

LITERATURE REVIEWS

Readers are invited to submit reviews of current literature relating to origins. Mailing address: ORIGINS, Geoscience Research Institute, 11060 Campus St., Loma Linda, California 92350 USA. The Institute does not distribute the publications reviewed; please contact the publisher directly.

THE ULTIMATE ORIGIN

GOD AND THE ASTRONOMERS. Robert Jastrow. 1978. NY: W.W. Norton & Co. 136 p.

Reviewed by Katherine Ching, Geoscience Research Institute

With the dawn of reasoning and the discovery of the concept of cause and effect, a child begins in earnest to search out the beginnings of objects and organisms about him. For many the search ends in childhood; for the lucky few it is a lifelong quest. In this highly readable book Jastrow describes the steps taken in the last few decades that have led to the formulation of a cosmological theory known as the Big Bang. With its roots in Einstein's theory of relativity, the Big Bang predicts an expanding universe.

Astronomical evidence by Hubble and Humason in the form of a red shift provided remarkable confirmation for ideas proposed by early theorists. Further substantiation is found in the work of Robert Wilson and Arno Penzias who discovered an isotopic microwave background radiation in every examined part of the universe, in agreement with predictions of Big Bang theorists. For this work they won the Nobel Prize in physics.

Descriptions of both the people and processes of cosmological development are highly readable, with the technical aspects explained so that nearly all readers will understand the basic principles of the methods used. Interesting picture sections are dispersed through the book which show experimental results along with portraits of the scientists involved and marvelous views of stars and galaxies. Were this all, it would be a fine book with which to begin a tour into modern cosmology. But more good things follow.

In addition to examining the data, Jastrow also sheds light on the philosophical and emotional stresses caused by the Big Bang theory. He shows that the Big Bang implies a beginning, and that this upsets many who would prefer a steady-state system — one that has no beginning or

end. Einstein seemed particularly stressed about this point and long resisted the evidence because it was contrary to his philosophical biases.

An admitted agnostic, the author delicately works with the possibility of a Divine presence in the universe. Though his feelings are most clearly stated in the title, he contrasts the theological mind with the scientific and sees that the theological has perhaps accommodated itself to the dissonance caused by the concept of a beginning.

Jastrow closes his book with a statement which will probably become highly quoted wherever theologians and scientists meet:

Now we would like to pursue that inquiry farther back in time, but the barrier to further progress seems insurmountable. It is not a matter of another year, another decade of work, another measurement, or another theory; at this moment it seems as though science will never be able to raise the curtain on the mystery of creation. For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.