## Dismantling the Big Bang

By Alex Williams and John Hartnett (Green Forest, AK: Master Books, 2005), 346 pp., \$11.00

Williams and Hartnett have written an engaging book which will be valuable for those of us who have interest in following the development of cosmology from the sidelines. The book is written from the perspective of two authors who take the early chapters of Genesis (and all that the Bible has to say regarding creation and the universe) at face value. While evaluating cosmological ideas against the standard of God's Word, the authors remain fair in their treatment of cosmological philosophies which are opposed to the Christian/Creation world-view.

The central theme of the book is an exposé of the most popular cosmology of our day: the big-bang theory of the origin of the universe. Special attention is paid to areas where big-bang cosmologists invoke special mechanisms which, although unobserved and untested, prove to be essential for big-bang cosmology to survive. These mechanisms include: a period of inflation during the big-bang sequence (necessary to produce the uniform cosmic microwave background radiation or CMBR); a force sufficient to cause localized regions of expanding gas to reverse direction and undergo gravitational collapse (necessary for galaxy or star formation); and undetectable 'dark matter' (providing a sufficient cosmic mass density to keep the big-bang universe from collapsing back into a singularity in a 'big-crunch'). Each of these mechanisms is really a case of 'special pleading' because they appeal to objects or processes which have never been observed. In essence, their possibility is only known in the creative minds of cosmologists and thus far can only be 'investigated' via theoretical mathematics.

Even more precarious than the explanations invoked for the sequence of events which the big-bang theory invokes to arrive at today's universe is the fundamental assumption of a singularity which is thought to have precluded the initial explosion (the 'bang' in "big-bang"). Within this singularity is found, "all the matter, energy, space, and time of the universe" contained "in an infinitesimal point of infinite temperature and density."

While this may seen like a natural antecedent to the 'big-bang,' which one arrives at by simply rewinding the explosion to a beginning, it also has some serious liabilities. Not the least of which is the inapplicability of the laws of physics to the beginning since conditions within the singularity involve mathematical realities so foreign to our observational world that they do not yield to anything we know or can investigate. We can't even know if any physical or mathematical laws would apply therein.

Adding to the inscrutability of the initial singularity is a viable mechanism which causes the infinitely small, hot, dense point to begin to explode (p. 161):

The starting assumption of the big-bang model is that all the substance of the universe (in the form of energy) as well as time and space began in a single point of infinite density and temperature. This state of singularity is a thermodynamic dead end, so something else was needed to get it out of the singular state and into a form that could produce the galaxies and stars of the observed universe. This "something else" is called the "big bang," but

nobody knows what it was—nothing in the known world of physics could have produced it. Physical descriptions of the big-bang model can only begin after the unknown event has already occurred.

This is not just any 'sloppy' explosion, but an explosion which produces just the right energy of expansion to match the gravitational energy almost perfectly yielding a universe like ours. Not only that, but unlike any other explosion, this explosion must be capable of producing a highly-structured aftermath including carefully balanced (tuned) systems which we see all around us. (This is akin to the problem of producing a complex system such as a 747 jetliner using a 'tornado in a junkyard.') But abundant experience shows that explosions are known to lead to disorder, not increased order.

Williams and Harnett help the reader understand that special pleading made by big-bang cosmology is essentially equivalent to appealing to 'miracles' because of its reliance upon never-before seen or experienced mechanisms. The ironic result is that, although similar to the creationist's resort to God in the beginning, big-bang cosmology appeals to its own set of miracles in the pursuit of what it deems to be 'naturalism'!

A particularly strong point of the book is the way in which it assembles the many liabilities of the big-bang together in one place for the intelligent reader to consider. When combined with other 'anomalous' evidence discussed in the text, such as the measured red-shifts of quasars, it becomes readily apparent that the secular media's love-affair with the big-bang theory as a workable explanation of origins oversteps observational evidence.

The book does not just restrict itself to discussing the big-bang theory and its many problems. Prior to the detailed treatment of the big-bang, the reader is presented with an interesting 'brief history of cosmology' as well as a survey of cosmological models.

Following the big-bang treatment, the authors explore the implications of Einstein's Relativity in combination with the stretching of the universe upon the measurement of time in relation to a Biblical understanding of the age of the universe. (An more in-depth treatment of this topic can be found in Hartnett's more recent book, "Starlight, Time and the New Physics.")

The book also includes a chapter discussing the Biblical model of the universe and an appendix which explores the consequences which result when the text of the Bible is twisted in an attempt to marry it with popular, but unbiblical cosmologies like the bigbang. Ultimately, our cosmology is our world-view. It forms the basis for our understanding of what we believe, who we are, and why we are here. What we believe about our origins has real theological, social, and political implications which we should acknowledge.

Appendix D contains the text from "An Open Letter to the Scientific Community" which states that scientific progress in the area of cosmology is being hampered by the unwillingness of the scientific establishment to fund or publish studies which evidence problems with the big-bang hypothesis. This unwillingness to consider problems with the big-bang is a strong bias within academia and the popular media and detrimental to those

interested in truth. (The statement may also be read at <u>http://www.cosmologystatement.org</u>.)

The reader will come away with a greater tentativeness in accepting the pronouncements of secular science as to origins, all the more so where they contradict the revealed Word of God as recorded in the Bible. The subject of origins deals with extremely complex conditions in the universe at a time when no human was present to see how it actually took place. (If you doubt the complexity of these issues, check out the math in articles referenced in the footnotes!) The state of secular cosmology is far from being in agreement with a uniform consensus and only minor issues remaining to be resolved (p. 294):

The differing models presented here show that it is possible to explain all these features of the universe in entirely different ways. The universe could be expanding or static. Gravity could be attractive or repulsive. Quasars and their high redshifts could be nearby or far away. The CMBR [cosmic microwave background radiation] could be interpreted as the redshifting of radiation due to the expansion of the universe or due to the temperature of space resulting from the thermalization of starlight—nothing to do with expansion. The universe might consist mostly of "dark matter" and "dark energy," or it could just consist of what we see around us; it could be everywhere like we see it, or what we see could be surrounded by vast reaches of "empty" space. These possibilities vary over colossal scales, and demonstrate that our ignorance far outweighs our knowledge.

With so many aspects of cosmology subject to question, the prudent man continues to look to God's explanation of how the universe came to be (the book of Genesis), lest he find himself standing in the shoes of Job:

I know that You [God] can do everything, And that no purpose of Yours can be withheld from You. You asked, 'Who is this who hides counsel without knowledge?' Therefore I have uttered what I did not understand, Things too wonderful for me, which I did not know. (Job 42:2-3 NKJV)

Reviewed by Tony Garland of www.SpiritAndTruth.org.