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Front Cover: Walter Lang, 1913-2004.

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EDITORIAL

First of all, a reminder. Subscriptions to *The Biblical Astronomer* expire with this issue for most readers. Be sure to renew now, before you forget.

Second, we have received this year a couple of books and a CD-ROM set which we think worthy of your attention. Below is a brief review of each.

Polyscience and Christianity by Russel Moe, 508 Forest Blvd., Wildwood, FL 34785; 8.5 by 11 inch format, 260 pages, with bibliography, footnotes, and illustrations. $19 postpaid US. From the announcement:

"The book addresses a neglected perspective on the conflict between reason and faith. Disputes over Creation vs. Evolution or Intelligent Design are certainly involved.

"This perspective reveals wrong ideas latent in the fabric of mathematics and astronomy, which remain integral to the framework of reason in our time. Such a blemish on reason surprises most people, who may not be aware that many present-day "facts" are built on layers of assumptions, especially "facts" requiring a large expenditure of reasoning to comprehend. The book shows that this ancient blemish still tarnishes science, scholarship in general, and Christian faith.

"Flooded with facts, yet suspicious of their objectivity, cultured people secretly worry that they substitute a wordy subjectivity for science and Biblical faith. *Polyscience and Christianity* affirms their worries, yet provides the conceptual landscape of a chastened science, which prunes and purifies faith and reason.

"A retired world traveler, the author writes from a background of extensive reading in the history of science and mathematics, the philosophy of science, the social "sciences,: history and apologetics of the early Church, history and ideology of Western civilization, and related topics."

In Awe of thy Word by G. A. Riplinger, AV Publications, Box 280, Ararat, VA 24053. 1200 pages, hardback, $24.29 postpaid US. Orders can also be placed on the web at www.avpublications.com.

The book is two books in one, the first dealing with the mystery of the King James Bible and the second with its history. The first focuses on what translators and past generations knew --- exactly how to find the meaning of each Bible word, inside the Bible itself. The second gives the documented history of the words of the Holy Bible.

The mystery section deals with topics that enable the reader to understand what translators, such as Erasmus and Coverdale, meant

when they spoke of the vernacular Bible's "holy letters" and "syllables." Riplinger shows how these holy letters and syllables work as God-set alphabet building blocks to build a word's meaning and automatically define words for faithful readers of the King James Bible—which alone brings forward the fountainhead of letter meanings discovered by computational linguists from the world's leading universities. Find out how only the King James Bible teaches and comforts through its "miraculous" mathematically ordered sounds. Meet the KJV's built-in English teacher, ministering to children and over a billion people around the globe. Finally, see that only the KJV matches the pure scriptures preserved "to all generations" and "to all nations," including the Greek, Hebrew, Old Italia, Italian, Dutch, German, French, Spanish and others.

The historical part derives from a word-for-word and letter-by-letter analysis of a vault of ancient, rare and valuable Bibles. Ten thousand hours of collation rescued echoes from these documents almost dissolved by time. It shows the unbroken preservation of the pure Holy Scriptures, from the first century to today's beloved King James Bible. "Watch the English language and its Holy Bible unfold before your very eyes," says the advertisement. This is done by showing in red, the letters and sounds which bind the words of each successive Bible from the Gothic, Anglo-Saxon, pre-Wycliffe, Tyndale, Coverdale, Great, Geneva, and Bishops' to the King James Bible. The book also presents word-for-word collations, aided by the KJV translators' newly discovered notes, revealing exactly how the KJV translators polished the sword of the Spirit. The book lives up to its hype.

In Awe of thy Word CD, also available from AV Publications, costs $39.95 postpaid in the U.S. It, is a 3 CD set with a searchable version of the above book plus the *Nuremberg Polyglot* of A.D. 1599, a parallel Bible in Greek, Hebrew, Syriac, Latin, Spanish, French, Italian, Danish, German, English, Polish, and Bohemian.

As if that were not enough, the set also includes both volumes of the Erasmus commentary on the New Testament, *Tome of he Paraphrase of Erasmus upon the New Testament*, with parallel text from the Great Bible of 1540. There is also a copy of the King James Bible searchable by letter group (see above), word, or phrase. Finally, there is a copy of *The Acts and Monuments* by John Fox, all eight volumes—nearly 6,000 pages—of Foxe's *Book of Martyrs*. Originally written in 1563, this is from the 1837-49 printing.

In Memoriam
WALTER H. J. LANG
1913-2004

On Saturday, July 10, 2004, Rev. Walter Lang passed on to be with his Lord and savior. He is survived by two sons, Robert and Philip. Robert is a graduate of Valparaiso University in Valparaiso, Indiana, who received his doctorate from Illinois Institute of Technology in Chicago. He works as a design engineer for Boeing and lives in Seattle with his wife Carole, son Marty, and daughter Robin. Philip teaches seventh-eighth grades and serves as principal at Grace Lutheran School in Denver. He lives with his wife Linda and daughters Laura and Laisa in Aurora, Colorado.

Walter's wife preceded him in death. Valeria Ruth Lang was born on April 27, 1911 in Beaumont, Texas. Her father, the Rev. Fred Wessler, served for 36 years as pastor of two congregations in the Lutheran Church-Missouri Synod. After high school, Valeria attended a business college in Minneapolis, and then worked four years in the State Treasurer's office at Pierre, South Dakota. After that, she worked as a legal secretary in Pierre until August 1940, when she married Walter. Over the years, she served as church secretary in their parishes. From the very first *Bible-Science Newsletter* in September 1963 and continuing until June 1981, she served as its working editor. She also edited the *Five Minutes with the Bible and Science* daily devotional. Valeria died in January 1999.

The early days

Walter H. J. Lang was born in Omaha, Nebraska on November 3, 1913. His father, Victor Lang, was a teacher in a Missouri Synod day school. Walter graduated from St. Paul's College, Concordia, Missouri, and in 1937, from Concordia Seminary, St. Louis, Missouri. He spent the next two years as assistant pastor at St. Philip's Lutheran Church in St. Louis, followed by a year teaching at a rural Christian school at Burkburnett, Texas. In 1940, Walter accepted a call to serve St. Paul's Lutheran Church in Denton, Texas. He left there in February of 1942 when he accepted a call from the Mission Board of the Texas District of the Lutheran Church-Missouri Synod to begin a mission church among the blacks of Houston. Several years later, that church started a Christian day school.

In September of 1950, Walter left Houston to accept a call to St. Paul's Lutheran Church in Winslow, Nebraska, a church his grandfa-

ther, Rev. John Lang, founded 38 years earlier. In June of 1955, he left to accept a call to Mount Calvary Lutheran Church in Denver. The church was located in an area with a transient population. When the Air Force Finance Center was relocated from St. Louis to Denver, to a location several blocks from Mount Calvary, some workers, many of whom were black, settled in the area. Within four years, Mount Calvary was fully integrated and a new building for its Christian day school had been finished. Also, a day care center was established.

A new vision

In late spring of 1959, Walter Lang accepted a call to Grace Lutheran Church in Caldwell, Idaho. Two years later, Walter read John Whitcomb and Henry Morris' *The Genesis Flood*. The book planted the seed for what Walter would later call "Creation evangelism." In September 1963, Walter and Valeria started publishing the *Bible-Science Newsletter* from Grace Lutheran Church. Beginning on the church's mimeograph, it soon became a full time job. Walter formed the Bible-Science Association and resigned from Grace Lutheran in 1963 to assume the duties of executive director of the Association. The mailings quickly grew to 5000 copies per month, and book sales were added as requests came in for those books mentioned in the *Newsletter*.

In the fall of 1964, a Creation Seminar was held in Southern California. Speakers included the founding members of the Creation Research Society, which had split off from the American Scientific Affiliation in June of 1963. Originally founded in 1941 as an organization of scientists who accepted recent creation, by 1960 the group had wandered far from that to blatant promotion of theistic evolution. In 1961, Whitcomb and Morris' seminal work, *The Genesis Flood*, became the rallying point for young earth creationists, who accepted a literal interpretation of the early chapters of Genesis, resulting in the CRS. At the 1964 conference, Walter Lang realized that the Bible Science Association's role should be to popularize the scientific work of CRS, and to promote to the churches the six-day creation and the worldwide flood. This was crucial in preventing the drift into liberalism, which reinterpreted Scripture to eventually reject even the Biblical message of sin and salvation.

Next, the BSA began hosting large annual meetings, with leading creation speakers. A daily devotional, called *Five Minutes with the Bible and Science*, was added to the *Bible-Science Newsletter*. On weekends, Walter would drive far and wide across Middle America, giving creationist seminars at churches and civic centers. Walter never refused to go anywhere, even abroad. Because of its growth, and be-

cause of the concentration of Lutheran workers, in 1978 the Bible Science Association moved to Minneapolis.

Walter Lang and geocentricity

It was in the devotional, *Five Minutes with the Bible and Science*, that Walter first addressed the issue of geocentricity. Though a staunch defender of the Bible's insistence on a recent six-day creation, Walter did not see geocentricity. On the contrary, Walter argued that Job 38:12-14 provided scriptural evidence *for* a rotating earth:

> [12] Hast thou commanded the morning since thy days; *and* caused the dayspring to know his place;
> [13] That it might take hold of the ends of the earth, that the wicked might be shaken out of it?
> [14] It is turned as clay *to* the seal; and they stand as a garment.

Walter attended the 1977 Conference on Absolutes, held in Cleveland. There he discovered that top secular scientists, such as Huseyin Yilmaz, were quite able to accept geocentricity, and that its primary detractors were religionists and theistic evolutionists.

Over the years, both the Hansons and the Bouws hosted Walter on multiple occasions. In 1983, the board of directors of the Bible-Science Association went against Walter's wishes and voted that the annual conferences were at an end. From that point on, it was decreed; conferences would only be scheduled for every second year. Walter had heard that the Northcoast Bible-Science Association of Cleveland wanted to host the next BSA conference and recruited them to host a conference in 1984, at the Brookside Baptist Church. In 1985, the NCBSA also hosted the official Bible-Science Association conference. Today, only the quadrennial Pittsburgh Conference survives.

Wherever Walter would travel, he preferred to stay in people's homes. My children fondly remember his stay with us in 1991; Walter banging his suitcases against the wall as he walked to the spare bedroom upstairs. (No damage done.) Whatever town he visited, Walter would call contacts on his BSA mailing list, looking for speaking targets of opportunity. It was our pleasure to host Walter on at least three occasions during the 1980s and early 1990s. I was also a guest at the Langs' home in Minneapolis.

By the mid-eighties, Walter repudiated his interpretation of Job 38:12-14 and embraced the geocentric universe as scriptural. Because of how he saw his role as promoter of creationism, he never made an issue of it. Nevertheless, he carried copies of *Geocentricity* on his book

table. Walter was also present for the 1991 geocentricity conference held in the author's back yard, where the cover photo was taken.

The final years

Eventually the Bible Science Association's change of leadership was complete when it changed its name to Creation Moments. Now out of the loop, pastor and Mrs. Lang founded the Genesis Institute and started a new publication, *The Ark Today*. Since 1963, Walter made it a rule to exchange *The Bible-Science Newsletter* and *The Ark Today* with the periodicals of other organizations. This included *The Bulletin of the Tychonian Society* and, later, *The Biblical Astronomer*. Walter was also convinced that a large board of directors was advantageous for his organizations. Jim Hanson and I both served on the BSA board. But Walter's occasional inclusion and reports of geocentric news galled other board members and unbeknownst to Walter, they stopped the exchange.

Walter continued supporting creationist causes, particularly those of the Twin Cities area, and in 1992 he helped organize the last BSA national conference on creationism in St. Paul Minnesota. His work with BSA done, in 1997 he and Valeria moved to Seattle to be closer to their children. There Walter served on the board of Creation Association of Puget Sound. There, too, Valeria died in 1999.

Walter's health had been declining for the past couple of years. He was having problems with his short-term memory, yet he remained ever gracious, as was his nature. Over the past few months, his physical strength began to fail as well. At the last, he contracted pneumonia and passed away on July 10, 2004.

Though Walter had not been on the road for years, he will still be sorely missed. His goal to unite the various creationist groups dies with him. Although Walter would not admit it, God called Walter to address the Laodicean church's failure to recognize its Creator (Rev. 3:14[1]). Precious in the sight of the LORD is the death of his saints (Psalm 116:15). Walter was ninety years old at his death.

Several of Rev. Lang's works are available free of charge, on the Internet at: http://www.creationism.org/lang/.

[1] "And unto the angel of the church of the Laodiceans write, These things saith the Amen, the faithful and true witness, the beginning of the creation of God." The "faithful and true witness" addresses the wide-spread rejection of the revealed, preserved scriptures, while "the beginning of the creation of God" addresses the rejection of the Genesis creation account.

THE BIG BANG THEN AND NOW

Gerardus D. Bouw, Ph.D.

This paper was first published under the title of "Cosmic Space and Time" more than twenty years ago. I came upon it in my files and was struck by its timelessness. The criticisms leveled at the big bang model of the universe then, still apply today. Though a couple of them some astronomers may claim to be solved, yet there is still deeply divided opinion on the nature of the solutions for those allegedly solved problems.

—G. Bouw, 12 November 2003

Abstract: This paper critiques the big-bang theory of modern cosmology on the grounds of the initial value problem, entropy, initial expansion rate, matter and antimatter abundance, star and galaxy formation, interpretation of the cosmic redshift phenomenon, the missing mass, uncertainties in the Hubble constant, quasar distribution, synthesis of elements, and the Schwartzschild radius of the universe.

Pick up any contemporary review article by an evolutionist on the subject of cosmology and you will be impressed by the assured certainty with which the processes and ages of the universe and its constituents are known. But below the popular surface, in the muddled language of the technician, there lurks a different story. There are a number of problems with which modern cosmological theories, despite their sophistication, have been unable to cope. Certainly, there is no comprehensive evolutionary view of the universe which can escape super-miraculous elements which point to the Creator.

The most highly favored cosmological model today is the big-bang theory. The theory itself resulted from the observation that almost all faint (and therefore, presumably distant) galaxies appear to be receding from the earth at speeds which increase with their distance (i.e., faintness). Starting from trigonometric parallaxes and passing through Cepheid variable stars to brightest galaxy cluster members, man has constructed a cosmic distance scale. The resulting distance scale involves billions of light years and it has allowed a more of less linear relation to be developed between a galaxy's redshift (presumed a measure of the galaxy's speed away from the earth along the line-of-

sight) and the galaxy's distance. The slope of the resulting line is called the *Hubble constant* and its inverse, which has units of time, is taken as a measure of the age of the universe. Such an extrapolation backwards in time implies that al the matter in the universe was once concentrated into a single point and that the universe expanded from that point. This explosion of all matter from a single point (called the *singularity*) is called the *big-bang*.

Initial value problem

The most unmentionable of the problems associated with the big-bang is its ultimate origin. Whence is all the material that makes up the universe? The mathematical models avoid dealing with this most fundamental problem by starting the cosmos at some time (of the order of 10^{-44} second) after time zero, and starting it at some size (variously at either 10^{-33} or 10^{-13} cm) greater than size zero. But this merely begs the question. The Heisenberg Uncertainty Principle (that a particle's position and momentum, or energy and time, cannot be known to utmost accuracy) is invoked as an excuse; but this means that the principle should exist independent of matter, since it existed before anything else existed. Yet the uncertainty principle is expressible only in terms of created matter:

$$\Delta E\ \Delta t \leq h/2\pi$$

where E is energy, t is time, and h is Planck's constant. The uncertainty principle can also be expressed in terms of position, x, and momentum (mass times velocity) p:

$$\Delta x\ \Delta p \leq h/2\pi.$$

Invoking the Heisenberg uncertainty principle to account for the origin of the universe is thus invoking the old question of which came first, the chicken or the egg and is devoid of any logical answer without the Creator.

Entropy problem

Allied with the question of the ultimate origin of the universe is the problem of entropy. Entropy, expressed as the Second Law of Thermodynamics, says that a disordered mess such as the initial state of the big bang should stay a disordered mess rather than become an orderly universe. Evolutionists attempt to get around the problem of entropy by pointing out that the total entropy of the universe remains con-

stant as long as the universe expands adiabatically; but this is trivial, since to assume that the universe expands adiabatically is to assume that entropy remains constant in the first place. In other words, the evolutionist argument is: "Look, if we assume entropy stays constant, we find that entropy stays constant!"

Miraculous expansion rate

Let us, for the moment, assume the big-bang model is correct. In that case, the universe exploded into existence some ten to twenty billion (10^9) years ago. Still we cannot escape the miraculous, for, as Robert Dicke has written:

> If the fireball had expanded only 0.1 percent faster, the present rate of expansion would have been 3×10^3 times as great. Had the initial expansion rate been 0.1 percent less and the Universe would have expanded to only 3×10^{-6} of its present radius before collapsing. At this maximum radius, the density of ordinary matter would have been 10^{-12} gm/cm^3, over 10^{16} times as great as the present mass density. No stars could have formed in such a Universe, for it would not have existed long enough to form stars.[2]

Considering that modern evolutionists maintain that the universe arose from a chance fluctuation, as mentioned above, then that had to have been some special fluctuation. But then, there are those who maintain that if it had not happened that way, we should not be here to observe it. Hypocritically, the same people will not allow creationists to argue the anti-parallel of that argument, namely, that the presence of design in the universe argues for the existence of the Designer.

Faraday rotation

Most of the big-bang models predict that equal amounts of normal matter and antimatter arose from the initial creation. Yet the universe appears to be constituted almost entirely of normal matter; at least, that is the evidence from radio astronomy. If a radio wave travels through a magnetic field, then the wave's plane of polarization is rotated by that field. Such a rotation is termed *Faraday rotation* and occurs in such a way that the polarization plane is curled in one direction if the field is due to koinomatter (normal matter) and the opposite direction if the

[2] Dicke, R. H., 1969. *Gravitation and the Universe*, (Philadelphia: Am. Philosophical Soc.).

field is due to antimatter. Reinhardt[3] observed that the rotation of the plane of polarization of radio waves from celestial sources was primarily in one direction. This indicates that the universe is made up primarily of one type of matter; presumably, normal matter. There are some theories, however, which have been proposed to account for the apparent lack of antimatter in the universe. The best of these require that the universe be expanding evenly in two directions and at a different rate in the third direction,[4] but this is not observed to be the case.[5]

Star formation

The big-bang has other problems, too. Evolutionary models have never been successful in accounting for the formation of a single star, let alone a whole galaxy or even a cluster of galaxies.[6] Virtually every model in vogue today, which attempts to account for such objects, assumes that they were formed from the collapse of certain density irregularities postulated to be present in the early stages of the big-bang. Without such an assumption, the physics of collapsing gas clouds would not allow for the formation of objects even remotely resembling the major constituents of the universe. A number of explanations have been proposed to account for such density irregularities, including magnetohydrodynamical "pinch" effects,[7] but the existence of the required cosmic magnetic field is in doubt and the 3-degree Kelvin black body radiation reveals no evidence for any significant clumps of matter at the time believed to be about a million years into the evolution of the big-bang.[4]

Red shift problems

Each of the above speculations on the part of evolutionists has assumed that the Hubble constant is indicative of a real expansion. But for more than three decades Halton Arp has been finding objects which contradict the Hubble expansion.[8] Arp found a statistical correlation between the sky positions of quasars and bright, nearby galaxies. Furthermore, he has noted that if quasars are local objects, then they cannot result from being thrown out of the nuclei of galaxies. Otherwise, we should then observe as many blue shifts as redshifts; but only redshifts are observed. Arp also found cases such as NGC 1199 where an

[3] Reinhardt, M., 1971. *Astrophysical Letters*, **8**:181.
[4] Zeldovich, Ya. B., 1970. *J. E. T. P. Lett.*, **12**:307.
[5] Muller, R. A., 1978. *Scientific American*, **238**(5):64.
[6] Jones, B. J. T., 1976. *Rev. of Modern Physics*, **48**:107.
[7] Fennelly, A. J., 1980. *Phys Rev. Lett.* **44**:955.
[8] Arp, H., 1970. *Astronomical Journal*, **75**:1. Also, 1971. *Science*, **174**:1189.

object with a redshift amounting to 13,300 km/sec is found located in front of a galaxy with a red shift of only 2,600 km/sec.[9]

Missing mass

Another assumption that is buried in the Hubble relation is the assumption that the cosmic distance scale is known. Underlying this is the assumption that all parts of the universe look alike (the *Cosmological Principle*). But if the distance scale, as presently adhered to, is even remotely correct, then there is the problem of the missing mass.[10]

The rotation-curves of galaxies are non-Keplerian, indicating that there is 10 to 30 times as much matter in a galaxy than can be accounted for by its luminosity (the amount of light emitted). For a cluster of galaxies, the discrepancy between the two mass estimates is even worse, ranging from factors of 100 to 500 or more.[11] If Bouw's detection of the rotation of the Virgo Cluster of galaxies is correct,[12] (and he now has evidence for rotation of the huge Coma Cluster, also), then from the shape of the resulting rotation-curve, either Newton's law of gravity breaks down at large distances or else there is a tremendous amount of undetected mass in galaxy clusters. All in all, considering that there are about nine steps involved in setting up the current cosmic distance scale, each step of which is claimed to be accurate to ten percent; and considering that the pressure is on for huge ages and huge distances to agree with the evolutionary theories of biology and geology, it appears likely that the individual steps may be overestimated and so the actual distances may be only forty percent or less of the quoted distances.[11]

Hubble trouble

Even if the Hubble constant (red shift) is accepted, evolutionists are still not without problems. The actual value of the constant is tremendously uncertain. Modern estimates range from 20 km/sec/Mpc[13] to 125 km/sec/Mpc. For the last several years, any paper quoting a value other than 50 km/sec/Mpc has been rejected for publication in the *Astrophysical Journal*; but recently, the trend toward a declining value for the Hubble constant has suffered a setback when observations indi-

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[9] Arp., H., 1978. *Astronomy*, **6**:15.
[10] This is no longer called the missing mass, it is now known by its various "solutions," such as "dark matter," for instance.
[11] Bouw, G. D., 1977. *Creation Rsrch. Soc. Quarterly*, **14**:108.
[12] Bouw, G. D., 1977. *Ibid*., p. 17.
[13] The measure Mpc, megaparsec, amounts to 3.2 million light years.

cate that its value appears more likely to be about 95 km/sec/Mpc.[14] This means that the Hubble age of the universe reverts back to ten billion years as opposed to the 20 billion inferred by the *Astrophysical Journal*'s figure of 50 km/sec/Mpc.[15]

The higher value for Hubble's constant leads to further problems because, if we assume as do evolutionists that uranium and thorium were produced by some unknown process when the galaxy formed, then using the same argument that is applied to dating of terrestrial rocks and extraterrestrial meteorites, it appears that the Milky Way must be at least 12 billion years old.[16] Even some stars and star clusters are claimed to be "older" than ten billion years. Furthermore, the universe should be at least 20 billion years old according to Browne and Berman, who applied the usual age determination assumptions to the rhenium-187 to osmium-187 abundance ratio.[17] Actually, an age or 29 billion years would more comfortably fit the abundance ratio, according to theory.

All this casts doubt on using the Hubble constant as an indicator of age, but as Akridge suggested, the Hubble constant may be purely a measure of the initial density of the universe at creation and thus cannot legitimately be extrapolated backward to give any meaningful age.[18]

Varshni's results

As if the redshift's problems were not bad enough, the assumption that quasar redshifts are cosmological in scale leads to an interesting conclusion. Varshni states it this way in his abstract:

> It is shown that the cosmological interpretation of the red shift in the spectra of quasars leads to yet another paradoxical result: namely, that the Earth is the center of the Universe.[19]

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[14] Hartline, B. K., 1979. *Science*, **207**:167.

[15] The value after about 1995 is held to be 75 km/sec/Mpc, which is about twelve billion years.

[16] Hoyle, F., 1975. *Astronomy and Cosmology*, (San Francisco: W. H. Freeman & Co.), pp. 574-577.

[17] Browne, J. C. and B. L. Berman, 1976. *Nature*, **262**:197.

[18] In the opening years of the twenty-first century, astronomers now regard the Hubble constant, resulting from the observed redshift, as indicative of a local expansion rate which is assumed to be higher than average and thus gives a lower age, locally, than is true for the universe as a whole. This accepts the evidence for a Hubble cosmic expansion value too "young" to produce the "oldest" stars, while taking on faith that if we could determine the Hubble constant our far enough, then we would find that there was enough time, after all.

[19] Varshni, Y. P., 1976. *Astrophysics and Space Science*, **43**:3.

Vashni found 57 groupings among a sample of 384 quasars. But his groupings are not groups in terms of position in the sky (i.e., clustering); on the contrary, some of the members of Varshni's groups are located in opposite parts of the sky. His groups are based on similarities in the appearances of the spectra of the quasi-stellar objects, and coincidentally, their redshift values were similar. From his study, Varshni concludes that:

> assuming the cosmological red shift hypothesis, the quasars in the 57 groups … are arranged on 57 spherical shells with Earth at the center.[20]

After considering two other alternatives, Varshni finds that he is forced to conclude that if the redshift hypothesis is accepted for quasars, then:

> the Earth is indeed the center of the Universe. The arrangement of quasars on certain spherical shells is only with respect to the Earth. These shells would disappear if viewed from another galaxy or quasar. This means that the cosmological principle will have to go. Also it implies that a coordinate system fixed to the Earth will be a preferred frame of reference in the Universe. consequently, both the Special and the General Theory of Relativity must be abandoned for cosmological purposes.[21]

A chance occurrence, you say? Varshni puts the odds against it at 3×10^{86} to one. (Note that Varshni's figure of 3×10^{-85} on his page 4 should be corrected to read 3×10^{-87}.)[22] But removing the cosmological redshift hypothesis for quasars does not necessarily help the evolutionists or the modern acentrists, for the groupings will still exist—in phase space.[23] Varshni thus concludes that the spectral lines in QSOs are not redshifts at all.

Perhaps the bulwark for the evolutionist's evidence for the big-bang is the 3-degree Kelvin black body radiation [now called the cosmic background radiation —*Ed.*] The radiation is believed to be due to the light released when electrons and protons combined to form atomic hydrogen about a million years into the course of the big-bang. The temperature of the universe at the time is calculated to have been about

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[20] *Ibid*., p. 8.
[21] *Ibid*., p. 8.
[22] Bouw, G. D., 1980. *Bulletin of the Tychonian Society*, in press.
[23] Phase space is a seven-dimensional view of physics. The usual three dimensions plus time, the fourth dimension, are joined by the momentum of a body expressed along the first three dimensions.

3,000° Kelvin (about 3,000° C or 5,000° F), and what is purportedly observed today is that 3,000-degree flame redshifted by a factor of z=1,000. Yet here another curious factor arises. The redshift of the hydrogen flash is thus 1,000, but the highest redshifts observed thus far are far below ten (and that for a quasar). Where, then, are the objects with redshifts between 5 and 1,000? Was the universe devoid of objects for all those billions of years? And what of the curious "coincidence" mentioned by Clayton,[24] who echoed Hoyle, et al.,[25] that if all the elements were created *in situ* by nuclear fusion from hydrogen, and if the resulting photons were somehow thermalized, then the temperature of the resulting black-body spectrum would be 3°K? Actually, Hoyle and his colleagues considered only hydrogen to helium fusion and that not necessarily *in situ*, but their estimate for the mean density of the universe is probably low, meaning that the error resulting from ignoring these two factors would roughly cancel each other out.

More miraculous coincidents

A miraculously-balanced big-bang, a miraculous unexplainable origin, a miraculously-placed earth, contradictory values for the age of the universe as inferred from its expansion rate: is there not end? Hoyle points to another "coincidence" which happens to be a particular favorite of his. The nuclei of atoms exhibit energy levels much the same as electrons exhibit in their placement about the nucleus. Now it happens that carbon-12 has a nuclear energy level at 7.655 MeV and oxygen-16 has a level of 7.119 MeV. If we accept nuclear fusion to account for the elements (even fusion *in situ* some 6,000 years ago), then the placement of these two energy levels is noting short of miraculous. The energy levels themselves are due to properties of the strong nuclear force and the electro-magnetic repulsion between protons. Change these latter two quantities only slightly and there would result a drastic change in the two aforementioned energy levels. The change would be such that almost all the atoms that are now carbon-12 would have gone on to become oxygen-16. The implication is clear, no carbon, no life as we know it.

Finally, there is one aspect that has not been dealt with in either the evolutionary or the creationist literature as far as the author is aware. The current literature in astronomy has, for the last ten years, been abuzz with rumors and speculations about *black holes*. A black hole is defined as a clump of matter that has been so compacted that its gravitational field has overwhelmed all other forces so that its escape

[24] Clayton, D. D., 1969. *Physics Today*, May, p. 28.
[25] Hoyle, F., N. E. Wickramasinghe, and V. C. Reddish, 1968. *Nature*, **218**:1124.

velocity exceeds the speed of light. Nothing can escape a black hole; at least, not a massive black hole. For a mass, *M*, the radius, *R*, to which it must be compacted in order to become a black hole, termed the *Schwarzschild radius* is given by:

$$R = 2\ G\ M/c^2$$

where *G* is the gravitational constant and *c* is the speed of light. According to Dirac's large number cosmology, there are about 2×10^{78} nucleons in the universe.[26] At 1.67×10^{-24} gm/nucleon, this yields a total mass for the universe of about 3×10^{54} grams. The black hole radius of the universe is then about 500 million light years, far less than the currently held radius of 10 to 20 billion light years. In order to save the big-bang theory, are we then to believe that the universe is exempt from the physics of black holes? Or else, if we, for example, accept the missing mass as being above and beyond the Dirac cosmology's mass, giving us a factor of 100 to 500 more to play with, can we conclude anything at all from the Dirac large numbers? In particular, can we conclude anything then about the age of the universe?

Conclusion

We have considered only a few of the fundamental problems which modern evolutionists are struggling with in order to hold on to their naturalistic views. Much of what is critiqued here will be outdated in the years to come. Such is the nature of science, especially modern science where a theory is considered fruitful if it raises more questions than it answers. Truly "science falsely so called" (1 Tim. 6:20) is a great description of the knowledge of a natural man:

> But the natural man receiveth not the things of the Spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned. (1 Corinthians 2:14.)
>
> Ever learning and never able to come to the knowledge of the truth. (2 Timothy 3:7.)

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[26] Roxburgh, I. W., in *The Encyclopedia of Ignorance*, R. Duncan & M. Weston-Smith, eds., 1977. (N. Y. C.: Pergamon Press), p. 39.

READERS' FORUM

Some questions and answers

As a Christian layman (36 years old) and year-long subscriber (and reader) of BA, I would like to ask you a few questions about geocentricity. Would you be so kind as to write your answers between the questions?

J-P, Belgium

1. What is, according to you, the best evidence for the rotation of the universe?

Scripture is the best evidence for the rotation of the universe, in particular, Joshua 10:13.

There is no good physical evidence, but the best is probably that the Sagnac effect shows a relative rotation between earth and firmament but the Michelson-Morley results fail to show the relative movement of the earth about the sun.[27]

2. For the sake of honesty, do you have to admit that present-day knowledge does favor a heliocentric view or are all the facts of science equally well explained by both a geocentric and a helio/a-centric point of view?

All the facts of science are equally well explained by either model. As shown by the Barbour and Bertotti paper, the geocentric hypothesis explains the speed of light, the centrifugal and Coriolis forces, the Euler effect, and some quantum mechanical effects from first principles, whereas the current acentric model needs a separate explanation for each. If the current model considered the presence of the universe in its derivations, then it, too, would find those to be real gravitational forces. So right now, using Occam's razor, the geocentric model wins.

3. Could you reformulate (paraphrase, explain) the well-known statement by Sir Fred Hoyle (i.e.: "We know that the difference between a heliocentric theory and a geocentric theory is one of relative movement only, and that such a difference has no physical significance") by using as many lay and simple words as possible? You may use many more words than the original sentence.

He says that relative motion has no physical significance, that the physics is the same and there is no way to say one is real and the other is only apparent. *There is no experiment that can be performed to tell the difference between the two*. This, because Ernst Mach pointed out that

[27] My responses have been edited slightly for this publication.

physical behavior of a ball bouncing on a basketball court must look the same relative to the court no matter where we fix our coordinate system, and no matter how our coordinate system rotates or moves. Thus the physics in each coordinate system will adjust to match reality.

4. What is the evidence for a non-moving earth that is most understandable by non-scientists (which requires the least technical knowledge)?

The authority of Scripture ranks first in the minds of most non-scientists I've talked to. As for physical evidence, I think the fact that light does not show the motion of the earth through space but acts as if the earth is fixed in space. Even simpler: "What do your senses tell you?" often works.

5. Have you already had contacts with atheists and have you talked with them about geocentricity? How do they react? Do you personally believe that the geocentric issue is the main reason why until now atheists are atheists?

I talked with two skeptics about 15 years ago; they serve as a good example of the scientifically-minded atheist. They were the late Schadewald and Patterson, the latter of the University of Iowa. They admitted that geocentricity was "real science." They would never admit that of creation science. I don't think that atheists are so only because of acentrism, but I do think that the fall of geocentricity affords them a good excuse. If it hadn't fallen, I think they would find another excuse, such as "contradictions" in the Bible.

6. Do you think that there can be good scientific evidence for refusing a geocentric view or is the reluctance of scientists and non-scientists exclusively based on an emotional level, a philosophical preference or the fear of ridicule?

It seems that most people favor the acentric model because it was the model they were taught in school, and sentiment causes them to doubt that their teachers, and their teachers in turn, could be that wrong. I find this to be the case among Christians, too, with regard to geocentricity and the criticism of the Bible. Christian pastors cannot allow themselves to believe that their "good, godly, knowledgeable," theology professors could have been so "deceived" about the authority of the written scriptures.

There is another factor, too: it makes a certain, physical sense to our minds that the smaller should be dominated by the larger. Thus large objects such as the sun could not possibly do anything but dominate the lesser, as the earth. The flaw in that view is that the heliocentric system ignores the largest object of all—the universe—in any of its dynamic computations. Without seeing the universe as a whole, the firmament, this might makes right assumption serves only to strengthen the notion

that the earth should orbit the sun because the sun is more massive than the earth.

For those scientists who know all these things, their silence on geocentricity is based on the fear of ridicule for many, especially in creationist circles, and an aversion to the God of the Bible, whom they would prefer to face in judgment with a plea of lack of evidence.

7. Is there any evidence as to the position of the earth in the universe?

The redshift, Varshni's quasar shells and similar groupings about the earth of galaxies and clusters of galaxies, all hint at a special position of the Milky Way, if not the earth. Also, when the earth's "motion" relative to these shells is taken into consideration, the speed of the shell is a minimum about the sun as opposed to centered on the galactic center (600 km/sec versus 300 km/sec for the only study I've seen that reports it).

8. What is the most obvious biblical teaching: that the earth stands still or that it is at the center of the universe?

The most obvious to me is Joshua 10:13. The Holy Ghost, who inspired the Scripture, says in editorial voice, "the sun stood still and the moon stayed." If it was the earth that stopped rotating, then the God of truth should have said so. Indeed, there is no reason why the verse could not say, "So the earth stopped turning so that the sun appeared to stand still, and the moon to stay." All arguments to the contrary insist that the Holy Ghost did not write the truth for one reason or another, and so makes a liar of the Holy Ghost.

Other strong geocentric passages include Isaiah 38:8b; Ecclesiastes 1:5; and Malachi 4:2 (if the rising of the sun is not literal, then how can we insist that the rising of the Sun was literal?)

There is no direct scriptural support that places the earth at the center of the universe. Circumstantially, Joshua 10:13 ("the sun stood still in the midst of heaven") allows that the sun, not the earth, is at the center of the universe. Historically, most people have assumed the earth is at the center because it is the focus of God's plan of redemption. I think the sun is at the center because of Josh. 10:13 and it also makes the physics much easier to deal with, that is, it "saves the appearances" much more gracefully than the strict geocentric model.

More Bad Astronomer exchanges

The following paragraphs are taken verbatim en from the bad-astronomy.org website. It involves the particles that make up the firmament.

"Dstahl" [the pen name of an anti-geocentrist —*Ed*.] makes some very bold claims, starting with the idea that a firmament made of real, rather than virtual, particles would violate the Heisenberg Uncertainty Principle. Consider that geocentrists like Selbrede are hardly inventing

this kind of subquantum domain—it's been developed before by the well-respected team of Louis De Broglie, David Bohm, and Jean-Pierre Vigier and has appeared in refereed journals.

Dstahl implies that the particles being real means their position is so narrowly defined that the uncertainty principle is violated — as if the principle read something like "you can't know a particle's position with this kind of accuracy." That is NOT what the principle states. It refers to simultaneous knowledge of a particle's position AND velocity (relating the product of the uncertainties to the Planck constant). Anybody who examines Bouw's or Selbrede's published remarks on the firmament will see a reference to its temperature (usually held to be the Planck temperature), which, once incorporated into the picture (rather than willfully neglected by hasty critics), provides the necessary counterbalance to the argument. (Selbrede even provides mean free path criteria for these subquantum particles.)

While most would be content with this resolution (since it flatly refutes Dstahl's criticism), one could go further and point out that de Broglie, Bohm, Vigier, and quantum researchers on the Causal Stochastic (rather than Copenhagen) side of the house believe that the uncertainty principle arises OUT of this subquantum domain, rather than being subject to it.[28] In fact, they believe it likely that a classical regime can be recovered in the subquantum domain (and say so), and quantum effects be reinterpreted in terms of Bohm's (not Bohr's) quantum potential theory. (I.e, the "noise" in the system is due to the real particles that constitute the firmament and their extremely rapid constrained motion. Selbrede, for one, equates these with Markov's "maximon fluid" described in *The Very Early Universe* edited by Stephen Hawking and two collaborators, which drives the density to the Planck level.)

If some geocentrists (Selbrede in particular) hold that spacetime foam is made of real rather than virtual particles, they do so under the influence of the published research of Redmount and Suen concerning the inherent instability of spacetime foam. Selbrede has pointed this out repeatedly — there is a General Relativity problem with the virtual particle model of spacetime foam, namely, that it results in the spontaneous creation of topological anomalies that grow and coalesce into wormholes (and worse) at rates high enough to have been detected millions of times over. Selbrede, then, abandons the virtual particle model

[28] The Heisenberg Uncertainty Principle can be stated in two ways. The first involves energy and time and the other involves position and momentum. In both cases, the product of the uncertainties of each must be less than or equal to the Planck constant divided by 2π. In both cases, substituting in the mass of a firmament particle, its size, it's characteristic time, and the speed of light gives a value exactly equal to 2π. Hence this statement.

for the subquantum domain on good and necessary observational evidence.

Critics of this strategy are ill-informed — they're the ones standing on observationally & experimentally untenable ground. Selbrede elsewhere makes no ruling over virtual particles in general, which are understood to govern certain interactions in the Standard Model. But when he abandons virtual particles in favor of real particles for spacetime foam, he gives chapter & verse of *Physical Review* to buttress his position (citing, again, Redmount & Suen). Perhaps Dstahl should attack Redmount & Suen for giving virtual particles a bad name. Frankly, the geocentrists are derivative here, not original.

By the way, lots of talk on this thread about barycenters,[29] and (as the geocentrists have maintained) continued willful neglect of the heaviest object in the system — the firmament (which bears the Planck Density). Once all this unproductive chatter against the firmament is cleared away, it will be revealed for what it is: an attempt to obscure the fact that geocentricity is based on barycentrism, and opposing cosmologies are not. On the other hand, the geocentric case could even be made without reference to the firmament based on the kind of motion superpositions published by Thonnard, Rubin, etc. which indicated that the hierarchy of astronomical motions summed up to zero at our general position. That this result was an unexpected surprise was evidenced by the authors' concern that the data appeared to justify a return to a pre-Copernican worldview, which was deemed to be (of course!) undesirable. Hmmm....

But back to barycentrism. How can a barycentric analysis be accurate that is incomplete by dint of omitting the most massive object in the system (by a factor of around $10^{93\text{rd}}$ power in comparison with the total mass of the universe). This is like arguing about an ant and a fly while ignoring Mount Everest. But I suspect such nonsense will continue on this thread, despite the fact that nothing I've mentioned here is actually new material. It gets brought up every 4 to 6 months, and then geocentricity's critics trot out the same arguments all over again. Geocentrists keep kicking the stone out of Sisyphus's hands, but he keeps going back down to roll it up the hill again. But it's geocentrists who keep being accused of "trotting out the same old tired arguments." The debate doesn't progress because the exact opposite is true. Besides which, geocentrists almost exclusively discuss the scientific aspects. It's geocentricity's critics who indulge in scorn, ridicule, psychoanalysis, and *ad hominem* attack. (As if science and scientific debate were properly conducted with such tools!)

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[29] A barycenter is the point at which two or more orbiting objects would balance if they were connected by a rod and hung as a mobile from some cosmic ceiling.

Well, this is off the topic (and a rare exception to the general "science only" debate strategy), but it cries out for correction anyway (in fact, this is a repeat of a post from a half year ago, responding to the exact same selective quotation of Hoyle). It is claimed that Hoyle had a dim view of pre-scientific cosmology (specifically that contained in the Hebrew Scriptures), and two quotes were produced in support of this. Let's repeat the response offered months ago when these quotes had surfaced here: Sir Fred Hoyle submitted an *amicus curiae* brief in favor of creationism to Judge William Overton's court during the Arkansas Creationism trial in the early 1980s, AND sent his key collaborator, Chandra Wickramasinghe, to represent him in that court as a witness on behalf of the creationists. The late Sir Fred Hoyle, one would think, is not so easily pigeon-holed by either side! Selective quotations yield this imbalanced result. (While we're on the topic, Hoyle, in the same biography of Copernicus elsewhere cited, provided a provisional defense of geocentricity using Newtonian mechanics and without recourse to relativity theory, but nobody bothered to quote any of that, now, did they?)

Does a heavier object fall faster than a lighter one?

The following is a three-way email conversation between Mr. L., Mr. P., and your editor. The first letter is to P in response to an email from L:

> How do you reconcile Newton's gravitational law with Galileo? If what Galileo wrote was true, and the objects of differing mass fell at an equal rate in a vacuum towards an object with larger mass than they, then that would negate Newton's law that the objects of greater mass would be attracted more strongly than the one larger object of mass and the other object of least mass.

The next email is from your editor to L in response to his reply to P.

> Allow me to answer your question to P my own way, and add to that an analysis of Hanson's conclusion that falling bodies of different masses fall at different rates.
>
> Newton's law says that the force of gravity, F, relates the mass of the falling body, m, the mass of the earth, M, the distance from the center of the earth, R to the gravitational force, F, via the formula
>
> $$F = - G m M / R^2$$
>
> From Newton's definition of force, $F = m a$, where a is the acceleration. Thus the above equation becomes

$$m\,a = -\,G\,m\,M\,/\,R^2.$$

We find the mass of the falling body, *m*, on both sides of the = sign and thus it cancels out, leaving

$$a = -\,G\,M\,/\,R^2.$$

That says that the acceleration experienced by the falling body is the same regardless of the mass of that body. That is what Galileo observed, and that is what is expected from Newton's law of gravity.

When Jim Hanson wrote his paper entitled "Heavier Objects Fall Faster,"[30] he showed that the above analysis breaks down for large masses. In his paper he found that if a body with 1% of the earth's mass (roughly the mass of the moon), and a body of 2% earth mass were to fall to earth from the same height, then the more massive body will reach the surface of the earth about 0.49% sooner than the less massive body.

When we try that for a 1000-gram ball versus a 1-gram ball, the difference is 0.000 000 000 000 000 000 000 099 9% or about 10^{-22}%. Even in a five-second free fall in a vacuum tower, the difference of 500 septillionths of a second could not be detected. This calculation is extremely rough, but it's not off by more than an order of magnitude (meaning, a factor of 10). Thus Galileo's observation and Newton's gravity law give the same result, and Hanson's agrees with them for all practical purposes.

Building a star shield

On 19 February, a certain Daniel Brooks wrote this letter, which, though not common, reflects a certain attitude about geocentrists.

Hi there,

I was reading your website, www.geogentricity.com [sic], with great interest. On it, you make the very rational case that, because the Bible says the earth is the center of the universe, that we must adjust our understanding of astronomy to a geocentric one, as God is infallible and, as the author of the Bible, would not have told us in His Word that the earth is the center of the universe if indeed the earth revolved around the sun.

[30] Hanson, J. N., 1997. "Heavier objects fall faster," *Biblical Astronomer*, **7**(81):10.

I was wondering if you also advocated the concept of a flat earth, as the Bible does. After all, our understanding of the universe is insignificant compared to Yahweh's, and it clearly states in the Bible that the earth is flat. Also, should we be concerned about stars falling to the earth, since they are not actually balls of gas as most scientists tell us, but actually points of light in the firmament which can be shaken by an earthquake down from the heavens to the earth? Is there any way to put some type of star-shield up to keep them from falling on us?

Thank you for your knowledgable [sic] reply,

--DA [sic]

My reply:

Dear Daniel,

I'm afraid you misunderstood the geocentricity.com web site and take several things for granted.

First: the Bible nowhere says that the earth is at the center of the universe, nor does the site claim that it does. The Bible says that the earth does not move relative to the throne of God, which is in the third heaven, and that science can only "prove" its acentric position by assuming that the universe is the smallest isolated system, that is, by assuming there is no third heaven.

Second: elsewhere on the site, viz. geocentricity.com/flatearth.htm, it is shown that the Bible does NOT teach a flat earth. The claim that it does teach a flat earth is based on faulty exegesis, i.e., by ignoring the definition of the word "earth" as given with its first usage in Genesis 1, where it is defined as the dry land.

Third: I recognize no god named "Yahweh." I can find no record of him before the critics of the eighteenth century invented the name. They proposed Yahweh was the original name of the god of a well in the Sinai.

Fourth: the definition of star in Scripture is any object located in the firmament. Again, this is according to the first usage of the word "star" in Gen. 1. As such, meteoroids are members of the set, stars. So you *do,* indeed, need to worry about non-gas "balls" hitting the earth. The context tells you that your best shelter is in a cave.

Fifth: the Scripture nowhere teaches that the stars are "shaken by an earthquake." This kind of claim comes from Bible critics, 99% of whom have never even read the Holy Bible (the so-called "King James Version") from cover to cover, and 100% of whom never studied it. After all, if they had, they wouldn't bear false witness about it, now, would they?

Gravity Probe B and geocentricity

From the Internet, milli360 claimed:

> The definitive experiment (Gravity Probe B) to test "frame dragging" is to be launched April 17 of this month. Results in a couple years, but preliminary analysis of other satellites (LAGEOS) seems to favor a positive outcome. If general relativity fails this test, Geocentricity is doomed.

The question thus arises, is milli360 correct that if General Relativity fails the test, Geocentricity is doomed?

To this question, asked by Amnon, your editor replied:

> Nope. There's still Gerber's 1898 advanced potential model. It was the exploration into the validity of Mach's principle as applied to General Relativity that led Thirring, and then Lense and Thirring, to derive the "drag" effect. I should probably make the translation of the two relevant, German papers available on the Internet.

Amnon also asked:

> Do you expect anything to come out of the Gravity Probe 5 test of Relativity & frame-dragging? Bowden claims that like Eddington, Mercury, Hafele-Keating & COBE, the results will be fudged to support Relativity. Could it have any implications for geocentricity?

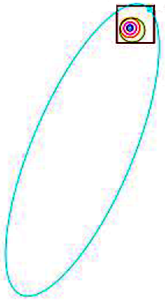
To which Martin Selbrede replied:

> Actually, the results will be helpful to geocentricity regardless what the outcome is. If the experiment "disproves" frame dragging, then relativity takes it on the chin. If it "proves" frame dragging, then Einstein's geocentric version of reality is supported. So, we'll keep an eye on those four polished quartz spheres and see what happens.

PANORAMA

Evidence for a young solar system from KBO pairs

A handful of moons orbiting icy space rocks on the fringes of the solar system and discovered over the past couple of years have astronomers puzzling over their presence and size. Add to that the recent discovery of what some have heralded as the tenth planet, tentatively named Sedna, and the mystery deepens.



At left: Sedna's orbit compared with the other planets out to Pluto. Its eccentricity is that of a comet, not a planet. If astronomers challenge Pluto's status as planet because of its elliptical orbit (largest circle in the square box), certainly the case against Sedna as planet is far stronger. Sedna's discovery position is represented by the dot in the upper right corner of the square box.

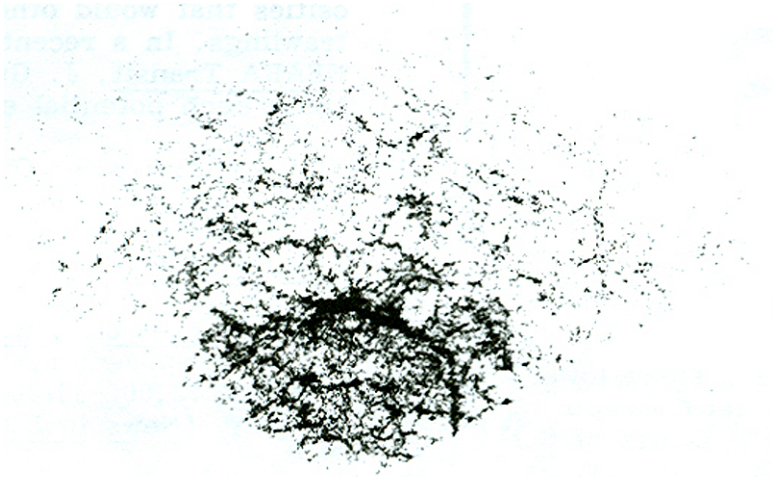
The Kuiper Belt region of the solar system stretches from just past Neptune to beyond the farthest reaches of Pluto's orbit. To date, more than 500 Kuiper Belt Objects (KBOs) have been found since 1992. About two years ago, the first satellite orbiting a KBO was discovered. Astronomers were surprised to discover that in many cases, the satellites are as large or nearly as large as the KBOs they orbit.

Evolutionists think satellites were formed by collisions. In a paper to be published in the October issue of *The Astronomical Journal,* author Stern questions the evolutionary model for how such large KBO-satellite pairs could form. The collision model for large satellite formation assumes that two large objects form a bond when two bodies pass by each other. If their relative speed is low enough, the model can explain binary systems around asteroids, as well as Pluto and its moon Charon. Today this is the leading *evolutionary* explanation for the formation of the earth-moon system. (The model fails dismally to explain binary and multiple stars. About 2/3 of all stars are members of multiple systems.) Now, collisions of the magnitude required to form KBO satellites, Stern found to be energetically improbable, given the number and masses of potential impactors in the Kuiper Belts. Stern concludes that either the surface of the KBOs with satellites, or the surfaces of the satellites themselves are much shinier than observed for comets and asteroids. Of course, it may also be that the solar system is a lot younger than commonly assumed or formed by a totally different process than accepted theory allows.

The Great Wall of galaxies revisited

About twelve years ago, we published an article by David and Linda Harris in which they related that the distribution of galaxies about the earth seemed to fall on a great wall centered on the earth.[31] The Great Galactic Wall, as it was called at the time, presented evidence from a 1989 paper by Margaret J. Geller and John P. Huchra of the Harvard-Smithsonian Center for Astrophysics who first reported the wall as a structure much larger than the Virgo Cluster of Galaxies. Although that research was based on several thousand galaxies, new research results obtained from the Sloan Digital Sky survey (SDSS), led by Max Tegmark of the University of Pennsylvania, has now mapped over 200,000 galaxies. More than 200 astronomers from 13 institutions are involved in the data reduction.

The following comments are quoted from William Corliss.[32]



The accompanying figure is a two-dimensional wedge-shaped slice of this cosmic map. It pinpoints approximately 33,500 galaxies.

The roughly concentric distribution of galaxies about the point of the wedge, which is the earth, is inescapable. Also readily apparent is a decrease in galaxy density with increasing distance from the earth.

The implications of the SDSS work so far is highly unsettling to [evolutionists] for two reasons:

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[31] Harris, D., & L. Harris, 1992. "The Largest Structures in the Universe," *Biblical Astronomer*, **2**(61):4-15.

[32] Corliss, W., 2004. "Could we really be at the center of the universe?" *Science Frontiers*, no. 154, pp. 1-2.

1. The Cosmological Principle, which demands that the universe be homogeneous with no favored center, is violated.
2. The earth *does* seem to be at center of the observable universe contrary to the adamant philosophical declaration of science that the earth and its cargo are insignificant in the Grand Scheme of Things—whatever that is!

Corliss continues, and correctly notes that: "The accompanying SDSS map is consistent with the long-claimed [Since mid-1960s—*Ed.*] quantization of redshifts. (SF#105)

"It is possible that astronomers misinterpret redshifts as yardsticks thereby invalidating the SDSS maps.

"No one yet knows whether the earth might also be at the center of the distributions of dark matter and dark energy—assuming they exist and are not uniformly dispersed."

To this, your editor would like to add that the quantized redshifts would indeed give an earth-centered view as one sees in the map, but if one were to move away from the center then the 72-km/sec quantized rings seen in the map would disappear. This is strong evidence for the Scriptural doctrine of geocentricity, that the earth is in a special place, albeit the shells—for the concentrations are in shells akin to Varshi's discovery of shells of quasars about the earth—do not provide evidence for a stationary (geostatic) earth.

Notice that there are at least five concentric shells about the earth.

Galaxy luminosity distribution finds evidence for geocentricity

A paper printed in the 29 June 2004 issue of the *Monthly Notices of the Royal Astronomical Society*[33] claims that when galaxies are grouped into bins according to luminosity (intrinsic brightness, that is, how bright each galaxy would appear if it were moved to a specific distance from earth), a roller-coaster-like normal distribution describes galaxies of mid-to-lower luminosity while an exponential curve describes the distribution of galaxies of greater luminosity.

Evolutionarily speaking the question is why, if the universe were 13.6 billion years old, would it spawn humps of medium-luminosity galaxies that peaked a short time ago and then dwindled away completely? These form shells about the earth just as certainly as the SDSS maps. Indeed, the current evidence is also based on SDSS data.

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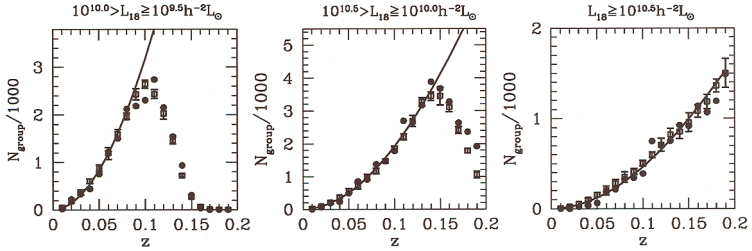
[33] Yang, X., H.J. Mo, F. C. van den Bosch, & Y.P. Ying, "The Two-Point Correlation of galaxy Groups: Probing the Clustering of Dark Matter Haloes," preprint at arXiv:astro-ph/0406593 v1 25 Jun 2004.

In the figure below, the numbers on the vertical axis, (N_{group}/1000) is the number of galaxies in that bin in thousands, and the axis labeled z is the redshift in the usual notation. The solid line is the curve that plots the expected value. The reader will readily see that for the lowest luminosity galaxies (leftmost curve), and for the mid-luminosity galaxies (center curve), the points drop well below the expected value while the high-luminosity galaxies, at right, follow the expected distribution curve. The leftmost two curves are of such a nature that they would lose their central focus if observed from another place significantly offset from the earth.

An explanation for this that is acceptable to evolutionists is that if each galaxy had an intrinsic redshift (one that is not due to Doppler shift), and at the same time the attenuation (stretching) of space is greater than predicted by the theory of relativity, then the nearby, fainter galaxies are slightly displaced, but as the error introduced by the intrinsic red shift becomes a successively smaller and smaller percentage compared to the total red shift, that the data would peak and then would drop to insignificance.

In the above hypothesis, the stretching effect is underestimated, and this fainter population of galaxies then appears to dwindle with increasing distance. Astronomers note that the red galaxy population (presumed to be old) dies out at a certain distance, but stronger telescopes keep stretching that distance further and further out. This effect in galaxy populations is consistent with the lower-than-predicted mag-



nitude of distant supernovae, which would then be wrongly attributed to an increase in the expansion rate of the universe due to "dark energy."

We could also postulate changes in the local speed of light as a function of distance from the earth as an explanation, changes which may possibly affect the force or strain of gravity, which in turn effects the age-dependent models used to determine the properties of a star, in particular its evolutionary "age." Regardless of the explanation, this phenomenon is geocentric in nature and attests to the special location and significance of the earth as related in the scriptures. No scientific

fact has ever contradicted Scripture once the fact was understood completely in context.

The ossuary of James may not be a hoax after all[34]

In October 2002, the *Biblical Archaeology Review* (BAR)reported the find of an ossuary, a box built to preserve the bones of a prominent person after the body has decomposed, with the inscription, "James the son of Joseph, the brother of Jesus." On June 18, 2003, a committee appointed by the Israel Antiquities Authority (IAA) declared the inscription to be a forgery. This was the basis for an earlier Panorama piece.[35]

Since then, other experts and research institutions have examined the box and each has concluded that the ossuary inscription is authentic. Among those are P. Kyle McCarter, Albright Professor at the Johns Hopkins University, Israeli paleographer Ada Yardeni, and one of the world's leading Aramaic experts, Joseph Fitzmyer of the Catholic University of America, who, after some initial hesitation, judged the somewhat peculiar Aramaic phrasing on the inscription to be appropriate to A.D. the first century. The Geological Survey of Israel, a government agency, also examined the box and its inscription at BAR's request and found both to be authentic. A team from the Royal Ontario Museum in Toronto, where the ossuary had been on exhibit, also judged it authentic.

It turns out that the pronouncement that the inscription is a forgery primarily stemmed from one man, Professor Yuval Goren of Tel Aviv University. The decision of the IAA purports to be by unanimous agreement of a 15-person committee, each of whom had been named by the IAA. It appears, however, that the only one on the committee with any geological and chemical knowledge on which the conclusion is based is Yuval Goren. He managed to convince the rest of the five-person sub-committee of his scientific conclusions based on materials in which they were not expert and which they have no more than a laypersons' knowledge. This sub-committee convinced the other scholars of the conclusion of the five-person scientific committee. The committee of other scholars had even less scientific expertise. Of course, Professor Goren may still be right, but we need to wait for further developments before arriving at this conclusion. Beyond that, it will be impossible to prove that the Jesus and James mentioned in the inscription are the Christ and his brother.

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[34] Shanks, Hershel, http://www.belief.net/story/128/story128521.html.
[35] Panorama, 2003. "James Ossuary a hoax," *B.A.,* **13**(105):100.

Antarctic lake water will fizz like a soda[36]

Water released from Lake Vostok, deep beneath the south polar ice sheet, could gush like a popped can of soda if not contained, opening the lake to possible contamination and posing a potential health hazard to NASA and university researchers. A team of scientists that recently investigated the levels of dissolved gases in the remote Antarctic lake found the concentrations of gas in the lake water were much higher than expected, measuring 2.65 quarts (2.5 liters) of nitrogen and oxygen per 2.2 pounds (1 kilogram) of water. According to scientists, this high ratio of gases trapped under the ice will cause a gas-driven "fizz" when the water is released. Lake Vostok lies under 2.5 miles (4 km) of ice. Evolutionists believe it to contain microorganisms living in an environment that may be analogous to Jupiter's moon, Europa, which apparently contains oceans trapped under a thick layer of ice.

An important implication of this finding is that if scientists expect to find life in water with oxygen levels fifty times higher than that found in ordinary freshwater lakes on earth, that life has to have special abilities, such as high concentrations of protective enzymes, in order to survive. To find out, an international group of researchers that will deploy a remote observatory at Lake Vostok within three years and return samples within ten years.

The team also discovered that the air-gas mixture there, besides dissolving in the water, also is trapped in a type of structure called a *clathrate*. In clathrate structures, gases are enclosed in an icy cage and look like packed snow. These structures form at the high-pressure depths of Lake Vostok and would be unstable if brought to the surface.

Lake Vostok is one more than 70 such lakes deep beneath the polar plateau. They are part of a large, sub-glacial environment that has been isolated from the atmosphere since Antarctica became covered with ice about 4,000 years ago. Evolutionists believe that the ice sheet formed more than 15 million years ago. The new finding presents a problem for that age. Ice is porous, and under such pressure the gasses should escape to the surface over time or, at least, into the surrounding ice. This is the same type of problem encountered with oil fields. If they are more than 10,000 years old, then all pressure would be gone and one would not find any gushers.

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[36] http://salegos-scar.montana.edu/.

CREDO

The Biblical Astronomer was founded in 1971 as the Tychonian Society. It is based on the premise that the only absolutely trustworthy information about the origin and purpose of all that exists and happens is given by God, our Creator and Redeemer, in his infallible, preserved word, the Holy Bible commonly called the King James Bible. All scientific endeavor which does not accept this revelation from on high without any reservations, literary, philosophical or whatever, we reject as already condemned in its unfounded first assumptions.

We believe that the creation was completed in six twenty-four hour days and that the world is not older than about six thousand years. We maintain that the Bible teaches us of an earth that neither rotates daily nor revolves yearly about the sun; that it is at rest with respect to the throne of him who called it into existence; and that hence it is absolutely at rest in the universe.

We affirm that no man is righteous and so all are in need of salvation, which is the free gift of God, given by the grace of God, and not to be obtained through any merit or works of our own. We affirm that salvation is available only through faith in the shed blood and finished work of our risen LORD and saviour, Jesus Christ.

Lastly, the reason why we deem a return to a geocentric astronomy a first apologetic necessity is that its rejection at the beginning of our Modern Age constitutes one very important, if not the most important, cause of the historical development of Bible criticism, now resulting in an increasingly anti-Christian world in which atheistic existentialism preaches a life that is really meaningless.

If you agree with the above, please consider becoming a member. Membership dues are $20 per year. Members receive a 15% discount on all items offered for sale by the *Biblical Astronomer*.

To the law and to the testimony: if they speak not according to this word, it is because there is no light in them.

– Isaiah 8:20

The participants of the August 7, 1991 Geocentricity Conference. From top to bottom they are Bob Wehmeyer, Jim Hanson, Gerry Bouw, Dick Elmendorf, Walter Lang, and George O'Keefe. The plaque was a Windmill Tilter Award for Walter van der Kamp who could not attend the meeting. It read "Presented to Walter van der Kamp, Founder of the Tychonian Society, for his pioneering work in showing geocentricity to be a fundamental physical and theological necessity in the formation of a truly Biblical world view. Given to him with respect and admiration by the members of the Society o august 7, 1991."