

NUCLEAR SCIENTISTS UNWITTINGLY SUPPORT CREATIONISM

D. LEE CHESNUT*

Creationism is "the doctrine that the world and all things came into being out of nothing through an act—or series of acts—of a transcendent Creator." So runs an accepted definition.

All things are made of "matter" in a host of forms and varieties. Man's experimental chemistry has supported the conclusion that all things originally found in nature have been made of all kinds of chemical elements from hydrogen through uranium. Add to this his attempts at alchemy, pre-nuclear man had become convinced that whatever the original quantities of each chemical element, that total would always remain the same, considering both the amount of the pure element plus the amount of that element in chemical compounds.

This was the crux of the law of the conservation of mass and energy, one of the peers of the physical laws of the pre-nuclear period. But Einstein's mass/energy equivalence theory—plus nuclear discoveries—changed some details of this picture very rapidly.

In the post-nuclear period, energy has been transformed into the basic particles; man has "seen" this take place in his particle accelerator/cloud chamber/hydrogen bubble-chamber experiments, and while he may not have seen specific man-made particles come together and form atoms, there isn't the slightest doubt that this could take place—and undoubtedly has taken place.

If we insist that the word "creation" means that the Creator started with *nothing*, the foregoing experiments would have to be classified as *transformations* rather than as creations. But it is a "whopper" of a step to acknowledge that invisible energy has been transformed into sub-nuclear particles which, in turn, are ready to "gather themselves together" instantly to form chemical atoms. This backward progression is the way man has been learning things.

Questions Raised by Present Concepts

A leading scientific concept is that a common basic mass of matter—"ylem"—preceded all the particles. Here we are way out in the "deep dark blue" with the post-nuclear cosmologist who believes that, in the beginning, there had been a huge mass of ylem that weighed billions of tons per cubic inch. From the intense concentration of this amount of ylem, sufficient heat had been

generated to cause the "Big Bang" which was the starter of that which is commonly called the "great galactic explosion." Several of the cataloged events in this hypothesis are, to say the least, generating these kinds of "wonderings" or "Why" questions or "how-could-it-have-happened-this-way" questions—or a whole sequence of such queries as these:

(1) From whence came the large mass of ylem?

(2) A massive explosion normally results in an irregular conglomeration of broken and jagged pieces of all sizes and configurations. But instead, this hypothesis assumes that the explosion generated mostly a host of neutrons. Unless planned and controlled, it could not have turned out this way.

(3) Without a plan and a guiding hand, how could these neutrons have acquired their radioactive-decay nature before they were combined with protons in the nuclei of atoms, but then become *stable* neutrons *after* their union with protons in atom nuclei?

(4) If neutrons were to break up into smaller masses, why didn't they just remain as smaller *uncharged* particles? Looking ahead to the remarkable nuclear functions as we now know them to be, it is easy to see, now, that there *had to be* positively charged protons and negatively charged electrons; but *before the fact*, "what" was the sensory function that triggered this action?

(5) Again looking ahead to chemical elements as we now know them, from whence came the sensory function that set the free-neutron half-life at about 13 minutes so the needed ratio of protons to neutrons would be established?

(6) How is it that multiple positively charged particles combined in the nuclei of all atoms except hydrogen? Considering the mathematical level of this repellent force, this was a phenomenal occurrence. For example, if one gram of protons could be positioned at the north-pole of the earth and another gram at the south-pole, *then* the Coulomb repellent force of the two grams, some 8000 miles apart, would still be of the order of 28 tons!

Leaving the two polar regions and bringing these two packages of protons closer and closer together, the repellent force increases according to the inverse-square law.

No Known Rationalization

If we assume the Big-Bang hypothesis, we can rationalize the possibility that the short-lived force had been sufficient to have over-ridden the

*D. Lee Chesnut was an electrical engineer, nuclear science lecturer, and business analyst with the General Electric Company and is now retired. He has authored numerous books and pamphlets dealing with science and scripture. He resides at 2301 W. Shady Glen Ave., Phoenix, Arizona 85023.

Coulomb force. But there is no known rationalization of the event that is now believed to take place as these multiple protons cross the nuclear boundary into a nucleus.

In her book, *The Nature of Matter*,¹ Amaldi presents an amazing picture of the strategic automatic transformation of mass into energy to accomplish specific purposes:

a. The atomic weight of a proton is 1.0081 units of mass, and of a neutron, 1.0090.

b. So, two protons and two neutrons, each weighed separately as they would be when outside atomic nuclei, would add up to 4.0342 units.

c. But the helium nucleus which is made of these four particles has a mass of only 4.0040.

d. Thus when two protons and two neutrons are forced inside the nucleus of an atom, there is a loss of mass equal to 4.0342 minus 4.0040, or 0.0302 units. Reach in, figuratively, and exert sufficient force to pull these particles outside the nucleus, and their mass is restored to 4.0342; force them back inside the nucleus and the mass again drops to 4.0040.

e. The loss of mass, 0.0302 units (known as the "mass defect"), is transformed into the binding energy required to hold the nucleus of the atom together against the Coulomb force of repulsion.

Other "Non-Explainables"

Subsequently, Amaldi tells of another "non-explainable" down inside atom nuclei. In the above illustration, as the protons and neutrons cross the boundary into the nucleus of the helium atom, an attracting force begins to operate when the particles are separated by a distance of about four "fermi." Farther down inside the nucleus the attracting force disappears, changing into a repellent force. Amaldi says judiciously:

... The nucleus is a world which is only partially explored and is full of uncertainty. We do not yet know how to write mathematical expressions for nuclear forces, or the equations which control the motion of nucleons—i.e., a combination of protons and neutrons—within the nucleus.²

Thus Amaldi introduces the reader to another elementary picture, but one which is outstandingly non-explainable. Acknowledging there are now about thirty named nuclear particles, named groups of particles and energy units, Amaldi states that:

Physicists now have reason to think that the atomic nucleus is effectively made up of only protons, of neutrons and of nothing else. That is, protons and neutrons belong to a class which is different from that of other particles. They are the "bricks" from which the nucleus is made.³

An atomic package containing six protons in the nucleus, and with the right number of neutrons so it will hold together long enough to be analyzed, is the element carbon. Similarly such a package with eight protons is oxygen; 29 would be copper; 50, iron; 79, gold, etc., all the way from hydrogen with one proton to uranium with ninety-two.

Explanation Missing

No scientists has come forth with an explanation as to why atomic packages with different numbers of *the same* proton "building blocks" or "bricks"—and their associated neutrons—make entirely different kinds of chemical elements; this does not make sense but it is a fact.

This situation is further supported in Seaborg's *Man-Made Transuranium Elements*. This approach refers to the newly synthesized elements from neptunium to lawrencium with from 93 to 103 protons in their nuclei. Throughout the text it is clear that in their experimental work they were making no attempt to predict the chemical nature of these prospective elements except by the conventional method of trying to fit the new elements into an extension of the Periodic Table of 1944. Even this procedure was not reliable as indicated by this example:

The Periodic Table of 1944 implied that the chemical properties of elements 95 and 96 should be very much like those of neptunium and plutonium, 93 and 94. The assumption proved to be wrong and the experiments directed toward the discovery of 95 and 96 failed. Again the undisclosed elements 95 and 96 apparently refused to fit the pattern indicated by the Periodic Table of 1944. . . . Thus we have the interesting result that the newcomers have affected the facts of the Periodic Table and a change has been made after many years even though it—i.e., the Periodic Table—seemed to have assumed its final form.⁴

How do we bring all these humanly irrationable data into focus? First, we would do well to listen to Vannevar Bush; he has come forward with these sobering thoughts:

Within the atom occur phenomena concerning which visualization is futile, to which common sense, the guidance from our everyday experience has no application, which yield to studies by equations that have no meaning except that they work. Science here does two things. It renders us humble. And it paints a universe in which the mysteries become high-lighted, in which constraints on imagination and speculation have been removed, and which become ever more awe-inspiring as we gaze. . . .⁵

Note especially his conclusion that “constraints on imagination and speculation have been removed” and that which we observe has “become ever more awe-inspiring.” This conclusion is a distinct steppingstone to Creationism.

Revealing Admissions

George Gaylord Simpson, one of the “Deans” of the Neo-Darwinian concept of evolution, has openly concluded that the source of all the physical laws is: “. . . quite *unknown and probably unknowable to science*.” (Emphasis added) And then surprisingly, Simpson indicated the direction of his own thinking by adding: “Here religion may honorably enter the picture.”⁶

In the same vein the noted astronomer, Harlow Shapley, persistently probes behind or beyond the tangible supply of hydrogen and all the physical laws, searching for the origin of origins when he wrote:

In the very beginning were hydrogen atoms, so far as we now see, but actually there must have been something antecedent. Whence came these atoms of hydrogen . . . that we now surmise have become the material make-up of the universe? What preceded their appearance, if anything? That is perhaps a question for metaphysics. The origin of origins is beyond astronomy. It is perhaps beyond philosophy, in the realm of the, to us, unknowable.⁷

Michael Moravcsik aptly summarizes this “blank wall” faced by scientists, in his book-review of Martin and Speakman’s, *Elementary Particle Theory*. He says, “It is impossible to write a book on elementary particle theory since, as the authors themselves emphasize at the very beginning of their preface, there is no such thing . . .”, as an elementary particle theory,

“in existence” though “The amount of activity that has taken place is staggering.”

Conclusion

The accumulated evidence—or more realistically, the *lack* of material evidence—points majestically to a great predetermination that this was the way in which all things were to be made. And a great predetermination required both *mind* to plan, and overall capability to perform the developed plan; that is, there had to be a Great Predeterminer who both planned and produced realities that had no prior existence. Here—within the realm of nuclear laws and nuclear particles—we behold majestic evidence of the Omniscient and Omnipotent Creator—GOD—at work.

And in *Science* of June 4 of 1971, a scientist of national repute—referring to these types of non-explainables—said openly: “. . . if you want to call *what’s underneath* a supernatural being, that’s all right with me. . . .” There will be more Davids.

References

- ¹Amaldi, Ginestra. 1966. The nature of matters. The University of Chicago Press, p. 167.
- ²*Ibid.*, pp. 182, 183.
- ³*Ibid.*, p. 167.
- ⁴Seaborg, Glenn T. 1963. Man-made transuranium elements. Prentice-Hall, Inc., Englewood Cliffs, N. J. pp. 39-40.
- ⁵Bush, Vannever. 1965. Science pauses. *Fortune Magazine*, May, 1965, p. 116.
- ⁶Simpson, George Gaylord. 1964. This view of life. Harcourt, Brace and World, Inc., p. 38.
- ⁷Shapley, Harlow. 1962 reprint. Science ponders religion. Appleton-Century-Crofts, Inc., N. Y., p. 3.
- ⁸Moravcsik, Michael. 1970. Book-review of Martin and Speakman’s *Elementary Particle Theory* in *Science*. Vol. 170, December.
- ⁹A quoted statement by Edward E. David, Jr., from a Deborah Shapley signed article, *Science*, Vol. 172, June, page 1010.