

THE *A Response to Gerald Skoog* INCOMPATIBILITY OF SCIENCE AND THE SUPERNATURAL



Time alone calls into question a part of the standard Creationist account. How could this bacterium be embedded deep within a three-billion-year-old rock, unless it lived at the time the rock was formed? All such early evidence of life are of small, usually microscopic, forms.

Credit: Elso S. Barghoorn and J. W. Schopf

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In the courts and state legislatures, creationists have yet to win. But by instituting pressure on local school boards, administrators, and teachers, they hope either to diminish or eliminate the teaching of evolution even though they appear to be asking only fair play and equal time for an opposing view. As evolution is moot on religion, the equal time argument is specious. As creationism involves the intercalation of supernatural explanations into science, it is epistemologically unsound and scientifically invalid.

There is a broad spectrum of scientific theories to account for the origin of life. Biogenesis versus abiogenesis, cosmic panspermia, archeobiosis, and archeogony are examples of accounts of life's origin that have a greater claim on the attention of scientists than does creationism.

Suppose the creationist view were to be intercalated into science courses. Why not the views of other religions as well? We should include the Chinese concept that the world began with a cosmic egg breaking apart: the white of the egg becoming heaven; the yolk, earth. Why not include an American Indian legend? The earth medicine man, tiring of his loneliness, kneaded a ball of greasy soil from his own skin and set a sphere in space. Burrowing ants enlarged the earth and the raven slashed into the lands and divided the waters. In the Babylonian account Marduk killed Tiamat, divided her body, and converted half into the sky and half into earth, which he then sculpted and filled with life.

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Creationism may have a place in schools, but as a theological doctrine, not as a scientific theory. In courses in comparative religions, which creationists adamantly oppose, it would be possible to give fair play to all the theological accounts of origins. To select only one and place it in a science class in opposition to evolution is to anoint that particular account as a state-sponsored religion.

Creationism demands a position in the classroom that would be denied all other religions. When creationists attempted to have their views mandated in California schools by the State Department of Education, it was theologians such as the Reverend Robert Bulkley—who represented the archdiocese of San Francisco, the San Francisco Council of Churches, and the Board of Rabbis of Northern California—who argued strenuously against the inclusion of creationism in science textbooks. So did the Reverend James F. Church, Assistant Superintendent of Catholic Schools in Sacramento; the Reverend Hogan Fujimoto, Director of Education for the Buddhist Churches of America; and the Reverend C. Julian Bartlett, Episcopal Dean of San Francisco's Grace Cathedral.¹

Evolution has been labeled atheistic many times.² The coupling of atheism with evolution, in the same way that damn yankees frequently appears as a single word, implies that all who use the theory of evolution are atheists. Among the thousands of biological scientists who find the theory of evolution a useful biological concept, few consider themselves atheists. Evolutionary theory is no more atheistic than atomic theory, the germ theory of disease, or the kinetic theory of gases. The lack of necessity to invoke the supernatural does not constitute atheism. Individuals who ride in automobiles are not atheists because the car moves by means of an internal combustion engine rather than a divine push.

Scientific evidence has not only confirmed evolutionary theory but has detailed the processes of evolution. One could ignore Darwin and his ideas and still develop the theory of evolution from such 20th century investigations as those in molecular and biochemical genetics.³ It is conceivable that anti-evolutionists can ignore Darwin, but it is inconceivable that anyone familiar with modern re-

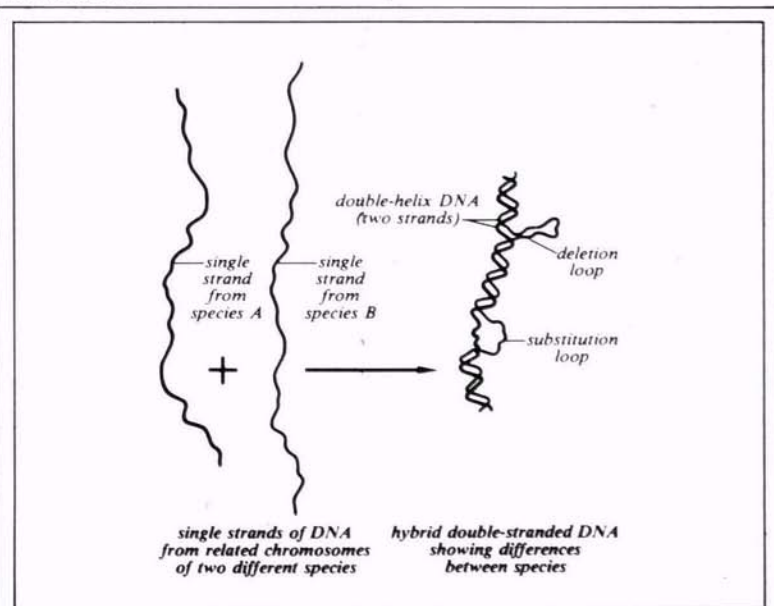
search can ignore the 20th century. The processes of science are so organized that they do not take refuge in the supernatural. The fact that creationism does require a supernatural explanation removes it from the realm of science.

What if the supernatural explanation were true? If it were, it would still not be a scientific explanation and could not be part of a science curriculum. A theory is capable of revision or rejection. The creationist position allows neither. Its supernatural component must be accepted on blind faith with no possibility of modification or rejection. Science does not operate on nonmutable givens. Creationism does and thus removes its dogma from the pale of scientific discussion. ■

¹ *Los Angeles Times*, 10 November 1972, p. 23.

² William V. Mayer, "Evolution: Yesterday, Today, Tomorrow." *The Humanist* 37 (January/February 1977): 16-22.

³ Horace Freeland Judson, *The Eighth Day of Creation*. New York: Simon and Schuster, 1979.



Modern data give additional support for evolutionary theory. The discovery of DNA provided a new technique for determining relationships. The paired DNA strands from a single species can be separated and then single strands from different species brought together. The more closely they pair the more closely the organisms are related. In this case, the two loops indicate differences in DNA sequences. Where the two strands coil together, the hereditary message is similar. Confirmatory data from various branches of science attest to relationships and common ancestry. The probability that these data are mere coincidence is almost beyond calculation.

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