

THE ELEMENTS OF THE UNIVERSE POINT TO CREATION

On earth, (1) matter is made of atoms containing protons, neutrons, and electrons; and (2) there are 92 kinds of atoms, called elements. **Astronomers have discovered that matter throughout the universe has precisely these same properties:** (1) it is made of atoms exactly like those found on earth; and (2) there are the same 92 kinds of atoms (elements) found on earth and no others. Astronomers have also found that (3) there is a remarkable degree of chemical similarity between portions of the universe billions of light years apart.

These three observations seem rather ordinary, but not because evolutionary theory expected them. If the Big Bang had really happened and the cosmos had evolved randomly in diverse places billions of light years apart, there is no prior reason why any of these observations should be true. In fact, cosmic evolutionism leads to the expectation that these observations should not be the case and views these observations as surprising. The reason these conclusions seem prosaic today is that cosmic evolutionism has been modified over the decades to make it agree with these observations.

These three observations are anti-evolutionary and point to the truth of creation. If an omnipotent Creator made the entire universe by His spoken word, this conformity of matter to universal patterns is what we might expect. Advocates of cosmic evolution do not accept this, and claim that, "Cosmic evolution has no implication of different elements in different places." This is not true, and the fact remains that the universal characteristics of matter point away from evolution and toward creation.

I. How Do Astronomers Detect Elements in the Stars and Cosmos?

All matter gives off some light or radiation. This energy can be analyzed to find which elements are causing it. Each element produces a unique spectrum which is like a "fingerprint" for the element. For example, light from stars can be gathered by a telescope, passed through a prism to produce a spectrum, then the spectrum can be analyzed to see which elements are in the stars.

This procedure, called spectroscopy, was first applied to the light from stars by the scientists Kirchoff and Bunsen in 1859. "Kirchoff and Bunsen's discovery of using spectra to determine the elements in stars [was significant]. Kirchoff and Bunsen immediately saw their discovery's celestial possibilities. Bunsen wrote to a fellow chemist in England: 'At present Kirchoff and I are involved in an investigation that doesn't let us sleep. Kirchoff has made a wonderful, entirely unexpected discovery in finding the cause of the dark lines in the solar spectrum. ... A means has been found to determine the composition of the sun and fixed stars.'"¹

With Kirchoff's and Bunsen's discovery of stellar spectroscopy, the elements present anywhere in the universe could be

detected out to any distance telescopes could penetrate. It was soon found that all stars are mostly hydrogen, a fact which led one wag to pen the ditty,

Twinkle, twinkle little star
I don't wonder what you are,
For by spectroscopic ken,
I know that you are hydrogen.²

II. The Same Basic Kinds of Matter Exist Throughout the Cosmos

This is a well recognized fact, and has been forcefully stated by astronomer George Abell and colleagues:

"The Ancients believed in a sort of unity between the heavens and the Earth. ... But there is a real unity ... The real unity is in the basic structure of matter everywhere in the universe ...

"We have learned that all matter is made of the same stuff -- the matter of the Earth ... and of the stars and even the remotest galaxies (from studying their spectra). This stuff is ... approximately a hundred different kinds of atoms that make up the hundred or so naturally occurring elements and, in various combinations, the molecules of the billions of kinds of chemical compounds."³

These scientists further point out that this is not a trivial state of affairs, but is "significant": "The deeply significant point is that everything, everywhere, is basically the same. ... [it is] made up of the same things: mainly protons, electrons, and neutrons."⁴

Later, these authors speak of the "marvelous unity" implied by this observation: "Science has revealed a marvelous unity in the universe; ... everywhere ... we find the same kind of stuff: atoms, electrons, and so on."⁵

Since this observation is viewed as being a "significant" condition of "marvelous unity," we might suspect that this is not the observation which cosmic evolution would lead one to expect. Indeed, astronomer Martin Harwit is quite explicit about the unexpectedness of this observation:

"The relative abundances of the various isotopes of different elements are repeatedly found in similar ratios in stars, in the interstellar medium, in meteorite fragments, and in the earth's crust. The similarity of these ratios cannot be accidental, and the detailed explanation of the hundreds of known abundance ratios provides a severe task for the theory of stellar evolution."⁶

Though elemental abundances are not entirely similar, they resemble each other to the point that Harwit believes some explanation is required. **Clearly evolutionary astronomers such as Martin Harwit do not see the universal characteristics of matter as expected or self-evident.**

Further, and most significantly, the primary originator of the Big Bang theory, George Gamov, did not see this situation as self-evident either: "Relative abundances of elements

[throughout the cosmos] have been exhaustively studied. . . . The most important result of these studies is the fact that *the chemical composition of the universe is surprisingly uniform*" [emphasis in original].⁷

III. Elemental Abundances Are Anti-Evolutionary

This fact was emphasized by physicist James Clerk Maxwell, considered one of the greatest physicists of all time. Maxwell, in a "Discourse On Molecules" written in 1873, recognized the creationary implications of the fact that over the universe, molecules and atoms of a given kind are identical:

"A molecule of hydrogen ... whether in Sirius or in Arcturus, executes its vibrations in precisely the same time. Each molecule therefore throughout the universe bears impressed upon it the stamp of a metric system as distinctly as does the meter of the Archives at Paris, or the double royal cubit of the temple of Karnac.

"No theory of evolution can be formed to account for the similarity of molecules [for there is no a priori reason why all matter in the cosmos should be the same -- cosmic evolution has simply been framed to include the fact that it is so!], for evolution necessarily implies continuous change. ... The exact equality of each molecule to all others of the same kind gives it, as Sir John Herschel has well said, the essential character of a manufactured article, and precludes the idea of its being ... self-existent."⁸

Maxwell also wrote in the *Encyclopedia Britannica*, "[T]here are immense numbers of other atoms of the same kind [throughout the universe]. ... Each is physically independent of all the others. ... We are then forced to look beyond them to some common cause or common origin [i.e., supernatural creation] to explain why this singular relation of quality exists ..."⁹

Maxwell's stand against evolution was well known. People used his arguments to oppose evolution and defend creation. One writer said:

"The nebular theory does not explain even the mechanics of the [solar] system ... The unity [of the elements] we have to start with is not simple, but complex. It is again a unity of related elements, and thus a unity which is not merely material; it is also rational."¹⁰ Then speaking of the evolution of the universe in general, he observed that, "What has to be accounted for is the unity of all these elements in one [chemical] system [throughout the universe]."¹¹ **This writer clearly identified these arguments as originating with Maxwell.**¹²

Not only did Maxwell oppose evolution, but it is clear that for him, and for others after him, **part of their anti-evolution arsenal was the fact that elements throughout the cosmos evidence a common creation.** There is no evidence of a random nuclear/chemical development subsequent to an evolutionary process.

IV. Conclusions

The uniformity of elements throughout the cosmos is not what evolutionism would expect, and points toward creation. Further, since the same elements exist everywhere, this means that chemistry anywhere in the universe must be the same as chemistry here. In particular, the chemistry of any extraterrestrial life would have to be earth-like, since the elements and their chemistry are everywhere the same.

Furthermore, any life-supporting planet would also have to be earth-like to support the chemical reactions required in living things. Despite the many modern claims of planets outside the solar system, the fact remains that not one earth-like planet has been found.¹³

References

- 1 Jonathan Wiener, *Planet Earth*, Bantam Books, 1986, p. 216.
- 2 Ian D. Bush, quoted by John D. Barrow and Frank J. Tipler, *The Anthropic Cosmological Principle*, Oxford, 1986, p. 326.
- 3 George O. Abell, David Morrison, and Sidney C. Wolff, *Exploration of the Universe*, Saunders, 1987, p. 1.
- 4 *ibid.*, p. 2.
- 5 *ibid.*, p. 10.
- 6 Martin Harwit, *Astrophysical Concepts*, Concepts, 1982, p. 304.
- 7 George Gamov, *The Creation of the Universe*, Mentor, 1952, p. 49.
- 8 Lewis Campbell and William Garnett, *The Life of James Clerk Maxwell*, Macmillan, 1882, p. 359.
- 9 James Clerk Maxwell, "Atom," *Encyclopedia Britannica*, 9th edition, Scribner's, Vol. 3, 1878, p. 49, 9th ed.
- 10 James Iverach, *Christianity and Evolution*, Thomas Whittaker, 1894, pp. 24-25.
- 11 *ibid.*, p. 43.
- 12 *ibid.*, pp. 14, 34, 41.
- 13 For a more thorough discussion the message of creation in the elements of the cosmos, see J. Henry, "The Elements of the Universe Point to Creation: Introduction to a Critique of Nucleosynthesis Theory," *Journal of Creation*, Vol. 20 no. 2, July-November 2006, pp. 53-60; J. Henry, "Have the Elements Evolved by Stellar Nucleosynthesis?," <creationconcepts.org>, 2005.