

Karl Kienitz, professor at ITA, speaks about science and the Christian faith

The original text of this interview (in Portuguese) first appeared on March 15, 2012, on [Origem e Destino](#), an Internet blog maintained by Prof. Johannes Janzen, professor for Civil Engineering at *Universidade Federal do Mato Grosso do Sul*, Brazil.

Many scientists, at the beginning of modern science, were Christians. What was the importance of the Christian worldview to the development of modern science?

Many scientists from the start - and not just at the beginning - of modern science have been Christians. Science depends on certain properly organized assumptions about the world. And it was in the European culture of the late Middle Ages, permeated by Christianity, that appropriate conditions in this regard occurred, favoring the development of the experimental method of science as we know it. Christians like Robert Grosseteste and his student Roger Bacon (thirteenth century) were among the first to emphasize the use of experimentation to assess claims about natural phenomena, and gave a clear motivation for this, rooted in a Christian worldview. They were followed by early modern scientists, Christians such as Agricola, Kepler, Pascal, Boyle. Centuries later, the Christian James Joule continued emphasizing the positive link between Christian faith and science by saying that “after the knowledge of, and obedience to, the will of God, the next aim must be to know something of His attributes of wisdom, power and goodness as evidenced by His handiwork.” For science showed to be an excellent tool to learn, explore and make good use of “His handiwork,” i.e. everything God created.

To do science it is necessary to assume that the tools of science - the law of logic, the law of causality, the principle of uniformity - are true. Has the Christian worldview something to say about these tools of science?

The Christian worldview does not accredit one or the other tool of science, philosophy or other branch of human intellectual activity. But it can predispose us to expect that such tools will work, as in the case of the three you mentioned. For example, the Bible tells us that God is consistent in his government of creation, and not full of whims. So, beforehand we can expect to discover regular patterns in the study of nature. This kind of argument demonstrably contributed to the investigation of nature in a methodic way that was refined, resulting in the scientific method.

In specific cases, it is possible to recognize further contributions of Christian beliefs. Let me illustrate this with two examples. Kepler used his findings to highlight the glory and wisdom of the Creator. Galileo argued that one can not assume that God's ways and thoughts are ours, and therefore chose to systematically observe the world He created.

In summary, I would not go so far as to say that a Christian worldview is the basis of modern science. The basis of modern science was the hard work of people of enviable intellect, tenaciously devoted to the study of nature. But their Christian worldview decisively motivated and encouraged the development and use of the scientific method.

Stephen Jay Gould, a prominent paleontologist, evolutionary biologist and philosopher of science, who taught at Harvard, and died in 2002, said that Christianity and science can coexist, because they occupy separate places in human life. Do you agree?

Christianity and science have coexisted in Western culture, you simply study history of science and clearly see that. When Gould tries to explain that this is because the two “occupy separate places in human life,” I don't follow his reasoning. What “separate places” would he be talking about? But I know that for scientists like James Clerk Maxwell and Max Planck, Christianity and science not only coexisted: they existed in union. Planck reiterated that the two “united in fighting a ceaseless battle against skepticism and dogmatism, against unbelief and superstition.” And Maxwell suggested that “Christians whose minds are scientific are bound to study science that

their view of the glory of God may be as extensive as their being is capable of.”

Do you believe in miracles?

In the Modern Dictionary of the Portuguese Language (from publisher *Melhoramentos*), miracle is defined as “a fact that is attributed to a supernatural cause.” There are facts that I attribute to supernatural causes. I consider the resurrection of Jesus Christ, the most significant of them.

Isn't it a contradiction that a scientist believes in miracles?

No, because it is the materialist and not the scientist who believes that everything (in the broadest sense of the term) can be explained - or will someday be explained - in terms of natural laws.

If miracles happen, there are events with supernatural causes. That is, you attribute certain events to supernatural causes when, in reality, these events may have undiscovered natural causes. Wouldn't this belief convey the idea that you believe in the God of the gaps?

Scientists usually do not refer to the supernatural in their assertions for fear of committing the “fallacy of the god of the gaps,” which would consist in appealing to the supernatural when in fact there is an explanation - not yet known - in terms of natural laws. When a person believes that everything can (or will) be explained in terms of natural laws, (s)he is often prone to accuse others of “the god of the gaps fallacy,” even without certainty that one day there will be an adequate material/natural explanation. Ultimately, such a person will simply reject an explanation that does not suit him/her, accusing his party of an alleged “fallacy” that might as well not exist. As an example I quote the resurrection of Jesus, with the notorious failure of all known attempts of naturalistic explanation. The alternatives – not very honest, unfortunately – are simply to deny or ignore the fact, rudely disregarding the existing evidence.

Unlike the materialist, I recognize as different the set of “what is” and that of “what can (or will) be known/understood by natural means.” To my understanding, a mentality such as the materialistic one is mistaken, when it derives its ontology (the theory of what is) from epistemology (the theory of what can be known). Scientists who profess the Christian faith, and also other scientists (such as Gödel and Einstein) oppose (d) that kind of mentality. I believe in the personal and relational God revealed in the Bible, and know that miracles do happen. As a scientist I have a high standard to accept miracles, but I do not deny them. If I will ever be accused of the “god of the gaps fallacy,” the charge will be motivated by the faith of the materialistic accuser and not by a lack of scientific rigor on my part.

Norman Geisler, a Christian philosopher, believes that materialism and naturalism lead some scientists to ignore, for example, intelligent design. Why is the materialist worldview false?

Alvin Plantinga presented several strong arguments against materialism, for example in his article “Against Materialism,” published in “Faith and Philosophy” in 2006. From a more practical point of view, I consider that the main aberration of materialism / naturalism becomes apparent in its search for explanations for what may be inaccessible by principle. Thus the materialist closes himself to the insight that the danger of fallacy exists when trying to explain the unexplainable.

Why then are there still materialists and naturalists?

In fact there are many materialists and naturalists despite strong arguments against materialism and naturalism. In my view there are (at least) two possible explanations for this kind of phenomenon, both pointed out by Blaise Pascal (in “Pensées,” fragments 245, 259 and 277). (1) Reason and habit can both be sources of beliefs. Many people simply acquired the habit of being materialists / naturalists and it never occurred to them to seriously think about their worldview.

(2) People have the power to decide what they will or will not think about. Reflecting on one's own worldview also occurs by choice. Pascal says that “the heart has its reasons, which reason does not know... the heart naturally loves the Universal Being, and also itself naturally, according as it gives itself to them; and it hardens itself against one or the other at its will.”

What should a materialist do to become a Christian?

In the light of my answer to the previous question, I understand that the first step is to objectively reconsider one's own worldview. Those who wish to work on more detailed arguments can read the writings of Alvin Plantinga and William Lane Craig. Those looking for excellent but more accessible texts, may prefer the writings of Norman Geisler and Josh McDowell.

What should a Christian university student do when (s)he is being confronted with the materialistic and naturalist worldview?

Instead of answering this question, I want to point to a text by Prof. Alderi Souza de Matos (*Universidade Presbiteriana Mackenzie, São Paulo*), which deals comprehensively with this question. His “Letter to a Christian university student”(in Portuguese) is available from the site [*Fé e Ciência*](#).