

Book Review**Review of Amit Goswami's Book: Creative Evolution: A Physicist's Resolution between Darwinism and Intelligent Design**

Stephen P. Smith*

ABSTRACT

Goswami's book is worth five stars, and his view of evolution is almost the same as my own; and I have studied evolution for years now. I present the following quotes. For example, Goswami write: "Any organizing principle that is nonmaterial is automatically excluded from science by definition. However, mainstream scientists themselves, biologists included, have a fundamental but unproven metaphysical assumption behind their work called scientific materialism." You can find this book at Amazon http://www.amazon.com/Creative-Evolution-Physicists-Resolution-Intelligent/dp/0835608581/ref=cm_cr-mr-title .

Key Words: creative evolution, Darwinism, Intelligent Design, physicist, Amit Goswami, resolution.

Goswami (page 8) writes the following. "Every biologist must be painfully aware that biology is an incomplete science. It needs new organizing principles, ones that are nonphysical and nonmaterial, to explain three perennial mysteries: the difference between life and nonlife, the development of an embryo into an adult biological form, and, as emphasized here and by Eldredge and Gould, the discontinuous epochs of evolution. Unfortunately, it is not politically correct for biologist to admit these shortcomings in public."

Goswami (page 13) writes: "Any organizing principle that is nonmaterial is automatically excluded from science by definition. However, mainstream scientists themselves, biologists included, have a fundamental but unproven metaphysical assumption behind their work called scientific materialism."

Goswami notes that Darwin's theory of evolution is very incomplete, and he (page 15) writes: "According to theoretical predictions of Darwinism and its later versions, there should have been thousand upon thousands of reported cases of intermediates filling up most of the fossil gaps. That hasn't happened, and therefore the question of the fossil gaps cannot be refuted simply because a few cases of transitional fossils have been found."

Gaswami (page 23) writes: "The Nobel laureate Paul Dirac once said that the solution of great problems requires the giving up of great prejudices. Darwin had to give up the prejudice for Christianity and its doctrine of biblical creationism so that he could explain the data he and his contemporaries collected. In the twentieth century, physicists had to give up the great prejudices of causal determinism and continuity in favor of quantum indeterminacy and discontinuity. Today, the twenty-first century demands an equally revolutionary change in the mind-set of biologists. They must give up the prejudices of genetic determinism and the Darwinian continuity of all biological evolution."

Gaswami (page 32) gets to the heart of the issue, evolution by choosing: "We choose not from ordinary ego-consciousness, but from a nonordinary state of unitive consciousness - call it quantum

Correspondence: Stephen P. Smith, Ph.D., Visiting Scientist, Physics Department, University Of California at Davis, CA
E-mail: hucklebird@aol.com

consciousness. You can easily recognize, though, if you are familiar with esoteric spiritual traditions, that this unitive character of consciousness is widely recognized as God-consciousness. Quantum physics is introducing God-consciousness as the agent of downward causation."

Gaswami (page 33) writes: "In God-consciousness, we have total freedom to choose among the possibilities that quantum dynamics offers for the states of quantum objects. Conditioning limits this freedom of choice in favor of past responses to stimuli (learning). Eventually, we become conditioned to identify with a particular pattern of habits for responding to stimuli; this identification is the ego."

Gowami (page 49) defends vitalism, and asked some hard questions: "The truth is that molecular biology of a cell explains neither an experiencing self nor feelings. Could it be that the necessary organizing principles are missing? Could consciousness explain the experience of the self? Could the vital body explain the experience of feeling? The unfortunate truth is that when biologists are shoved against the wall, almost all resort to evolutionary adaptation as the solution. Consciousness? Of course it is the product of evolutionary adaptation, the biologists insist, forgetting conveniently the problem of the experiencing self."

Goswami (59) defends Rupert Sheldrake and the idea of morphogenetic fields, he writes: "The interaction of the morphogenetic field with physical matter is a resonance of sorts. It is nonlocal, requiring no exchange of signals through space. Such nonlocal interactions are instantaneous."

Goswami (page 62) writes: "When consciousness collapses its possibilities, two parallel correlated experiences occur. One we call an experience of the physical world; this one we sense (or perceive). The other we call an experience of the world of morphogenetic fields; this one we feel. The two worlds do not interact directly, and dualistic issues don't arise. Instead the two worlds go on in parallel, and consciousness nonlocally maintains their parallelism."

Goswami (page 77) writes: "With an understanding of the evolution toward complexity, the biological arrow of time is no longer a mystery. As organisms get more sophisticated as a result of evolution, they represent within themselves more and more sophistication. Over the course of this change, the organism become more sophisticated in processing feeling. And all this creation of complexity, this increasing order and sophistication, requires the involvement of creativity from consciousness."

Goswami (page 102) writes: "I submit that to produce both complexity and specificity we require both upward causation and downward causation. Upward causation is needed to give us randomness in the form of possibility waves that obey quantum probability calculus. Downward causation, via quantum collapse and conscious choice, is needed to give us specificity."

Goswami (page 147) ridicules Darwinism: "In the Middle Ages, when Ptolemy's Earth-centric theory of the world began to show disagreement with the growing observational data in astronomy, adherents of the Ptolemy paradigm busily invented a seemingly endless series of cycles and epicycles (circles within circles) to account for the movement of heavenly objects around the Earth, tweaks that allowed them to continue to justify the old paradigm. The same thing happened and continues to happen in biology. The Darwinists' response to any possible observational discrepancy is to propose a suitable modification of Darwinian ideas - shades of cycles and epicycles. Darwinism is so general that it can be reinterpreted to incorporate any data that contradicts it. It is not falsifiable."

Goswami (pages 203-203) corrects Darwin's theory: "In quantum thinking, genetic determinism gives only part of the answer - the possible variations. However, natural selection in Darwinian form cannot collapse these possibilities into an actual change; that requires consciousness. But if we

reinterpret 'natural selection' as choice by nature in the form of Gaia-consciousness according to the creative requirements of the situation, this selection can collapse the possibilities into actually."

Goswami (page 316) gives his vision of our evolutionary future: "Let those who can, see the point of the new science. Let those who can, take quantum leaps from negative to positive emotions with evolutionary intentions. Let those who can, live increasingly with positive emotions, making new brain circuits and changing the associated morphogenetic fields. Let those who can, spread positive emotions through relationships. We will be few at first, but our numbers will grow, especially as we create new institutions that facilitate this journey for others."

References

Amit Goswami, 2008, *Creative Evolution: A Physicist's Resolution Between Darwinism and Intelligent Design*. Quest Books.