by God. One even maintained that the presence of Jesus in the Eucharist was indeed “a fact!” Of course, Catholics are not easily going to say that the Creator, the Resurrection and the doctrine of the Eucharist are “myths.”

However, it is confusing to say articles of faith are empirical facts in order to maintain they are “realities,” introducing another category. It might be possible to speak of “religious realities,” based, however, in faith, of which Gould does not speak. Of course, the sciences do not hesitate to study religious faith and religious experience and seek to explain them in psychological and sociological terms. Indeed, theologians use scientific approaches when they do textual criticism or biblical archeology, as well as in more tangential areas, as in the dating of the Shroud of Turin.

Parenthetically, I might mention one approach to science and religion worthy of consideration, that of Edward O. Wilson, in his latest book *Consilience: The Unity of Knowledge*. He seems to intend the absorption of religion by science, moving beyond Gould to the “explanation” of “values and meaning” by the genetics of the development of the human brain. The scientific enterprise, itself, of course, can also be so investigated as a mere evolutionary adaptation. However, its claimed objectivity is not really damaged by a deeper understanding of the evolving personal and social environment in which it is done. So, I believe, as well, that the investigation of the evolutionary aspects of religion does not threaten the validity of the values and meaning that it sustains.

In the Catholic tradition and some others philosophical analysis discovers “realities” and “truths,” which, however are not empirical facts or theories in the scientific sense nor are they articles of faith. This might indeed be a third, nonoverlapping magisterium. In this area might be included the question of the existence of the human soul and, indeed, traditionally, the existence of God. Of course, a goodly number of scientists do hold with an almost evangelical fervor that science has indeed wiped out these “hypotheses!” They are, I would agree, unnecessary additions within the methods and limits of a scientific worldview. However, the problem is that science itself becomes a religion or a philosophy once it becomes “The Total Explanation” and the cosmos becomes, by definition “all there is.” Whether this is so is obviously outside the possibility of scientific investigation as such.

So, at this moment, I am pondering what in the content of my own religious faith I regard as empirically factual, which I understand as being in principle accessible to scientific investigation, historical, archeological, textual, or other. Is the death of Jesus on the cross such a historical fact rather than a belief, the belief, or myth, being that He died for our sins? What are we to say of the miracle stories in the accounts of Jesus and, indeed, in the history of the Church? Much has been done to interpret many of these as “mythos.” However, most Christian scholars are not ready, I believe, to see all the tales of these extraordinary events simply as examples of “illuminating literature.” Some would maintain that alleged miracles could be scientifically investigated and that they would, hopefully, be found to be “without any possibility of scientific explanation.”

For Catholics, an added dimension is the teachings over the years of the Church, which in many areas seem to be proposing empirically investigable facts as doctrine, such as, for example, the virgin birth of Jesus, which is, of course, based in scripture. The mind of the Church does not seem to allow this to be seen as “mythos,” but clearly as “logos,” including as a fact to be believed, not only that Mary remained a virgin but that there were no other children. It does not seem that any empirical data is included in the case of something like the Assumption of Mary, for the *terminus ad quem* extraterritorial, as it were. However, implied certainly is that her body is not to be found in any earthly tomb! The doctrinal affirmations about divine revelation itself may touch upon the empirical, as well, even for those traditions which do not have angelic dictation or golden tablets.

What thoughts do others have in this area of considerable concern in particular for scientists who are believers? It seems that the ongoing dialogue, with believers showing an openness even to that which may seem doctrinaire or hostile from members of the scientific community, cannot but clarify religious claims and methodology, as religious and, maybe more importantly, philosophical reflections may help put a scientific worldview in perspective. Carl Sagan’s self-explanatory Cosmos may need farther explanation, as indeed the popular images and explanations of “God” continually need purification. I find that religious people are still clinging to “the God of the gaps,” as J. T. Robinson called this explanatory God who comes to our rescue in those areas in which science has thus far no explanation.

The very fact that science works so well is part of that overall mysterious that surrounds our human experience and leads some to believe in an ultimate reality which is not simply the cosmos. We only touch upon this “freshness deep down things,” to quote the Jesuit poet, Gerard Manley Hopkins, through myth, allegory and the experience of moral goodness, even if scientists think they can explain human goodness away through analysis of genes and neurons. Usually, I have found, such investigators have themselves marvelously developed moral sensitivity which, for me, is much more than their genetic history might explain! Mystery does remain, as Wittgenstein averred: “Not *how* the world is, but *that* it is is the mystical.”