

"For all the gods of the nations are idols: but the LORD made the heavens" (Psalm 96:5).

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## WHAT ASTRONOMERS DON'T KNOW

by Henry M. Morris\*

Judging from the number of published books and articles on the subject, there is a lot going on in the field of evolutionary cosmogony as astronomers and cosmological physicists are trying to learn how the universe originated and its various components evolved, including all the millions of galaxies, stars, planets, and other objects in the vast cosmos. I try to scan two dozen or more scientific journals each month, and it seems to me there is no end to the speculative writings and researches on these topics. Like "the LORD's mercies" they are "new every morning" (Lamentations 3:22,23), though hardly as beneficial. As one scientist noted rather wistfully while eulogizing science as a whole:

Still, even today certain major sciences offer scant prospect of practical application. Astronomy and cosmology are of little earthly use.<sup>1</sup>

That's a valid point, though not completely true, of course. The visible stars have for centuries been of great use in navigation, surveying, and chronometry.

But the distant stars and galaxies, observable only through giant telescopes, have been of use only in fueling speculations about the origin and evolution of the universe. That also is the primary motivation for the scientists of NASA and their space program, as they are trying to

determine how the earth and the solar system evolved, and even how life began.

The noted columnist, George Will, quotes the physicist, Steven Weinberg, as saying that our

effort to understand the universe is one of the very few things that lifts human life a little above the level of farce, and gives it some of the grace of tragedy.<sup>2</sup>

That is a darkly pessimistic outlook, obviously, but is the logical conclusion of any consistent evolutionary worldview.

Yet with all the billions of dollars spent on such studies and all the brain-power of such large numbers of brilliant scientists devoted to it and thus side-tracked from useful research, they still don't know the answers to any of the key questions about the universe.

As far as the origin of the universe itself is concerned, the predominant belief has been the theory of the Big Bang. Actually, no one knows.

The Big Bang concept at least postulates a beginning, but that beginning consists of an infinitesimal particle of space/time which explodes and evolves over billions of years into our present cosmos. One science writer, trying to help us understand it says:

Don't imagine outer space without matter in it. Imagine no space at all

and no matter at all. Good luck.

To the average person it might seem obvious that nothing can happen in nothing. But to a quantum physicist, nothing is, in fact, something.<sup>3</sup>

The author of the above article calls this notion a "Grand Guess." It is certainly not anything that anyone *knows*!

The so-called "Grand Guess" was put forth by M.I.T. astrophysicist Alan Guth. According to this concept the infinitesimal particle of space/time which exploded into the Big Bang had to first go through a period of cosmic inflation, which presumably would solve the various difficulties present in the unmodified Big Bang theory. The latter is said to be a "singularity," where the equations describing the phenomena of the expansion cease to apply.

At such places, physics dissolves into metaphysics. These mathematical points admit of no explanation; they just are.<sup>4</sup>

Scientists can't explain singularities. That means they don't know how to explain the Big Bang, although Guth's theory is said to handle most of the difficulties, and most astronomers now accept inflation. However, that doesn't help much, so many modifications of inflation have been proposed.

Roughly 50 forms of inflation have been proposed, named, and studied, including double, triple, and hybrid inflation, tilted hybrid inflation, hyperextended inflation that is "warm," "soft," "tepid," and "natural."

Even if astronomers really understood all about inflation—that is the extremely rapid inflation of the universe to about the size of a grapefruit in a tiny fraction of a second prior to the explosive Bang—that would not answer the question of how the universe began. That "singularity" is still there.

For instance, cosmic inflation . . . does not eliminate the primeval singularity but simply isolates it from today's universe. 6

So one thing astronomers don't know is how the universe began. They take refuge in quantum physics, saying it somehow evolved from the primeval nothingness. And, of course, they don't know that either.

Quantum theory also holds that a vacuum, like atoms, is subject to quantum uncertainties. This means that things can materialize out of the vacuum, although they tend to vanish back into it quickly... this phenomenon has never been observed directly,...<sup>7</sup>

In spite of not being able to observe it, Guth and others hope that it happens. Of course, they don't know. Guth believes, nevertheless, that all of this is consistent with the known laws of physics. But that raises another question.

'Where do the laws of physics come from?' (Guth) pauses: "We are a long way from being able to answer that one."8

Yes, that would be a very big gap in scientific knowledge!

But maybe we should bypass the question of the origin of the universe and study more tractable problems such as the origin of stars and galaxies. These would be amenable to observation and ordinary physics, would they not?

Take galaxies, for example. The most familiar, of course, is the Milky Way, the galaxy of which our own sun is a member. It is a spiral-disk galaxy, a type very common in the cosmos. It is supposed that it began from vast quantities of gas from the Big Bang explosion collapsing through gravitational attraction of the molecules in the gas.

Our galaxy is a highly evolved entity.

. . . it is an elegant structure that shows both order and complexity. . . . The end product is especially remarkable in the light of what is believed to be the starting point: nebulous blobs of gas. How the universe made the Milky Way from such simple beginnings is not altogether clear <sup>9</sup>

It's not clear at all. They simply do not know how our galaxy began. Even less could be known about other galaxies.

What about individual stars? The standard guess is that the first stars, called Population III, were formed only of hydrogen and helium. Later stars with heavier elements were supposedly generated when these first stars collapsed, forming heavier elements in their heated interiors which then traversed space to eventually coalesce enough to form new suns. This remarkable scenario is widely believed, but did it really happen?

Did later stars come into being through variants on a common theme (such as the collapse of molecular clouds) or in a seething mosh pit of disparate forces and mechanisms? No one knows.<sup>10</sup>

As far as those hypothetical first simple stars are concerned—those stars whose collapse eventually generated all the more complex stars—it is not even known that they ever existed.

Astronomers have never seen a pure Population III star, despite years of combing our Milky Way galaxy.<sup>11</sup>

Space does not allow discussion here of the various speculations about other components of the universe (planets, satellites, asteroids, dark matter, etc.). Ignorance about these matters is also quite profound. As another prominent astronomer, Alan Sandage, once observed:

The study of origins is the art of drawing sufficient conclusions from

insufficient evidence.12

Their conclusions may vary widely from one cosmologist to another, but they all try to keep them compatible with their basic assumption of cosmic evolution over billions of years.

It is well to remember that they *do not know* how the cosmos evolved—or stars, or galaxies, or anything else.

We who believe the Bible to be the inspired word of the God/man, Jesus Christ, who is the one man who has shown His power over His creation by defeating death itself—we know!

By the word of the LORD were the heavens made; and all the host of them by the breath of His mouth. . . . For He spake, and it was done; He commanded, and it stood fast (Psalm 33:6,9).

## References

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- 3. Brad Lemley, "Guth's Grand Guess," *Discover* (vol. 23, April 2002), p. 35.
- 4. Anonymous, "Been There, Done That," *Scientific American* (vol. 286. March 2002), p. 25.
- 5. Lemley, op cit., p. 38.
- 6. "Been There, Done That," op cit., p. 25.
- 7. Lemley, op cit., p. 35.
- 8. Ibid., p. 38.
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- Linda Rowan and Robert Coontz, "Great Balls of Fire," *Science* (vol. 295, January 4, 2002), p. 63.
- 11. Robert Irion, "The Quest for Population III," *Science* (vol. 295, January 4, 2002), p. 66.
- 12. Alan Sandage, as quoted by Chiappini op cit., p. 515.

Some things cannot be fully comprehended. Infinite things, eternal things, matters of God's sovereignty—these transcend our finite and temporal minds. For example, why did He create us? Certainly He doesn't need us, for He existed in perfect love and unity before He even created time. Furthermore, He even knew beforehand that His image, recreated in man, would reject Him and His Kingship over their lives, resulting in unthinkable pain and suffering and death of all things placed in man's dominion. He foresaw ruinous mutations, debilitating injuries, devastating cancer, etc., as consequences. We can only approach an answer to this unanswerable question by following the hints given in Scripture.

In a more ultimate sense, God knew that man's sin would force His only begotten Son to die an unthinkably horrid death in sacrificial payment for man's sin, and that ungrateful man would even carry out the execution, for Scripture identifies His Son as "the Lamb slain from the foundation of the world" (Revelation 13:8). In order to accomplish this fully sufficient sacrifice, the Son willingly set aside aspects of His deity, and "took upon Him the form of a servant, and was made in the likeness of men" (Philippians 2:7), forever limiting Himself to bodily form. Why would He do this? If we had not been created, it would not have been necessary. Why did He create us?

While we can never fully answer the question, it helps to recognize that the answer will come only as we recognize the character and attributes of God. First and foremost, God is a God of love, and love must be demonstrated by showering it upon the object of that love. His grace

comes only to those who deserve punishment, and the demonstration of His love and grace and mercy stands without parallel among humans.

But in His love He desired reciprocal love, so He created man in His own image. Man was given the ability to respond to God's love or reject it. In the beginning man enjoyed full fellowship with God, but soon rejected Him, bringing the ruination of all creation. This wasn't God's intention, so He implemented His plan for creation to fulfill its intended purpose.

Perhaps the grandest statement of His purpose can be found in Revelation 4:11, where we see heavenly beings gather in His praise, saying, "Thou art worthy, O Lord, to receive glory and honor and power: for thou hast created all things, and for thy pleasure they are and were created." And there we have it! God created us for His pleasure, for His ultimate good will, because it is best in His estimation.

Unfortunately, the present world with sin and its penalty permeating all things and processes, temporarily experiences postponement of His ultimate plan, but it will not be forever thwarted. There will be the "new heavens and a new earth, wherein dwelleth righteousness" (II Peter 3:13) once again. This is His plan, purpose, and pleasure.

Thus, it makes sense that He would have created things as stated in Scripture, in an orderly, rapid fashion. He would not have used billions of years to create in His image, and He certainly would not have used death, pain, extinction, and survival of the fittest. These are the results of sin and bring Him no pleasure at all.

