

## **ARTICLE**:

## Can Science and the Supernatural Co-exist?

By James D. Stein (898 words)

he truth is out there – and we have been searching for it for millennia. Some of the truth is known – these are the great laws of science. Some of the truth is unknown – but will be uncovered by scientists of the future. But many people, including some distinguished scientists, believe that some of the truth is unknowable, and will remain forever hidden. It will remain hidden because there are ultimate secrets of the Universe that science is incapable of disclosing.

Our lives are unquestionably richer, in a material sense, because of the efforts of science. But science deals with the material – with the measurable matter, forces, and energy that shape the physical Universe. Many people claim that there is a non-material Universe, supernatural and paranormal phenomena that science has been both unable and unwilling to explain. So is it possible to reconcile the analytical approach to the measurable that is the domain of science, and the perceptions of the supernatural and the paranormal that are widely believed to be equally real?

This is not the first time in history that science has collided head-on with belief. Early in the sixteenth century, Nicolaus Copernicus propounded the theory that the Sun, and not the Earth, was the center of the solar system. This was viewed as heresy by the Catholic Church, which even resorted to burning advocates of this position at the stake. The Catholic Church has drastically altered its position on this subject, and now even sponsors seminars on astrophysics. So it is possible for science to co-exist with a radically different world-view.

But the situation now is different than it was in the sixteenth century. It is science, not religion, that is now pre-eminent, having unequivocally demonstrated that it understands a great deal about the behavior of the Universe. Although science does not bring the power of the Inquisition to bear on those who hold alternative views, it does represent the prevailing world-view. Science has shown us that disease is caused by organisms too tiny for us to see

with the naked eye, and that the world is made up of atoms, objects so small they make disease-causing organisms seem gargantuan by comparison. If you had espoused either of these viewpoints in the sixteenth century, you would have been seen as a crackpot. Today you are viewed as a crackpot if you believe in psychokinesis, ghosts, or alien abductions.

So could the "crackpot" views of today be the science of tomorrow, much as the "crackpot" views of the sixteenth century have become the science of today? It's certainly not impossible. There's a lot that we don't know. Moreover, we know that we don't know it. Only 5% of the Universe consists of ordinary matter and energy; the remaining 95% is referred to as "dark matter" and "dark energy." We know it's out there, but we have no idea what it is.

Compared to this, how strange are paranormal phenomena such as ESP, telepathy, and precognition? Even though these phenomena have not been substantiated to the satisfaction of scientists, these phenomena have a long – if clouded – history. In a world in which scientists will soon be able to obtain pictures of the surface of planets light-years distant that thirty years ago were not even known to exist, is it really so ridiculous to assume that we may be able to receive information by means other than sight, sound, smell, taste, or touch?

What must be done to bring about a reconciliation between the supporters of science and the believers in the supernatural? Each side has steps that it can take which will bring this closer.

## Scientists should

- Be less critical of colleagues who are willing to investigate these phenomena, as long as these investigations are conducted in accordance with scientific methods.
- Be open to arguments that there are laws governing the behavior of matter, forces, and energy which the tools of science may never be able to validate.

## Believers in supernatural and paranormal phenomena should

- Realize that anecdotal descriptions do not constitute evidence of anything other than individual perception; and that belief or feeling without supporting material is unlikely to convince a skeptic.
- Become more skeptical themselves; reducing the amount of fraud associated with the paranormal and the supernatural will enable claims to be taken more seriously.
- Forego claims such as "recent developments in quantum mechanics support the existence of psychic phenomena." Statements such as this are generally made by people ignorant of what quantum mechanics actually has to say, and thus taint any subsequent observations.

There are benefits to both sides from being able to effect such reconciliation. The mission of science is to investigate new phenomena, which it is eager to do as long as the new phenomena are genuine. Noted scientists throughout the ages have indicated a willingness to accept paranormal and supernatural phenomena as a legitimate part of the Universe if it can be so demonstrated. If these phenomena can be substantiated – and of all human endeavors, science is best equipped to do so – believers in these phenomena will have made a significant contribution to expanding our knowledge of the Universe.

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Dr. James D. Stein graduated from Yale in 1962 with a BA in mathematics, and received his PhD from the University of California at Berkeley in 1967. He is the author of more than 30 research articles on mathematics and the coauthor of textbooks on mathematics and strategic management. Dr. Stein has also blogged for *Psychology Today* and the *Huffington Post*.