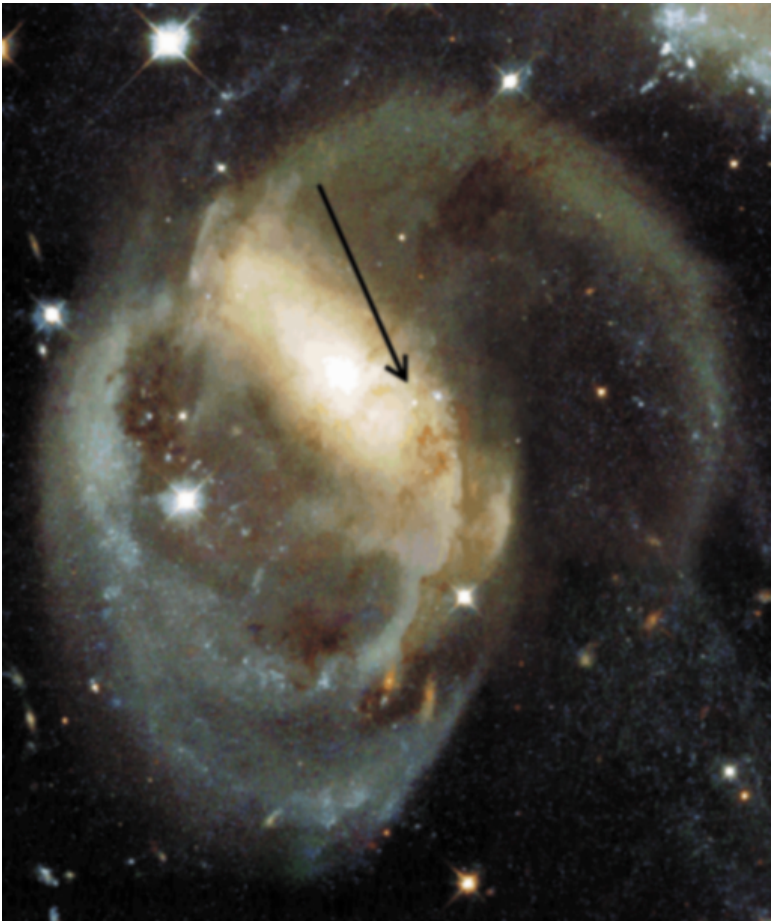


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**THE
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SPRING 2005



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Editor: Gerardus D. Bouw, Ph.D.
4527 Wetzel Avenue
Cleveland, Ohio 44109
U.S.A.

E-mail address: gbouw@bw.edu
<http://www.geocentricity.com/>
FAX: (440) 826-6973

Front Cover: NGC 7319, a galaxy in Stefan's Quintet, has a high-redshift galaxy in front of it (arrow). This is impossible, according to modern cosmology. See page 67.

Back Cover: The total eclipse of the moon of 18 December 1964. Note the blood-redness of the moon, along with a copper color gradating into darkness. The Bible speaks of the moon becoming red as blood and being darkened. An eclipse shows how that might occur. (Photo taken through the University of Rochester's Alvin Clark refractor by Dr. Bouw.)

THE BIBLICAL ASTRONOMER

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EDITORIAL

Your editor has now been on a leave of absence from the College for three months, after being on sabbatical for the Fall 2004 semester. During the leave, I have traveled to Pensacola, Houston, and Denver, met dozens of pastors and missionaries, spoke on geocentricity to a class of more than 30 students, and had occasion to minister to one young believer in a restaurant. At the end of next month (April), I will, D.V., minister to churches in the Philippines, New Zealand, and the UAE. As a result, the office will be closed from the end of April to the start of June.

Announcing a new book

After more than a decade on the back burner, James Hanson's book had been printed and is now available. For our new readers unfamiliar with Prof. Hanson's background, here is a quick synopsis. Prof. Hanson is Professor Emeritus of Computer Science at the Cleveland State University. His real expertise is mathematics. Prof. Hanson conducted a "Bible and Geocentricity" column in the early '90s, and much of the book is taken from those articles. The book is not at all mathematically oriented; it is pure Bible and geocentricity. Hence its title, *The Bible and Geocentricity*. The book consists of 145 pages plus preface. It has a full-color cover and is perfect bound. Unlike the original articles, the book contains figures and illustrations.

The ten chapter titles are as follows:

1. Bibliology demands geocentricity
2. All doctrines require geocentricity
3. The embarrassment of geocentricity
4. God's cosmic geometry
5. Biblical testimony from chronology, time and place
6. Science and geocentricity
7. Ancient descriptions of celestial motion
8. Copernicus's arguments
9. Post-Copernican evidences of earth's motions
10. Evidence for earth's motions after Newton

The cost is \$8.00 postpaid in North America, and \$13.00 postpaid to the rest of the world.

In this issue

Much of this issue is dedicated to the moon. The lead article, entitled “The Bible and the Moon,” examines the role the moon plays in Scripture as a type of the body of Christ, and its role in the last days. The article also examines the spiritual aspects of lunacy; is a lunatic really “ticked” by the moon or is it an obsolete figure of speech? Finally, we look into the worship of the moon, examining the moon as both a male and female deities, searching for the origin of each, and looking at the various forms of moon worship today.

In the second article we look at the question of whether or not man should colonize space. Though recently resurrected by President Bush’s goal to send men to Mars, the question is not at all new. It was debated back in the 1960s when the moon program was in full swing. Scriptures invoked by proponents of manned exploration of the celestial bodies are examined, as well as scriptures invoked by those opposed to the matter. We also look at some of the impediments that need to be overcome before man can safely colonize the moon and planets. These impediments are not trivial.

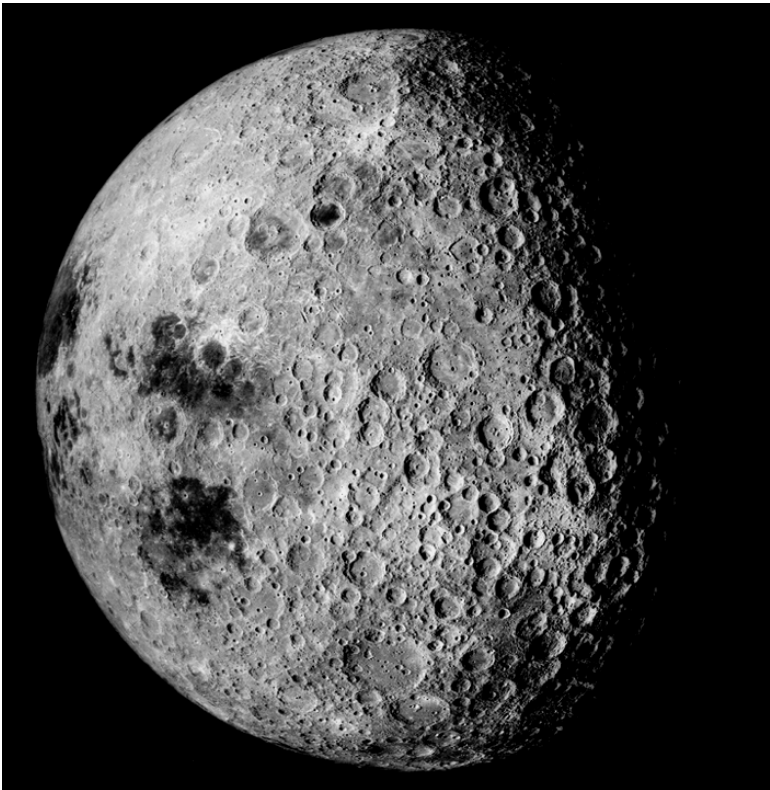
In “Panorama” we have a large section dealing with frauds perpetrated in the name of evolution. The article was spawned by the recent exposure of a German expert in Carbon-dating who, it turns out, could not run his own C-14 dating equipment. The exposure will result once more in the necessity to rewrite “all the textbooks.” In a subsequent report in “Panorama” we disclose why evolution is so fraught with fraud.

Finally, have you ever wondered how a truck or tank can completely disappear, driver and all, in the deserts of the world? Well, wonder no more. No, it’s not quicksand in the sense of the usual explanation, as presented in the movie, *Hidalgo*. The reality is much stranger than that and illustrates why one should consistently accept local accounts of a phenomena rather than the opinion of experts in ivory towers thousands of miles away from where these events occur. For instance, one time I was at the Arizona Meteor Crater, I asked the curator of the museum whether the local Indians had an account of the crater’s formation. “Yes,” was the answer, and their account was exactly what one would expect survivors to have seen. The curator, however, dismissed the account as a lucky guess because he was told that the crater fell 50,000 years ago, long before archaeologists claim there were any Indians in the Americas. *Evolution über alles!* Nuts! Sheer nuts!

THE BIBLE AND THE MOON

Physical characteristics

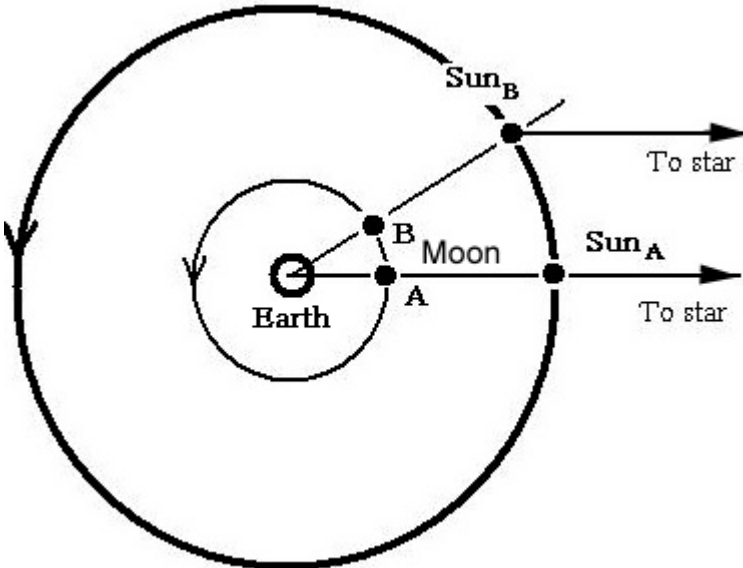
After the sun, the moon is the most prominent object in the sky. It is 2,145.8 miles (3,476.2 km) in diameter at its equator, which is about 2.5 miles (4 km) greater than its polar diameter. The earth is 81 times as massive as the moon, and the distance from earth's center to the moon ranges from 227,100 to 253,400 miles (363,300 to 405,500 km) from earth, roughly a quarter of a million miles.



The moon's revolution about earth is measured from when the earth and moon and a particular star are in line until the next time they are in line. It is 27.3217 days long and is called the *sidereal month*. But the month itself, measured from new moon to new moon, is 29.53 days. This

is the moon's *synodic period* (see figure below). Because the moon's day is a month long, the moon keeps the same face to the earth. Since the moon's orbit is elliptical, the moon's distance varies from earth and its orbital speed also varies in the course of a month; but its rotation speed is constant. As a result, sometimes the orbit is ahead of the moon's day, and sometimes behind. As a result of this *nutation*, as the phenomenon is called, we get to see about 60% of the moon over the course of time.

But that means there is 40% we do not get to see. The far side of the moon is more heavily cratered than the side we see, as can be seen in the picture on the previous page. The dark area on the left edge of the moon in the picture is Mare Crisium, the dark area that makes up the left eye of the "man in the moon." To the right, in the picture, is Mare Smythii which may be found on lunar maps.



Geocentric explanation of the sidereal and synodic months

At the first new moon, marked "A," the moon, sun, and a distant star are aligned. A month later, at point B, the sun has moved to the point marked Sun_B. The sidereal month ended when the moon reached point A, again; but because the sun had moved counterclockwise in its yearly motion, it was not until 2.2 days later, at point B, that the new moon occurred. This is the synodic month. (The motion of the sun, described by the outer circle, takes one year and may be due to irregularities in the distribution of matter in the universe that cause the cosmos to wobble.)

The creation of the moon

The creation of the moon is recounted in Genesis 1:14-19. Though discounted by “modern science,” which does not like to retain God in its knowledge (Romans 1:28-32,¹ q.v.), the Genesis account makes at least as much sense as any other theory for the origin of the moon.

14 And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years:

15 And let them be for lights in the firmament of the heaven to give light upon the earth: and it was so.

16 And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: *he made* the stars also.

17 And God set them in the firmament of the heaven to give light upon the earth,

18 And to rule over the day and over the night, and to divide the light from the darkness: and God saw that *it was* good.

19 And the evening and the morning were the fourth day.

The text does not tell us how God made the sun, moon, and stars, but it does tell us why he made them. Their purpose is strictly geocentric:

1. to divide day from night
2. for signs
3. for seasons
4. for days
5. for years
6. to give light upon the earth
7. to rule over day (the sun) and night (the moon)

¹ Because modern Bible criticisms (both higher and lower) fall victim to the same atheistic “scientific” principle, we are forced to reproduce the inspired text in the article: either in footnote or in the body of the text.

28 And even as they did not like to retain God in *their* knowledge, God gave them over to a reprobate mind, to do those things which are not convenient;

29 Being filled with all unrighteousness, fornication, wickedness, covetousness, maliciousness; full of envy, murder, debate, deceit, malignity; whisperers,

30 Backbiters, haters of God, spiteful, proud, boasters, inventors of evil things, disobedient to parents,

31 Without understanding, covenantbreakers, without natural affection, implacable, unmerciful:

32 Who knowing the judgment of God, that they which commit such things are worthy of death, not only do the same, but have pleasure in them that do them.

8. The sun moon were made to praise the Lord (Psa. 148:3).²

A theory for the creation of the moon, consistent with the Genesis account, was published earlier in the *Biblical Astronomer*.³ Since the “how” of the creation of the moon is not given in Scripture, we shall not take time and space to elaborate on that in this article, nor will we bother to look at the various evolutionary speculations for its origin.

Elsewhere,⁴ we noted that the moon can be said to rule the night only in a geocentric framework, otherwise, the night would orbit the sun with the earth and so the sun, not the moon, would rule the night. The moon shares the dominion over the night with the stars (Psa. 136:9).⁵ A practical example of their dominion is that the moon and stars are used for navigation at night.

It is obvious to all that the moon gives light upon the earth, and how the light is divided day from night by the sun. That our calendars use the sun (for day and year) and moon (for month) reveals their use for days and for years. We use a solar calendar, based on the sun, but the Jews still use a luni-solar calendar, which couples both to the sun and the moon. Arabs use a lunar calendar. All bear witness to Gen. 1:14.

As the moon shines by the light of the sun, and has no light of its own, so the church reflects the light of Christ and has no light of its own. A couple of scriptures point to the moon not having its own light by which to shine. Job 25:5 says, “Behold even to the moon, and it shineth not; yea, the stars are not pure in his sight.” The idea is that the partial phases of the moon, and the new moon itself cannot be seen because they have no light of their own. Job 31:26 states it a bit more directly: “If I beheld the sun when it shined, or the moon walking *in* brightness.” “Walking in brightness” communicates the idea that the moon is walking in the light of another source, like a spotlight on a stage actor, having no light of its own.

Lastly, the moon was created to be eternal. Psalm 72:5 says, “They shall fear thee as long as the sun and moon endure, throughout all generations.” This is repeated in verse 7 with, “In his days shall the righteous flourish; and abundance of peace so long as the moon endureth.” Psa. 89:37 chimes in with, “[the seed of v. 36, namely, the Lord Jesus Christ] shall be established for ever as the moon, and *as* a faithful witness in heaven. Selah”; in other words, eternally.

² Praise ye him, sun and moon: praise him, all ye stars of light

³ Bouw, Gerardus D., 1997. “Creation of the Universe,” *B.A.*, 7(79):10. Also 1999. “Formation of the Moon,” *Ibid.*, 9(88):24. Other articles showing evidence for the recent creation of the moon, include Bouw, 1994. “Dust on the Moon,” *B.A.* 4(68):21.

⁴ Bouw, 1992. *Geocentricity*, pp. 134-137; Bouw, 2004. *A Geocentricity Primer*, chapter 10; W. v.d. Kamp, 1985. *Bulletin of the Tychonian Society*, no. 41, p. 6.

⁵ The moon and stars to rule the night: for his mercy endureth for ever.

Worship of the moon

It is no secret that the moon has been an object of worship since time immemorial. What is a secret is that at least three-fifths of the world is still steeped in the worship of the moon in one form or another, and to a more or lesser degree.

Unlike the sun, which is almost exclusively seen as a male deity, the moon appears both as male and female. It seems to have started in Sumer, where Nanna was the original moon god. Nanna, a male, liked to jump among the stars in the form of a white bull, from which, some claim, came the English myth from which Tolkein wrote the poem "The Inn," which has the line "the cow jumped over the moon." Nanna had a daughter whose name was Inanna. Though Nanna was the moon god, Inanna represented the moon in its waxing phase, particularly, the crescent moon. She was said to give life to the moon and then to take it away in the moon's waning stages, that is, after full moon. The supposed ability to give life and reduce it seasonally made her the goddess of crops. Since her scope of influence extended over all phases of the moon, she became the moon goddess. From that diffusion, then, came the male and female deities of the moon.

From Sumer, the two deities spread abroad. In other lands, in other tongues, and in other times, Nanna, the original moon god, became Toth, Asimbabber, Suen, Imaqah, Ilah, and Sin, the Acadian moon god. Sin was also worshipped by the Arabs of a particular peninsula, which gave their peninsula its name, Sinai. Inanna remained associated with the crescent moon and went under such diverse names as Ashtoreth, Astarte, Diana, Ishtar, Selene, Kali, and Allat. Each of these moon goddesses also bore the title, Queen of Heaven, and each was at one time or another pictured as a woman with the moon under her feet.

One particular moon god was found among the 360 gods of pre-Mohammedan Mecca's Kaaba. His name was Ilah. By adding the title, Al, before his name, Ilah became Al-Ilah which, in turn, contracted to Allah.⁶ Pre-Mohammedan Allah had three daughters, Al-lat, the goddess of vegetable life (crops), Manat, the goddess of fate, and Al-Uzzah, which

⁶ Apologists for the Mohammedan religion say that it was Robert Morley who first equated Allah with Al-Ilah, the moon god, in his 1990 book entitled *The Islamic Invasion*. I easily found the same claim made as far back as 1950. A 1944 Smithsonian reference identified Il or Ilah as a phase of the moon—presumably a crescent. Furthermore, the Arab apologists claimed that Morley accuses Mohammedans of worshipping the moon, but that is not what Morley said; he said that Mohammed converted the moon god of the Kaaba in Mecca to the supreme god and claimed him to be the same as the God of the Christians and Jews. Morley's critics have not changed their tune after these facts were presented to them; we therefore conclude that this derivation is correct, since its critics insist on demolishing straw men.

was Venus, the goddess of beauty. History records that Mohammed took his chief tribal deity, the moon god, Allah, and promoted him as the only god, declaring him to be the same God as worshipped by the Jews and Christians. Christians and Jews disagree. To them, Allah's promotion means nothing; he remains a moon god, even though Mohammedans do not knowingly worship the moon; but Allah's lunar origin remains.

A special case is Mohammed's "sinless" (immaculately conceived) youngest daughter, Fatima, who also bears the title Queen of Heaven in Islam and who is compared to the moon in the "Fatima Zahra." It is also reported that when Fatima was born, her face shone so brightly it lit up the sky.⁷ As part of her dowry, Allah made Fatimah a mediatrix for Muslims in the day of judgment.⁸ Muslims declare Fatima to be everything just short of a goddess. Her titles rival those of the Roman Catholic Virgin Mary, who is also pictured with the moon under her feet.

Now that brings us to look at Revelation 12:1-2, which says:

1 And there appeared a great wonder in heaven; a woman clothed with the sun, and the moon under her feet, and upon her head a crown of twelve stars:

2 And she being with child cried, travailing in birth, and pained to be delivered.

Catholics claim that the woman here is Mary. Protestants claim that the woman is the church. Both are wrong; the Catholics because the woman is in the wilderness for only three-and-a-half years, and the Protestants for that reason plus the church would then have a child before her wedding! Furthermore, the church is never referred to as a "woman." She is only called "wife," "bride," and "virgin."

I agree with the literalists who think the woman is Israel. The text says that whoever the woman is, she has to bring forth Jesus Christ (who will rule with a rod of iron—Psa. 2:9). Jesus finds refuge in heaven (v. 5 at his ascension) and the wonder continues when the remnant of Israel will once again flee into the wilderness, carried on eagles wings (v. 14), as she was when fleeing Egypt (Deu. 32:11). There she will again be sustained by God's manna. She spends three and a half years in the wilderness, (the prophet identifies the place as Petra) which time is probably how long Israel would have spent in total had they not rebelled at Kadesh-barnea (Num. 13). So the woman is Israel, who is allured into the wilderness (Hos. 2:14-15) where "she shall sing there...as in the day when she came up out of the land of Egypt."

⁷ "Golden Sayings and Speeches of the Prophet Hazrat Muhammad," 47.

⁸ Fatima Zahra on the way to marriage.

As for the moon under her feet, well, God called Abram out of Ur of the Chaldees, a city dedicated to the worship of the moon, as was ancient Jericho. The worship of the sun, moon, and the host of heaven (planets), is forbidden to Mohammedan, Jew and Christian alike (Deu. 4:19; 17:3; 2 Ki. 23:5; Jer. 8:2). But Israel's traditional enemies are characterized by the presence of the crescent moon, and Israel will have victory over them; their bones will be spread before her feet, and Jeremiah 8:2 will be fulfilled.⁹

Lunacy

The Bible speaks as though the moon can influence one's mental state. The Bible's critics dismiss that as nonsense. Bible believers are not so sure what to think. Is there a way that the Bible can be right, after all? Job 31:26-28 gives us a starting point to consider the matter when Job says:

If I beheld the sun when it shined, or the moon walking *in* brightness; And my heart hath been secretly enticed, or my mouth hath kissed my hand: This also *were* an iniquity *to be punished* by the judge: for I should have denied the God *that is* above.

Consider what it means to deny God. God is life, so denying God means denying life, that is to say, choosing death. God is love, so denying him is to choose hate. God is truth; so worshipping the moon, or anything else for that matter, is to loose hold of reality. And therein lies the key to the effect the moon may have on one's mental state.

Psalms 121:6 promises to those who depend on the Lord that, "The sun shall not smite thee by day, nor the moon by night." The verse allows that the moon may have a physical effect on men. Although some skeptics have done a statistical analysis on emergency room incidents and concluded that there is nothing to it. Still, hospital workers, police, coroners, and firemen maintain there is something sinister about the full moon. Folklore tells us of werewolves and other monsters that come out during the night of the full moon. In the Dark Ages, people were told that if they slept under a full moon at night, that it would drive them insane. My wife is a substitute teacher at school, and it is interesting that the only time she says "The kids were so bad today; it must be a full moon or something" it

⁹ And they shall spread them before the sun, and the moon, and all the host of heaven, whom they have loved, and whom they have served, and after whom they have walked, and whom they have sought, and whom they have worshipped: they shall not be gathered, nor be buried; they shall be for dung upon the face of the earth.

is usually within a day or two of the full moon. She may have other bad days, but only brings up the moon when it is *a propos*.

Then there are the songs written about the moon. The moon is considered romantic. Just to name a few songs: "Blue Moon," "Moonlight Serenade," "Prairie Moon," "Carolina Moon," "Moonlight Sonata," "Moon Over Miami," "By the Light of the Silvery Moon," "Me and the Moon," "Moon Ray," and "Moon Love." Others view the moon's influence less romantically. They postulate that it has to with the monthly cycle of women. But if it did, then would not all women be in lock-step in their monthly cycles?

But the Bible is even more overt in its declaration about the effect of the moon on the soul of man. Twice in the New Testament we find the word "lunatick" (spelled exactly that way):

Mat 4:24, And his fame went throughout all Syria: and they brought unto him all sick people that were taken with divers diseases and torments, and those which were possessed with devils, and those which were lunatick, and those that had the palsy; and he healed them.

Mat 17:15, Lord, have mercy on my son: for he is a lunatick, and sore vexed: for oftentimes he falleth into the fire, and oft into the water.

Now the first response of those who want to save the Scripture from embarrassment in the eyes of modern humanism (the belief that man is the measure of all things) is to retreat to the "Original Greek." The O.G. says, "lunatic"! The Greek is *seleniazomai*, moon-struck, which has as its root the word *selene*, which means moon. Although modern versions will change "lunatick" to "seizures," that is not what the O.G. says.

Lunacy is a condition that appears to stem from the worship or abuse of the moon (i.e., violating its purpose as stated in Gen. 1:16-18). It is characterized by senseless violence, as seen in Mat. 17:15, above. In India, the worshippers of Kali are particularly violent. Kali is a moon goddess. The only riot in the New Testament happened at Ephesus, in the temple of Diana, the moon goddess. Though Moslems claim they do not worship the moon, yet the trappings of the former moon god persist with the presence of a crescent moon on Moslem flags, minarets, and mosques. Mohammedism is extremely violent to women, children, each other, and other nations of other faiths, it matters not which. The Bible speaks of

this in Gen. 16:12b-13.¹⁰ Moslems instituted the slave trade that brought the blacks to the western hemisphere. Slavery is still practiced in Arab countries; witness what is happening in the Sudan right now and in Indonesia. These all worship the moon, either overt or disguised.

Some Catholic and Protestant denominations also abuse the moon. Since the moon is a type of the Church, consisting of both Jew and Gentile, the abuse there takes the form of denying one or the other component of the group. The abusing denomination typically insists that it alone is Israel. Some “completed Jew” factions believe only they are Israel, without the Gentiles. This latter group is represented in the New Testament by the circumcision faction, which believed that no man could be saved unless he is circumcised. Their Gentile counterpart insists the same, but replaces circumcision with baptism. These denominations also tend to violence, and the degree of violence they will perform depends on the degree to which they embrace the crescent moon. If that seems like a slap only at the Catholics and Jews, it isn’t. The large Protestant denominations gravitate toward Free Masonry, which also has the crescent moon as a symbol. Each of these feel that they need to set the world right by good works, and when those do not work, they resort to violence, subterfuge, and forced conversion. Clearly, such practices run contrary to the Lord God, for he does not advocate that a man take vengeance into his own hands (Deu. 32:35;¹¹ Rom. 12:19¹²), nor had God ever forced conversion.

Historically, worship of the moon leads to greater violence than does worship of the sun. Neither is right in the sight of Scripture, but worship of the moon seems to wreak a greater vengeance from the Lord. Perhaps the one is worse than the other because of the typology. The sun is a type of Christ, whereas the moon is a type of Israel: Jewish in the Old Testament, with the Gentiles grafted in for the New Testament.¹³ To worship the moon, then is the greater abuse because it involves the worship of men: saints (both O.T. and N.T. believers are called saints in Scripture), scholars, preachers, authors, singers, mullahs, imams, popes, movie stars, and emperors.

So far we considered only the effect on religious organizations, but the worship of the moon also has consequences to individuals. Immanuel

¹⁰ Behold, thou *art* with child, and shalt bear a son, and shalt call his name Ishmael; because the LORD hath heard thy affliction. And he will be a wild man; his hand *will be* against every man, and every man’s hand against him; and he shall dwell in the presence of all his brethren.

¹¹ To me *belongeth* vengeance, and recompense; their foot shall slide in *due* time: for the day of their calamity *is* at hand, and the things that shall come upon them make haste.

¹² Dearly beloved, avenge not yourselves, but *rather* give place unto wrath: for it is written, Vengeance *is* mine; I will repay, saith the Lord.

¹³ Romans 11:17-24.

Swedenborg, a prophet of the occult, for instance, first obtained an explanation for the formation of the world during a séance with the “inhabitants” of the moon. La Place later took the revelation and formalized it into a palatable form for atheistic scientists. Today we know it as the Nebular Hypothesis for the origin of the solar system. It is the leading evolutionary theory for the formation of stars and solar systems today, even though the mathematics for the model falls far short of what is needed. And just think; it came from the inhabitants of the moon.

We see how lunacy relates to the moon. Is there any way to rid oneself of the devil invited into one’s life by worship of the moon? Although the worship of the moon leads to physical violence, the case of lunacy is spiritual. The cure is given right there, in Matthew 17:21; the cure is prayer and fasting.¹⁴

For seasons

It is not obvious how the moon, in particular, is used for signs and for seasons. Nor is it easy to follow the typology of the moon through Scripture. We have witnessed some of that already in the preceding.

The moon is used to determine seasons. In 2001 we printed an article which explained how each full moon in a year is given a name.¹⁵ The names reflect human activities during the season when the particular full moon appears, such as the Hunter’s Moon and the Sturgeon Moon. The best example is September’s full moon, known as the Harvest Moon. It is particularly special. Throughout the year the moon rises about fifty minutes later each day, but near the first day of autumn, the day-to-day difference in rising and setting times is only about thirty minutes. This helps farmers who are working long days to harvest their crops before the frost. The same happens in the southern hemisphere, only in March. Successful farmers still plant by the moon, though that was more prevalent in years past. Some plants are deemed better planted when there is no moon, others at full moon, etc. Scholars may dismiss it as superstition, but the fact remains that experienced farmers still do it, and are successful by using the moon to determine seasons for planting and harvesting.

The Scripture speaks of the precious fruits put forth by the sun and moon (Deu. 33:14¹⁶). The precious fruits brought forth by the sun refers not only to food but also to salvation, given that the sun is a type of the

¹⁴ Howbeit this kind goeth not out but by prayer and fasting.

¹⁵ Bouw, G.D., 2001. “The Twelve Moons of Earth,” *B.A.*, **11**(96):52.

¹⁶ And for the precious fruits *brought forth* by the sun, and for the precious things put forth by the moon.

Christ (Mal. 4:2,¹⁷ etc.). The precious things put forth by the moon refers not only to those plants that depend on moonlight, as do some flowers, but especially to the light of the gospel which the church presents to the world, the moon being a type of the body of Christ, that is, the church. These are indeed precious in the sight of the Lord, his angels, and the saints.

Modern man thinks that sun is primarily responsible for the seasons, but that is only half the story. After all, it is the earth's orientation in space (i.e., its *obliquity*, the 23.5° inclination of the poles to the ecliptic), which accounts for the procession of the seasons throughout the year, so it is reasonable to think that the sun only is responsible for the seasons. The significance of the role that the moon plays in this seasonal procession has only come to light only in modern times. Computer simulations of the moon's orbit and the earth's orientation in space show that our moon actually stabilizes that procession. If the moon were smaller, the earth would twist and rock in a way that, in the long run, makes the seasons unstable, both in length and in climate.¹⁸ If the moon were larger than it is, the seasons would eventually be eliminated altogether as the earth's obliquity went to zero. The latter would violate the promise of Gen. 8:22.¹⁹ Thus the sun may be primarily responsible for the temperature and the yearly repetition of the seasons, but the moon keeps them constant.

For signs

The moon is also used for signs in Scripture. Indeed, the things presented above were the easy part of this paper, for they dealt with the natural realm whereas the signs introduce the role the moon plays in the Holy Scripture.

The moon is both appointed and ordained. It is appointed for seasons, according to Psalm 104:19,²⁰ and ordained with concomitant ordinances in its role as ruler of, and light giver to, the night (Psa. 8:3,²¹ Jer. 31:35-36²²). The use of the word ordination confirms the correctness of

¹⁷ But unto you that fear my name shall the Sun of righteousness arise with healing in his wings....

¹⁸ Panorama, 1993. "The moon and the Seasons," *B.A.*, 3(65):21.

¹⁹ While the earth remaineth, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease.

²⁰ He appointeth the moon for seasons: the sun knoweth his going down.

²¹ When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained.

²² Thus saith the LORD, which giveth the sun for a light by day, *and* the ordinances of the moon and of the stars for a light by night, which divideth the sea when the waves thereof roar; The LORD of hosts *is* his name If those ordinances depart from before me, saith the LORD, *then* the seed of Israel also shall cease from being a nation before me for ever.

equating the moon with the body of Christ, the church (Acts 13:48²³). The church is the prime focus in the Scripture's use of the moon for signs.

Many of the signs given by the moon are prophetic about the last days. Luke 21:25 addresses these by telling us:

And there shall be signs in the sun, and in the moon, and in the stars, and upon earth distress of nations, with perplexity; the sea and the waves roaring.

We now take a look at the various signs heralding the last days.

The moon turned to blood

The sign of the moon turning into blood is recorded in three places. The first is Joel 2:31,²⁴ which is quoted by Peter in Acts 2:20.²⁵ Its fulfillment is found in Revelation 6:12,

And I beheld when he had opened the sixth seal, and, lo, there was a great earthquake; and the sun became black as sackcloth of hair, and the moon became as blood.

In all three cases the sun is darkened and the moon turns blood red. Many believe that the blood reference means that man will have settled the moon and there will be a war there, shedding blood on the moon. One is not compelled to accept it, for Rev. 6:12 says “**as** blood,” signifying that it may not be literal blood. Possibly both views are correct.

There is not much in the way of naturalistic interpretation to offer here. Twice the sun is said to be “turned into darkness,” and the fulfillment verse says it will become black as sackcloth of hair. We could postulate that a cloud will obscure the photosphere of the sun, reddening it and causing the moon to appear red as it does during an eclipse of the moon. (See back cover.) The cloud could be between the sun and the earth, or it could be an obscuration in the sun's atmosphere. The darkening could also be caused by a change in solar surface pressure, an expansion of the sun, which could work to decrease the amount of light emitted. That

²³ And when the Gentiles heard this, they were glad, and glorified the word of the Lord: and as many as were ordained to eternal life believed.

²⁴ The sun shall be turned into darkness, and the moon into blood, before the great and the terrible day of the LORD come.

²⁵ The sun shall be turned into darkness, and the moon into blood, before that great and notable day of the Lord come

would not involve a cloud. All this is speculation; it could just be a special miracle.

The darkening of the moon

Seven references refer to a darkening of the moon as the return of the Lord approaches. Isaiah 13:10 is first. It says,

For the stars of heaven and the constellations thereof shall not give their light: the sun shall be darkened in his going forth, and the moon shall not cause her light to shine.

Prophetically, this could refer to a period when the church stops being a light to the world, something it appears to do in the Laodicean church age. But there is more said in Scripture about this event:

Ezek 32:7 “And when I shall put thee out, I will cover the heaven, and make the stars thereof dark; I will cover the sun with a cloud, and the moon shall not give her light.”

Joel 2:10 “The earth shall quake before them; the heavens shall tremble: the sun and the moon shall be dark, and the stars shall withdraw their shining:”

Joel 3:15 “The sun and the moon shall be darkened, and the stars shall withdraw their shining.”

Mat 24:29 “Immediately after the tribulation of those days shall the sun be darkened, and the moon shall not give her light, and the stars shall fall from heaven, and the powers of the heavens shall be shaken:”

Mark 13:24 “But in those days, after that tribulation, the sun shall be darkened, and the moon shall not give her light,”

The mate to all these verses is found in Rev 8:12, which happens after the time that the moon became as blood:

And the fourth angel sounded, and the third part of the sun was smitten, and the third part of the moon, and the third part of the stars; so as the third part of them was darkened, and the day shone not for a third part of it, and the night likewise.

This happens halfway through the trumpet judgments.

The Second Advent

The Song of Solomon, which tells about Christ and his Bride, the church, associates the Bride with the moon when in chapter six verse ten it says, “Who is she that looketh forth as the morning, fair as the moon, clear as the sun, and terrible as an army with banners?” It describes the Bride as ready for war.

During the age of grace, the church is not to fight to establish the Lord’s kingdom. That is for him to do, and he will when he returns at the Second Advent. It starts in Revelation 19:11 and goes through verse 16:

¹¹ And I saw heaven opened, and behold a white horse; and he that sat upon him *was* called Faithful and True, and in righteousness he doth judge and make war.

¹² His eyes *were* as a flame of fire, and on his head *were* many crowns; and he had a name written, that no man knew, but he himself.

¹³ And he *was* clothed with a vesture dipped in blood: and his name is called The Word of God.

¹⁴ And the armies *which were* in heaven followed him upon white horses, clothed in fine linen, white and clean.

¹⁵ And out of his mouth goeth a sharp sword, that with it he should smite the nations: and he shall rule them with a rod of iron: and he treadeth the winepress of the fierceness and wrath of Almighty God.

¹⁶ And he hath on *his* vesture and on his thigh a name written, KING OF KINGS, AND LORD OF LORDS.

The Bride is then found in verse 14. The battle will be accompanied by the fulfillment of the next sign.

The sun and moon will stand still again

This sign marks the Second Advent, the return of Christ. Although not directly mentioned in Revelation, the time the sun and moon stand still can be inferred from context. We note, for instance, that the first time it happened was just after Joshua entered the Promised Land. Joshua asked that the day be lengthened so that Israel could have longer to defeat her

enemies (Josh. 10:12-13).²⁶ Although it is not immediately apparent that this event was prophetic, it does fall in the category of portending events to come. The prophetic reference that does not point to Joshua's long day is found in Hab. 3:11,

The sun *and* moon stood still in their habitation: at the light of thine arrows they went, *and* at the shining of thy glittering spear.

The time when the sun and moon stand still apparently, from a study undertaken by James Hanson, spans a full month and marks the transition time between the end of the war and the gathering of the nations for the first time at Jerusalem to mark the start of the Millennial reign. But there is one more sign associated with the second advent and that is that

The sun and moon are brightened

Isaiah 30:26, after the terrible events described in previous chapters, speaks of healing:

Moreover the light of the moon shall be as the light of the sun, and the light of the sun shall be sevenfold, as the light of seven days, in the day that the LORD bindeth up the breach of his people, and healeth the stroke of their wound.

The passage apparently refers to the restoration of Israel in the Promised Land, that is, the Millennial reign, when Satan is bound and man is given the chance to prove whether or not he can be good if only Satan were not there to tempt him. Of course, the Millennium ends with man's failure to do so and the release of Satan and his final defeat, when a new heaven and a new earth are created.

The church and the moon

The living space in the New Jerusalem, which descends from heaven in Revelation chapter 21, amounts to more than one-twelfth the volume of the moon. The excess volume amounts to 1600 walls the thickness of the

²⁶ Then spake Joshua to the LORD in the day when the LORD delivered up the Amorites before the children of Israel, and he said in the sight of Israel, Sun, stand thou still upon Gibeon; and thou, Moon, in the valley of Ajalon. And the sun stood still, and the moon stayed, until the people had avenged themselves upon their enemies. *Is not this written in the book of Jasher?* So the sun stood still in the midst of heaven, and hasted not to go down about a whole day.

wall given in Rev. 21:17, *viz.* 144 cubits, (amounting to 222 feet or 264 feet if the royal cubit was used). Whether this has any bearing in reality is sheer speculation on anyone's part, but the numbers are interesting, at least, and the typology lends it a little credence. It does, however, give us an appreciation for the size of the New Jerusalem, which now is above (Gal. 4:26²⁷).

The most frequent Bible reference to the moon is as the new moon, particularly, the observance thereof under the law. The observance of the Jews under the law was a shadow of things to come. Isaiah 66:23 spells it out plainly that after the new heavens and new earth are established (verse 22), "And it shall come to pass, *that* from one new moon to another, and from one sabbath to another, shall all flesh come to worship before me, saith the LORD." This is in effect during the Millennium, the fulfillment for Israel, but it is also an ordinance for the new heaven and new earth of Revelation 21 and 22. At that time, the fruit of the tree of life is produced monthly and is available to those who come to Jerusalem. Those who inherited eternal life in the current dispensation have no need for the fruit—which appears linked to the moon via its monthly cycle (Rev. 22:2²⁸)—because the eternal life we inherited "is in his Son" (1 John 5:11), not in a tree. To their eternal life dependent on the tree of life is bad exegesis, for the life thus given is never said to be eternal; it must be eaten of every month. Since salvation will be works-oriented in eternity, (cf. the everlasting gospel of Rev. 14:6-7,) ²⁹ conditions will be similar to those under the law, which is why the law had the observance of the new moon. Under grace there is no such observance (Col. 2:16-17).³⁰

Inside the city there is "no need of the sun, neither of the moon, to shine in it: for the glory of God" will "lighten it, and the Lamb is the light thereof" (Rev. 21:23).

The typology of the moon is one of the richest, if not the richest, in the Holy Bible. As a type of the church, including both Israel and the Gentiles, the typology spans all dispensations. Even with the length of this study, your author knows that there is much still to be learned.

²⁷ But Jerusalem which is above is free, which is the mother of us all. (All born again.)

²⁸ In the midst of the street of it, and on either side of the river, *was there* the tree of life, which bare twelve *manner of* fruits, *and* yielded her fruit every month: and the leaves of the tree *were* for the healing of the nations.

²⁹ And I saw another angel fly in the midst of heaven, having the everlasting gospel to preach unto them that dwell on the earth, and to every nation, and kindred, and tongue, and people, Saying with a loud voice, Fear God, and give glory to him; for the hour of his judgment is come: and worship him that made heaven, and earth, and the sea, and the fountains of waters.

³⁰ Let no man therefore judge you in meat, or in drink, or in respect of an holyday, or of the new moon, or of the sabbath *days*: Which are a shadow of things to come; but the body *is* of Christ.

SPACE TRAVEL AND THE BIBLE

Gerardus D. Bouw, Ph.D.

Introduction

In 1961, President John F. Kennedy set a goal for the United States, to put a man on the moon by the end of the decade. At the start of his second term in office, President George W. Bush set a new goal for the United States: to send men to Mars. Both announcements met with the same reactions: some lauded it as a worthy goal; others condemned it as a waste of time and money. Some Christians think the goal good, but the rationale—to find clues to the origin of life—ridiculous; others damned it as an affront to God, an invasion of God’s territory. Each point of view has its reasons and we will not go into an exhaustive evaluation of those views; we will focus here on evaluating the goal in terms of Scripture.

The contrary view

Those who oppose space travel in general, and human visitation to the astral bodies in particular, have several reasons: They point out that the sun, moon, and planets were made for signs, for seasons, and to give light upon the earth. Nowhere in Scripture does it say that these were made for man to inhabit or to subdue. (Gen. 1:14 v.f.).

1. They note that God gave man dominion over the earth and did not say that about anyplace else in creation. (Gen. 1:28).¹
2. They point to Psalm 115:16 which says, “The heaven, *even* the heavens, *are* the Lord’s: but the earth hath he given to the children of men.” The regard us as trespassers on God’s “turf” if we set foot on the moon or Mars.
3. They argue that man’s goal is the same as Satan’s² in Isaiah 14:12-13 which says, “How art thou fallen from heaven, O Lucifer, son of the morning! *how* art thou cut down to the ground, which didst weaken the nations! For thou hast said in thine heart, I will ascend into heaven, I will exalt my throne above the stars of God: I will sit also upon the mount of the congregation, in the sides of the

¹ And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

² Virtually all modern versions disagree with this. They insist that the twelfth verse refers to the Lord Jesus Christ: the NIV says “Morning Star,” which is Christ, according to Rev. 22:16, and other versions say “Daystar,” which is Christ according to 2 Peter 1:19.

north.” That is, they think that man’s only rationale is to be like God.

4. Many, but not all, argue that man’s goal in space is to take God from his throne and take over from him. Or they see it as an attempt to get to heaven without God. They draw a parallel to the tower of Babel.

Dr. Peter Ruckman made a most intriguing and spiritually insightful point about the man to the moon program. In 1969³ he noted that when man sets foot on the moon, it means that the body of Christ (typed by the moon) has joined up with the world and has become apostate. In the light of Psalm 115:16, plus the observation that we are now in the Laodicean church age, the point is most cogent. (The Laodicean church is the only one of the seven churches of Revelation 2-3 that receives no commendation from the Lord, only condemnation.) Remember, too, blasphemy noted in footnote 2, which is found in all popular bibles produced by the Laodicean church.

We wrestle against spiritual wickedness in high places (Eph. 6:12). Laodiceans interpret “high places” to be presidents, kings, mayors, and popes—earthly rulers—but that is not what the Bible says. Isaiah 24:21-23⁴ teaches that these high places are in heaven, and, by contrast, the kings of this earth are in low places. Also note the presence of the moon’s confounding in the context. (See “The Bible and the Moon” elsewhere in this issue.)

The affirmative view

Those who support the effort for man’s going to the moon and planets also draw from Scripture. Here are their arguments:

1. The late Walter Lang used to argue for manned exploration of space. His rationale was that since the astral bodies were made for the earth, and since man was to subdue the earth, man was justified in extending his reach to the planets and the stars.

³ Ruckman, Dr. Peter, 1969. “Lunar Lunatics,” *Plain Preachin’* audio tape series, no. UT-4365. (Pensacola, FL 32534: Box 7135).

⁴ And it shall come to pass in that day, *that* the LORD shall punish the host of the high ones *that are* on high, and the kings of the earth upon the earth. And they shall be gathered together, *as* prisoners are gathered in the pit, and shall be shut up in the prison, and after many days shall they be visited. Then the moon shall be confounded, and the sun ashamed, when the LORD of hosts shall reign in mount Zion, and in Jerusalem, and before his ancients gloriously.

2. Of course, space travel advocates also have to deal with Psalm 115:16. They point out that to be consistent in one's interpretation, one must then also argue that we should not fly in the atmosphere either, for it is the first heaven. There are people who have used this verse against the space program and yet fly in airplanes. They put an upper limit as to how high man can go and yet not violate the verse. Some set the limit at an eagle's limit, others at tens of thousands of feet. Obviously the limit is arbitrary. Some counter that and since the earth is the Lord's (Ex. 9:29; 1 Cor. 10:26, 28, etc.), it seems contradictory to say man should not venture into space simply because the Scripture says it, too, is the Lord's, especially since there is no express commandment against manned space travel. Then too, some object that if Psalm 115:16 bans man from all heavens, it must also forbid man's entry into heaven. Where does a believer go upon his death? If one argues that these are dead, not alive, then what of the translations of Enoch and Elijah? They went up in the flesh.
3. Advocates refer to Deuteronomy 4:19, which specifically says that the sun, moon, and stars are "divided unto all nations under the whole heaven." They argue that such division is meaningless unless man is intended, whether in this world or the world to come, to colonize space.
4. Christian advocates also point to scriptures that speak of the presence of man in heaven, possibly in mortal bodies. They point to Nehemiah 1:9,⁵ Isaiah 13:5,⁶ Matthew 24:31,⁷ Mark 13:27,⁸ and Obadiah 4.⁹
5. In addressing the matter of man going into space to be like God, or to overthrow God, or to get to heaven without God, supporters of the program note that though some may think this, indeed, most people know better than to think this. Such goals are meaningless. Indeed, it may be a consensus that the reason men built the tower of Babel was to climb to heaven in case there was another flood,

⁵ But *if* ye turn unto me, and keep my commandments, and do them; though there were of you cast out unto the uttermost part of the heaven, *yet* will I gather them from thence, and will bring them unto the place that I have chosen to set my name there.

⁶ They come from a far country, from the end of heaven, *even* the LORD, and the weapons of his indignation, to destroy the whole land.

⁷ And he shall send his angels with a great sound of a trumpet, and they shall gather together his elect from the four winds, from one end of heaven to the other.

⁸ And then shall he send his angels, and shall gather together his elect from the four winds, from the uttermost part of the earth to the uttermost part of heaven.

⁹ Though thou exalt *thyself* as the eagle, and though thou set thy nest among the stars, thence will I bring thee down, saith the LORD.

or to bring God down, the Scripture states the real reasons were to make a name for themselves and for unity (Gen. 11:4).¹⁰

Those are the scriptural arguments put forth by believers who advocate the exploration of space by man and those who oppose it. Of these, the reader can make what he will.

The arguments have found new life with President Bush's goal of a manned Mars mission. The first step in that is to establish a working presence in space where men can assemble the vehicles necessary for the journey. A permanent station on the moon is not out of the question. Unlike the earth, of course, God did not create the heavens to make it easy for man to live there. The firmament is quite hostile to life, and a permanent facility may not exactly be what most would assume when one speaks of a permanent facility. Crews will have to rotate, be changed every few months or so. Yes, the moon and space are desolate. Water may or may not exist at the moon's poles; if not, it will have to be brought there and a recycling program set up to support life.

But water is only the beginnings of obstacles. Solar flares are huge explosions on the sun that shower high-energy particles to the earth, giving us the northern and southern lights. Men will have to be shielded from those, the strongest of which can be quite lethal. Cosmic rays are a constant presence; the flashes of light observed by all astronauts resulted from cosmic rays hitting the retina of the eye. These can add up fast, especially beyond the protection of earth's van Allen Belts. Even more powerful emissions, though somewhat rare, are potentially lethal. They come from nearby gamma ray bursters and magnetars. The latter are stars with extremely strong magnetic fields. A burst from a magnetar last December showered the earth with enough high-energy particles that for several seconds, the total energy rivaled what the earth receives from a full moon. Such things can be expected every few years. God certainly has not made it easy for us to live in space.

In conclusion we will make one secular note about the space program. There may be little in the way of spiritual fruit, and certainly it will not help against sin, but the moon program gave us the technology that went into CAT scanners, ultrasound, microcomputers, cellular phones, etc. These things have their good points and bad. Who knows what the Mars program may bring, but it will be both good and bad; that is certain.

These things are a mixed bag, as they say, and they do distract men from considering their spiritual state, but then so does all entertainment. Beyond that, there is one aspect of life that should be considered. A soci-

¹⁰ And they said, Go to, let us build us a city and a tower, whose top *may reach* unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth.

ety, like any organism, must produce and eliminate waste. Traditionally that function has been filled by war, with the waste going to “wine, women, and song” during peacetime. In the last century, a new peacetime “war” was added to the list. That “war” was President Lyndon Johnson’s “War on Poverty.” Rather than eliminating the waste, however, Johnson’s new waste system pumped the waste back into society through social welfare programs that did little more than subsidizing the poor, increasing poverty, and requiring two incomes to allow a family to “get ahead.” The fruit of it was the destruction of the family and devaluation of work as a means of escaping from poverty. From my own, personal perspective, I would rather see the waste go into a space program that will give some benefits to society, the family, and the work ethic, than to spend it on destructive social programs or on destructive wars. And I say that knowing full well that regardless of what I say, the word of the Lord must be fulfilled: that men will wax worse and worse, and our peril will increase until men’s hearts fail them from fear (Lu. 21:26).

COMPREHENDING ENGINEERS—TAKE TWO

There was an engineer who had an exceptional gift for fixing all things mechanical. After serving his company loyally for over 30 years, he happily retired.

Several years later the company contacted him regarding a seemingly impossible problem they were having with one of their multimillion-dollar machines. They had tried everything and everyone else to get the machine work but to no avail. So in desperation, they called on the retired engineer who had solved so many of their problems in the past.

The engineer reluctantly took the challenge. He spent a day studying the huge machine. At the end of the day, he marked a small “x” in chalk on a particular component of the machine and said: “This is where your problem is.”

The part was replaced and the machine worked perfectly again.

The company received a bill for \$50,000 from the engineer for his service. They demanded an itemized accounting of his charges. The engineer responded briefly:

One chalk mark: \$1.00. Knowing where to put it: \$49,999.00.

It was paid in full and the engineer retired again in peace.

PANORAMA

Dayton C. Miller: vilified and exonerated

Many of our readers may know that the Michelson-Morley experiment was designed to detect the orbital speed of the earth about the sun and failed to detect it. They may know, too, that their results were never exactly zero. The experiment always showed a few miles or kilometers per second result, but it fell far short of the expected thirty kilometers per second.

Intrigued by the not-exactly-null result, physicist Dayton C. Miller of Western Reserve University, later to become Case-Western Reserve University, took it upon himself to find out why. He conducted Michelson-Morley experiments all over the world, and always he found a non-null result. He finally concluded that the sun was moving at about 300 km/sec from a position in the sky located near the Large Magellanic Cloud and roughly towards the constellation of Lyra. This is, given the impreciseness of the values, consistent with star streaming, that is, the direction the stars come from as they stream past us, but 10 to 15 times faster.

A number of attempts were made to replicate Miller's findings, some with small positive readings, some with close to zero. These included an experiment by R J Kennedy in 1926 on Mount Wilson with the interferometer sealed in helium; an interferometer sealed in a vacuum casing and sent up by balloon to 2,500 meters in 1927; and an interferometer mounted inside a temperature-constant vault at Mount Wilson by Michelson himself in 1929. Displacements in each case were almost zero. However, Miller noted that in each case the instrument was enclosed in metal casings or in a basement room. He believed that such "opaque" shielding nullified the experimental effect.

Until his death in 1941, Miller's findings remained uncomfortably in the scientific background—impossible to refute, equally impossible to accept, since they fatally undermined Einstein's Relativity which by then had become universally accepted in physics. After Miller's death his former student Robert S. Shankland, became Chairman of the Physics Department at Case Institute of Technology (now Case-Western Reserve University). According to James de Meo, "Shankland's academic career soared after he organized a post-mortem on Miller's work, pronouncing it worthless, and after Einstein later granted him a series of widely-published interviews. Shankland subsequently became a bureaucrat within the emerging atomic energy infrastructure. Intimate with Einstein, in a 1981 interview Shankland claimed Miller's work on ether-drift had

probably cost Einstein the Nobel Prize for relativity theory (Einstein did later get a Nobel Prize, but for his other theoretical work)."

In 1955, Shankland, McCuskey, Leone, and Kuerti published a paper in the *Review of Modern Physics* which, on the surface, was a critical review and re-analysis of Miller's long and painstaking observations. In reality, there was no review and no re-analysis, simply a trawl through the data looking for possible sources of error. Moreover, neither Shankland nor his fellow authors actually did any of the work on which the paper was based. Instead this was left to one of Shankland's students who received no credit beyond a footnote. The 1955 Shankland paper begins with the statement that has been repeated so often since, that Michelson and Morley obtained a "null" result. The paper also claimed, "All trials of this experiment except those carried out at Mount Wilson by Dayton C. Miller yielded a null result within the accuracy of the observations."

Says James de Meo, "This kind of chronic misrepresentation of the slight positive results of many interferometer experimenters, including Michelson-Morley, Morley-Miller, Sagnac, Michelson-Gale, and Michelson-Pease-Pearson, suggests an extreme bias and deliberate misrepresentation. The fact that this is a very popular bias does not excuse it. By redefining all the positive results observed by what may in fact have been the majority of ether-drift researchers, as mere expressions of 'observational inaccuracy,' Shankland narrowed his task considerably."

In the end, Shankland and his team settled on the notion of seasonal temperature variations as being responsible for Miller's findings. There was no longer anyone alive to point out how fatuous this explanation is and Miller's data was safely interred along with his body. As far as orthodox science is concerned today, relativity is universally accepted and the æther controversy is dead and buried.

De Meo further points out a curious semantic footnote to this affair. The name for the hypothetical medium through which light was thought to travel has been spelled in two ways: as "ether" and as "æther." In late medieval times when the word was coined it was spelled æther. In the period 1850-1920 when the topic was current in physics and used regularly by physicists such as Sir Oliver Lodge, Michael Faraday, Nicola Tesla, Michelson and Morley, and even by Einstein, the term was spelled "ether." In the 1950s, after Miller's death, when a concerted effort was being made to denigrate his work, the medieval "æther" spelling suddenly re-appeared. On the face of it, the use of this spelling was to avoid confusion with the anesthetic fluid, ether. But it also appears to have been part of an attempt to "relegate the ether of space into ancient history, as an unproven speculation similar to Aristotelian elements of fire, air, water and earth."

About this charge I can only speak for myself: there is something to this but the reason I use the æther spelling, preferably with the ligature æ, is to divorce the light-bearing medium from the clearly discredited “ether” commonly referring to the rare (meaning not dense) “luminiferous ether.” The æther of medieval times was thought of as a plenum, meaning a very dense, if not infinitely dense medium. Thus I use “ether” to refer to the rarified luminiferous ether, and “æther” when referring to the dense, plenum-like firmament.

Found missing links are lost again

It was heralded one of archaeology’s most sensational finds when the skull fragment of an allegedly “36,000 years old” link between Neanderthal and “modern man” was discovered in a peat bog near Hamburg. Professor Reiner Protsch von Zieten had been invited to date the extremely rare skull and had made the most of it at his announcement of his dating results and examination of the skull. On 18 February 2005, however, the professor’s 30-year academic career ended in disgrace after the University of Frankfurt forced his retirement for systematically falsifying the dates of this and numerous other “stone age” relics.

The discovery of the fraud means that everything you may have learned about the last 10,000 to 40,000 years of human evolution will have to be rewritten. That, according to Thomas Terberger, the archaeologist who discovered the hoax. “Prof Protsch’s work appeared to prove that anatomically modern humans and Neanderthals had co-existed, and perhaps even had children together. This now appears to be rubbish.”

The scandal broke when Prof Protsch was caught trying to sell his department’s entire chimpanzee skull collection, 278 of them, to a United States dealer for \$70,000. Subsequent investigation established that he had also passed off fake fossils as real ones and had plagiarized other scientists’ work.

Protsch’s discovery appeared to show that Neanderthals had spread much further north than was previously known. But his university inquiry was told that a crucial Hamburg skull fragment, which was believed to have come from the world’s oldest German, a Neanderthal known as Hahnhöfersand Man, was actually a mere 7,500 years “old,” according to Oxford University’s radiocarbon dating unit.¹

Another of the professor’s sensational finds, “Binshof-Speyer” woman, lived in 1,300 BC and not 21,300 years ago, as he had claimed,

¹ A C-14 date of 7500 years is roughly 4040 years old when corrected for the decay of the earth’s magnetic field and calibrated to artifacts of known age.

while “Paderborn-Sande man” (dated at 27,400 BC) only died a couple of hundred years ago, in 1750. “It’s deeply embarrassing. Of course the university feels very bad about this,” Professor Ulrich Brandt, who led the investigation into Prof Protsch’s activities, said the day of the firing, “Prof Protsch refused to meet us, but we had 10 sittings with 12 witnesses. “Their stories about him were increasingly bizarre. After a while it was hard to take it seriously. You had to laugh. It was just unbelievable. At the end of the day what he did was incredible.”

During their investigation, the university discovered that Prof Protsch, 65, was unable to work his own carbon-dating machine. He simply made things up. In one case he had claimed that a 50 million-year-old “half-ape” called Adapis had been found in Switzerland, an archaeological sensation. Actually, the ape had been dug up in France, where several other examples had already been found. Prof Terberger said that he grew suspicious about the professor’s work in 2001 after sending off the skull fragment to Oxford for tests. Further tests revealed that all of the skulls dated by Prof Protsch were in reality far younger than he had claimed, prompting Prof Terberger and a British colleague, Martin Street, to write a rebuttal paper last year. “If you find a skull that’s more than 30,000 years old it’s a sensation. If you find three of them, people notice you. It’s good for your career,” Prof Terberger said.

Prof Protsch boasted of having flats in New York, Florida and California, where, he claimed, he hung out with Arnold Schwarzenegger and Steffi Graf. Even the professor’s aristocratic title, “von Zieten,” appears to be bogus. Far from being the descendant of a dashing general in the Hussars, the professor was the son of a Nazi MP, Wilhelm Protsch, *Der Spiegel* magazine reported last October. The university is also investigating how thousands of documents lodged in the anthropology department relating to the Nazis’ gruesome scientific experiments in the 1930s were mysteriously shredded, allegedly under the professor’s instructions. They also discovered that some of the 12,000 skeletons stored in the department’s “bone cellar” were missing their heads, apparently sold to friends of the professor in the US and to sympathetic dentists. For the Professor’s defense, in earlier remarks to *Der Spiegel* he insisted that he was the victim of an intrigue. “All the disputed fossils are my personal property,” he told the magazine.

There is nothing new or unusual about Prof. Protsch’s shenanigans. The “science” of evolution is fraught with them. I thought our readers, especially newer ones, might appreciate some further examples of the “facts” that make evolution “an established fact” instead of a theory. The list is by no means exhaustive. I’ve presented the most famous case and some newer ones exposed in the last five years. Others include Java Man,

Peking Man, and Archaeopteryx. We have an illustrated booklet called *The Peking Man Fraud* that we can reproduce and send to anyone interested in receiving it for \$8.00 postpaid. It is 65 pages but prints to thirty-four 8.5x11-inch pages at two panels per page. It depicts a presentation by the Rev. Patrick O'Connell. It mentions the late Walter Lang, from whom I obtained my copy.

Missing links and planted stone age finds

Piltdown Man

The most infamous of all scientific frauds was unearthed in 1912 in a Sussex gravel pit. With its huge human-like braincase and ape-like jaw, the Piltdown Man “fossil” was named *Eoanthropus dawsoni* after Charles Dawson, the solicitor and amateur archaeologist who discovered it. For 40 years, Piltdown Man was heralded as the missing link between humans and their primate ancestors. But in 1953 scientists concluded it was a forgery. Radiocarbon dating showed the human skull was just 600 years old, while the jawbone was that of an orangutan. The entire package of fossil fragments found at Piltdown - which included a prehistoric cricket bat - had been planted.

The devil's archaeologist

Japanese archaeologist Shinichi Fujimura was so prolific at uncovering prehistoric artifacts he earned the nickname “God’s hands.” At site after site, Fujimura discovered stoneware and relics that pushed back the limits of Japan’s known history. The researcher and his stone age finds drew international attention and rewrote textbooks. In November 2000 the spell was broken when a newspaper printed pictures of Fujimura digging holes and burying objects that he later dug up and announced as major finds. “I was tempted by the devil. I don’t know how I can apologize for what I did,” he said.

Piltdown Turkey

The supposed fossil of Archaeoraptor, which was to become known as the “Piltdown turkey,” came to light in 1999 when National Geographic magazine published an account of its discovery. It seemed to show another missing link—this time between birds and dinosaurs. Archaeoraptor appeared to be the remains of a large feathered bird with the tail of a dinosaur. The fossil was smuggled out of China and sold to a private collector in the US. Experts were suspicious and closer examination showed the specimen to be a “composite”—two fossils stuck together with strong glue.

Another quasar in a nearby galaxy²

A team of astronomers has discovered a quasar whose redshift indicates that it is billions of light years away, in front of a galaxy 300 million light years away. The team consists of Geoffrey Burbidge and his wife, Margaret, Vesa Junkkarinen, a research physicist at the University of California at San Diego's Center for Astrophysics and Space Sciences; Pasquale Galianni of the University of Lecce in Italy; and Halton Arp and Stefano Zibetti of the Max-Planck Institute for Astrophysics in Garching, Germany. Geoffrey has long been a critic of the Big Bang and has been sympathetic to Halton Arp's reports of similar quasars located near galaxies with much lower redshifts than the quasar. The discovery is especially significant because it is the most extreme example of a quasar with a very large redshift yet found near the center of a nearby, active galaxy. The redshift of the quasar is 2.11. The galaxy is NGC 7319, a member of Stefan's Quintet. (See front cover.)

"Most people have wanted to argue that quasars are right at the edge of the universe," said Geoffrey Burbidge, a professor of physics and astronomer. "But too many of them are being found closely associated with nearby, active galaxies for this to be accidental. If this quasar is physically associated with this galaxy, it must be close by." Astronomers have used redshifts and the known brightness of stars as fundamental yardsticks to measure the distances to stars and galaxies. However, Burbidge said they have been unable to account for the growing number of quasi-stellar objects, or quasars—intense concentrations of energy believed to be produced by the swirling gas and dust surrounding massive black holes—with high redshifts that have been closely associated with nearby galaxies. "If it weren't for this redshift dilemma, astronomers would have thought quasars originated from these galaxies or were fired out from them like bullets or cannon balls," he added.

"No one has found a quasar with such a high redshift, with a redshift of 2.11, so close to the center of an active galaxy," said Geoffrey Burbidge. The fact that the quasar is so close to the center of this galaxy, only 8 arc seconds from the nucleus, and does not appear to be shrouded in or obscured in any way by interstellar gas makes it highly unlikely that the quasar lies far behind the galaxy. If it were, its light would be grossly obscured by the dust in the center of the galaxy. So it cannot be a case of shining through the galaxy near its center by an accident of projection. Indeed, the gas in the galaxy appears to be interacting with the quasar.

² Presented 10 January 2005 in San Diego at the January meeting of the American Astronomical Society and which will appear in the February 10 issue of the *Astrophysical Journal*,

“If this quasar is close by, its redshift cannot be due to the expansion of the universe,” he adds. “If this is the case, this discovery casts doubt on the whole idea that quasars are very far away and can be used to do cosmology.”

Margaret Burbidge, who reported the team’s finding at the meeting, said the quasar was first detected by the ROSAT X-ray satellite operated by the Max-Planck Institute for Astrophysics in Garching, Germany and found to be closely associated with the nucleus of the spiral galaxy NGC 7319. That galaxy is unusual because it lies in a group of interacting galaxies called Stephan’s Quintet.

Mysterious disappearances in deserts solved?

In the past, we have reported on a possible solution to the mystery of sinking ships that go down so fast they do not have time to transmit a mayday.³ The solution proposed that natural gas produced on the sea bed breaks loose from the sediment and rises as a mass of bubbles, decreasing the density of the water, thus causing an unwary ship to sink like a rock. Some objected to the theory claiming that the pressure is still the same. As far as your editor is aware, no one has tried this as an experiment.

A similar mystery involves the complete disappearance of vehicles and their occupants in the world’s deserts. The phenomenon is well known among the dwellers of the desert and was even portrayed in the American film, *Hidalgo*. Conventional wisdom has it that fine silt gets water logged and acts like quicksand, though natives dispute that. Nevertheless, the disappearances do happen, as mentioned in T. E. Lawrence’s (Lawrence of Arabia) book, *The Seven Pillars of Wisdom*.

Unlike the bubble theory for disappearing ships, this one has been verified by experiment. Reported in the 9 December 2004 issue of *Nature*, Prof. Detlef Lohse, Remco Rauhé, Raymond Bergmann and Devaraj van der Meer of the University of Twente say that the sand is dry, not wet, and that it really is like the bottom falling out from under you.

To make the dry quicksand, the researchers blew air through fine sand about 0.02 inch (0.04 mm) in diameter in a cylinder. The loosened sand was 41% air by volume. They then dropped a weighted ping-pong ball into the sand. The ball was suspended a short distance above the sand and released by burning the thread that held it. The sinking ball even leaves a splash of sand, a spike that rises surprisingly high above the surface of the sand. The sequence of events is pictured on the next page.

³ Panorama, 2001. “Were some ships sunk by a North Sea bubble?” *B.A.* 11(95):28.

distance. In a similar way, a sprinter running one percent faster than his opponents might win a 10-meter race in a photo finish, while a one percent faster marathon runner will finish hundreds of yards ahead of the rests of the field. After the alleged billions of years of travel, or at much higher values for the speed of light in the past, the faster components of a light wave would be far enough ahead of the slower components to make the beam's wave front noticeably distorted, or blurred.

Two astrophysicists from the University of Alabama in Huntsville tested the theory of quantum time by looking for this blurring in Hubble Space Telescope images of galaxies at least four billion light years away. Dr. Richard Lieu and Dr. Lloyd Hillman were taken by surprise when they did not find it. Instead, each image showed a sharp, ring-like interference pattern around the galaxy. The finding suggests that time does not happen in short quantum jumps but flows fluidly.

Of this, Dr. Lieu said: “[T]his discovery will present problems to several astrophysical and cosmological models, including the Big Bang model of the universe.” The Big Bang theory supposes that at the instant of creation, the quantum singularity that became the universe needed to have infinite density and temperature. To avoid that sticky problem, theorists postulated Planck time. The problem is that the infinite density source points to the Creator. The episteme of modern science is to get rid of God in his creation, to eliminate him from man's knowledge (Rom. 1:28). So any hint of an omnipotent, omniscient, omnipresent presence before the origin of the universe is an abomination to the atheists. They avoid the evidence for the Creator by claiming that if the instant of creation was also a quantum event, then space and time were both blurry, so you don't need infinite density and temperature at the start of the Big Bang. “If time moves along like business as usual even at Planck scales, however, you have to reconcile the Big Bang model with an event that isn't just off the scale, it's infinite,” Lieu said.

The Christian reader can readily see why atheistic scientists turn to forgeries and deceptions in their attempts to get rid of God from their knowledge. We reported above on the forgeries of fossil evidence. One is left to wonder how many forgeries and deceits have gone undetected. How many souls are in hell because they rejected the Savior's sacrifice for sin and his resurrection all because of the fable of evolution? One cannot work one's way to heaven anymore than one can grow wings and fly there or build a tower and climb there. The impossible will always be impossible without God.

Natural Gas, Oil Occur Naturally and are not a Limited Fossil Fuel, Says Prominent Scientist—Part 1

A lot of powerful interests use “energy shortage” scares to manipulate not only public opinion (particularly in regard to U.S. foreign policy toward oil producing nations) but also the price of oil itself. However, the truth is that oil is not a limited resource, according to one of the world’s most prestigious scientists, whose views on the subject have not received the publicity they deserve. Dr. Thomas Gold contends, based on long study, that oil, natural gas and coal are not so-called “fossil fuels.” Instead, according to Dr. Gold, these resources are constantly being manufactured within the Earth by natural processes that are little understood and which point toward new, relatively unexplored realms in science.

In his book, *The Deep Hot Biosphere: The Myth of Fossil Fuels*, which is available in most bookstores, Dr. Gold has outlined the entirety of his theory. Dr. Gold was the guest on the Oct. 28 broadcast of Radio Free America, the weekly call-in talk forum with Tom Valentine, sponsored by American Free Press. He and Valentine were joined by a long-time mutual friend, oil wildcatter John Ledbetter, who has used Dr. Gold’s research in his own oil drilling ventures. What follows is an abbreviated transcription of the broadcast. Valentine’s questions are in boldface. Gold’s responses are in regular text. Ledbetter’s comments are in italics.

Your most controversial idea is the non-biological origin of natural gas and oil. You put forth the position that dinosaurs and plants and the fossils from those living beings are not the origin of oil and natural gas. Your theory was first publicly referenced in a book by your colleague, the late Fred Hoyle, one of the world’s leading physicists and astronomers, in which Hoyle had a chapter entitled “Gold’s Ore Theory,” the ore referring to the porous spaces in the Earth. What first prompted you to suggest that oil and natural gas is generated from a chemical substance in the crust of the Earth?

The astronomers have been able to find that hydrocarbons, as oil, gas and coal are called, occur on many other planetary bodies. They are a common substance in the universe. You find it in the kind of gas clouds that made systems like our solar system. You find large quantities of hydrocarbons in them. Is it reasonable to think that our little Earth, one of the planets, contains oil and gas for reasons that are all its own and that these other bodies have it because it was built into them when they were born?

That question makes a lot of sense. After all, they didn’t have dinosaurs and ferns on Jupiter to produce oil and gas.

That's right. Yet, for some reason my theory was not heard. The old theory that it was all made from fossils had become so firmly established that when the astronomers had perfectly definitive evidence on most of the other planets, it was just ignored, especially by the petroleum geologists who had, by then, called these things "fossil fuels." So once they had a name, then every body believed it.

The oil geologists have carved a niche for themselves and they are perceived now to "know more" about how oil was supposedly formed from dinosaur bones than anybody. However, you have taken your theory and have gone one step further by saying that there is a biosphere; that living entities (fungi, microbes, etc.) are not necessarily just the ones we see on the surface of the Earth but that living creatures are deep in the Earth which could have given rise to creatures on the surface.

In the whole petroleum and coal story, there is this extraordinary paradox that all of these substances contain some biological material. But the chemistry in detail fits it better, as many chemists have said, with the theory of a primordial hydrocarbon mixture (say an oil or gas mixture) to which biological products have been added. That was one aspect that has been quite firmly noted by many Nobel laureate chemists and others.

So every time they find oil deep in the ground and they analyze it chemically, they are effectively supporting your theory?

Absolutely! That has been known, also, for quite a large number of years since the mid-1950s.

Human skull fossils have been found in anthracite coal in Pennsylvania. The official theory of the development of coal will not accept that reality, since human beings were not around when anthracite coal was formed.

That's right. Coal was formed millions of years ago.

Mark that statement. Gold is rejecting the evidence of not only human skulls in coal, but also bone and porcelain artifacts. Gold has a point, that the amount of carbon fuels in the ground exceeds any reasonable amount of flora and fauna that may have lived on the surface. An even larger problem is the amount of limestone and dolomite found in the earth far exceeds what could be generated biologically, that is by reef building and so forth. That is true whether we consider the earth to be billions of years old or six thousand years old.

We consider Gold's argument important enough that we will continue it in the next issue, Lord willing. At that time I will have more to say about how hydrocarbons came about during the creation week.

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 Total Lunar Eclipse of 18 December 1964