

Does the soul exist?

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Abstract

The question of the existence of the soul has intrigued both scientists and philosophers for centuries. This article reviews the explorations of George Wald, Nobel Laureate in Medicine (1967), along with other scientific perspectives, to examine whether consciousness or the soul can be explained purely by physical processes. Highlighting Wald's reflections on awareness in living beings, Wilder Penfield's experiments, and insights from notable physicists, the article argues for the existence of consciousness as a non-physical entity, thereby bridging modern science and spiritual understanding.

Keywords: Soul, Consciousness, George Wald, Mind, Spirituality, Jainology, Non-physical entity, Upanishads, Atman

1. Introduction

The debate over the existence of the soul touches the core of human inquiry: are we purely physical beings, or is there an immaterial aspect that guides awareness and life? Dr. George Wald, awarded the Nobel Prize in Medicine in 1967 ², explored this profound question in the context of biology and cosmology. Agrawal reviews Wald's explorations, as well as those of other scientists, in his article titled "*Existence of Soul*,"³ revealing that conventional scientific methods encounter inherent limitations when probing consciousness. This article presents a

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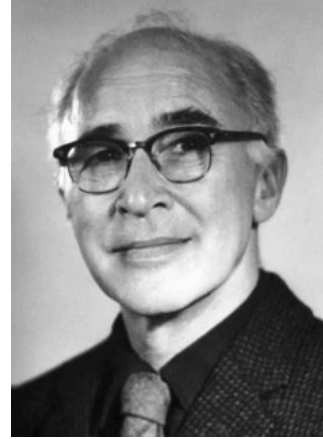
² Wald, *The Cosmology of Life and Mind*, 8–21.

³ Agrawal, *The Existence of Soul and Modern Science*, 9-24.

concise review of such explorations, integrating perspectives from physics, biology, and spiritual philosophy.

2. The Frog and Consciousness

In his exploration of the soul, Wald raised an essential question regarding the awareness of a frog: Is a frog aware that it saw something? He writes: *"But I know that I see. Does a frog see? It reacts to light, so does a photoelectrically activated garage door. Does the frog know that it is reacting to light? Is it self-aware?"*



George Wald

*Now the dilemma: there is nothing that I can do as a scientist to answer that kind of question."*⁴

To seek an answer, Wald requested his colleague Dr. Wilder Penfield to investigate whether objective evidence of awareness—such as conscious *seeing*—could be found in the frog's nervous system. He sought to identify a physical locus of the frog's awareness. In simple words, he wanted to see the location of the frog's 'mind'. Penfield's research⁵ suggested that consciousness does not generate physical signals; thus, it is impossible to locate the center of consciousness within the body. He concludes: *"I am forced to choose the proposition that our being is to be explained based on two fundamental elements- mind and brain as two semi-independent elements."*

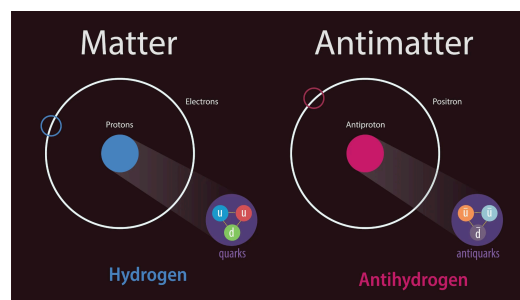
3. From Big Bang to Human Existence

Wald highlighted the extraordinary fine-tuning required for human existence: *"If there had not apparently existed a one-part-per-billion inequality in the number of particles and anti-particles in the Big Bang; if atomic nuclei were not so much massier than electrons; if the electric charge on the proton did not exactly equal that on the electron; if ice did not float; if the forces of*

⁴ Wald, *The Cosmology of Life and Mind*, 17.

⁵ Penfield, *The Mystery of the Mind*.

*dispersion and aggregation in the universe were not in exact balance, then there might still be a universe, but lifeless.”*⁶ Thus, after learning about the creation of our universe from the Big Bang nearly 13.7 billion years ago, one may be tempted to ask: What is the probability



of the creation of human beings starting from the Big Bang? The answer given by Deepak Chopra is as follows: *“The likelihood of the creation of human beings starting from the Big Bang is the same as the likelihood that a hurricane could blow through a junkyard and create a Boeing 707.”*⁷

4. Wald’s Solution to the Two Problems

Wald proposed that consciousness (or mind) has existed always, guiding the universe’s evolution toward life. He states: *“...mind instead has been there always, and this universe is life-breeding because the pervasive presence of mind has guided it to be so.”*⁸ Here, ‘mind’ refers to consciousness or the soul, which Wald also calls Atman or the essential Self. He draws parallels with the Upanishads: *“Each of us has a share in Brahman, the Atman, the essential Self, ageless, imperishable. Tat tvam asi – Thou art That! That is the stuff of the universe, mind-stuff; and yes, each of us shares in it.”*⁹ Wald notes: *“It is not only easier to say these things to physicists than to my fellow biologists, and easier to say them in India than in the West.”*¹⁰

5. Views of Nobel Laureates in Physics

Several physicists have supported the possibility of soul/God/stuff-beyond-physical-matter. Erwin Schrödinger, a pioneer of quantum mechanics, wrote: *“Mind has erected the objective*

⁶ Wald, *The Cosmology of Life and Mind*, 16-17.

⁷ Chopra, *Perfect Health*, 9–10.

⁸ Wald, *The Cosmology of Life and Mind*, 20.

⁹ Ibid., 21.

¹⁰ Ibid., 21.

outside world of the natural philosopher out of its own stuff."¹¹ Eugene Wigner, in an interview to the Washington Philosophical Society, emphasized the limitations of reductionist views:

Q: *Are we machines?*

A: *Oh yes. We are not machines. If man were a machine, it should be possible to describe him entirely in terms of atoms and molecules, which I don't think is possible.*

Q: *Are you suggesting consciousness is non-physical?*

A: *Yes.*¹²

Experimentation can also inform spiritual understanding. Acharya Amritchandra, in his commentary on *Samayasāra*, encourages self-experimentation to convince oneself of the soul's existence.¹³

6. Conclusion

The combined reflections of scientists such as Wald, Penfield, Schrödinger, and Wigner, along with insights from Jain philosophy, suggest that consciousness cannot be fully explained by physical matter alone. Evidence points to the existence of an immaterial aspect of life—often termed the soul or Atman—which pervades both the universe and human beings. By integrating scientific rigor with philosophical and spiritual perspectives, a holistic understanding of human consciousness and the soul emerges, bridging the gap between science and spirituality.

References

Agrawal, Paras Mal. "The Existence of Soul and Modern Science." *Arhat Vacan* 9, no. 2 (1997): 9–24. Indore: Kundakunda Jñānapīṭha. <https://www.spiritualsciencesg.com/book-article/pm02.pdf>.

¹¹ Schrödinger. *Mind and Matter*.

¹² Gomatam. *An interview with Eugene Wigner*. p. 261.

¹³ Agrawal. *Soul Science (Part 1)*. pp. 33–34.

Agrawal, Paras Mal. *Soul Science (Part 1)*. Indore: Kundakunda Jñānapitha, 2014.

<https://www.spiritualsciencesg.com/book-article/pm11.pdf>

Chopra, Deepak. *Perfect Health: The Complete Mind/Body Guide*. New York: Harmony Books, 1991.

Gomatam, Ravi. “An Interview with Eugene Wigner.” In *Synthesis of Science and Religion: Critical Essays and Dialogues*, edited by T. D. Singh and Ravi Gomatam, 257–264. San Francisco: Bhaktivedanta Institute, 1987.

Penfield, Wilder. *The Mystery of the Mind*. Princeton, New Jersey: Princeton University Press, 1975.

Schrödinger, Erwin. *Mind and Matter*. Cambridge: Cambridge University Press, 1958.

Wald, George. “The Cosmology of Life and Mind.” In *Synthesis of Science and Religion: Critical Essays and Dialogues*, edited by T. D. Singh and Ravi Gomatam, 8–21. San Francisco: Bhaktivedanta Institute, 1987.

