

TART, CHARLES T. (2009). *The end of materialism: How evidence of the paranormal is bringing science and spirit together*. Foreword by Huston Smith and Kendra Smith. Noetic Books, Institute of Noetic Science. Oakland, CA: New Harbringer Publications. 240 pp. ISBN-9781572246454, Hardback, \$29.95. *Reviewed by Arthur Hastings.*

Simply said, this book makes the point that spiritual realities can be studied with scientific methods, and the result of these studies is that the reality of spiritual experiences is now supported by scientific evidence. In this work, Charles T. Tart builds his case with validated and replicated scientific studies from his work and the work of many other researchers. His conclusion is that five kinds of phenomena have been established evidentially—telepathy,

clairvoyance (remote viewing), precognition, psychokinesis, and psychic healing. The experiential properties of transcendent and mystical states can now be well described: they include feelings of unity, expansion of identity, transcendence of space, transcendence of time, physical phenomena and other features that can not be reduced to material reality. Tart points out that many of these features have been shown to be real in laboratory research, including Tart's own experiments. As an example, he points out that telepathy has been established in controlled, scientifically rigorous experiments, and yet does not follow physical laws or extensions of them. Yet in spiritual experiences, a oneness with others is often reported, similar to telepathy. A sense of unity with the universe throughout space is another facet of mystical experiences, and this has been validated in research on remote viewing and clairvoyance, which show successful awareness of distant or hidden targets, under controlled conditions.

For many, the most puzzling paranormal effect is precognition, predicting an event yet to come—that is, in the future. This would seem to be impossible, but those who encounter profound spiritual occurrences report a sense of being outside of linear time, and able to be aware of information from events in the future. This is also reported in some near-death experiences and precognitive dreams. In research studies, remote viewing of future targets has been found to be successful. Tart reports his own skepticism about precognition, until it started turning up in his own laboratory. In all these forms of exceptional awareness, the author carefully explains the innovative and ingenious research methods that are used to test the hypothesis.

Further spiritual examples are the reported cases of prayer healing and apparent spiritual healing of physical diseases and ailments, and reports of persons who have reputations as healers. These possibilities have been now brought under scientific observation with established conditions, control groups, and objective statistical analysis. These are being published in reliable, peer-reviewed scientific journals. One experiment studied the healing of wounds on mice, and found that the mice that were given “healing” recovered far faster than the untreated mice.

Usually these studies are done in research centers, and of course these are not under conditions such as mystical experience may be, so the effects are often small. However, the point that Tart makes is that what happens is demonstrably real, and it is of the same nature as the more dramatic spiritual perceptions and experiences. These qualities seem to be present in most persons—many ESP studies are done on ordinary individuals—which is in agreement with Abraham Maslow and the early transpersonal psychologists, who concluded that peak experiences and spiritual levels of consciousness were an intrinsic part of human capabilities.

The author does not attempt to report all the evidential research that has been done in parapsychology, physics, and psychology on these phenomena. For this the reader can go to books such as *The Conscious Universe* (Dean Radin), *An Introduction to Parapsychology* (Harvey J. Irwin and Caroline Watt), *Best Evidence* (Michael Schmicker) and *Parapsychology and the Skeptics* (Chris

Carter). These books are readable, technically solid, and also even handed in their review of the evidence. The subject of paranormal phenomena and its threat to materialism has produced an army of skeptics and critiques (e.g. *Science and Supernatural*, by J. E. Alcock). These often label paranormal belief as superstition, wishful thinking, and credulity. Tart considers most of critics pseudoskeptics, because they appear already convinced of their position, whereas a true skeptic should explore all sides of a question in search of the truth.

Tart covers further research that informs spiritual levels of awareness, though he feels that the evidence is less cumulative than the five major topics. Near-death experiences, now a field of study with a professional journal, are discussed. These are not found to be caused by drugs, delirium, or lack of oxygen, and certainly for the individual, they are real. The experiences appear to include many of the psychic experiences mentioned, present a vivid and persuasive after-death reality, usually resulting in a profound spiritual transformation for the person. Tart also discusses out-of-body experiences. (In fact, he coined the shorthand OBE acronym for the experience.) His research included brain wave studies of persons experiencing this state. He says that his participants in OBE research often say to him that they do not believe that life after death is true (pause), they KNOW it is true, because they have been out of their physical body and survived.

Reincarnation is a topic that is relevant to several religious traditions. It is found in folk beliefs even when a religion is not emphasized. Tart reports on documented cases of individuals who tell of a past life that they remember. Systematic investigation of a good number of these cases by trained researchers have located the previous personality's existence, and verified the person's memories. Tart explains the complexity of these cases, and the problems of sorting out imagination and normal means of gaining information from actual traces of a previous life. At the same time he holds open the possibility that there is some kind of survival after death.

One of the outstanding features of this book is that Tart takes the readers behind the scenes in his thinking. When he investigates an effect or phenomena, he thinks of the ways it might be happening by chance, or how there could be a cause that has not been considered. Then he systematically controls for those possibilities. Thus his experiment may go through several iterations before he is ready to conclude there are really some non ordinary phenomena occurring. This is how a good scientist thinks.

Tart is one of the founders of transpersonal psychology, and sums up what he has learned in a chapter on mystical and transpersonal encounters and their potentials for human experience. The book includes a glossary, references to the research and serious discussion of these matters (including critical positions), institutions and organizations, and an index of topics.

I have known the author for many years, and so I asked him what point he wanted to make with this book. He said that the point was that you can be both scientific and spiritual. He has lived out this belief personally though practices in Aikido (where he has an earned black belt), engaging in the Gurdjieff

work, studying meditation with Shinzen Young, Sogyal Rinpoche, and other teachers, practicing Tibetan Buddhism, and other spiritual and transpersonal practices. With the case for a transcendent reality, he shares his honest thoughts as well as doubts, and what is behind each. This is also a personal book in which he talks about his childhood and how this influenced his interests in science and in spiritual seeking. He demonstrates a truly scientific stance, and at the same time draws conclusions reflecting openness and wisdom.

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The Author

Charles T. Tart, Ph.D., is one of the founders of transpersonal psychology. He is internationally known for his work in consciousness and scientific parapsychology. He is an emeritus Professor of Psychology from the University of California, Davis. He has held the Bigelow Chair of Consciousness Studies at the University of Nevada, Las Vegas, and currently teaches at the Institute of Transpersonal Psychology. His books include the classic *Altered States of Consciousness*, *Transpersonal Psychologies*, *States of Consciousness*, *Living the Mindful Life*, *Waking Up*, and *Body, Mind, Spirit: Exploring the Parapsychology of Spirituality*.

The Reviewer

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